Evaporites Through Phanerozoic Time: Using GeoDeepDive, Macrostrat, and Geochemical Modeling to Investigate and Model Changes in Seawater Chemistry

by

Benjamin Kumpf
B.A., The College of Wooster, 2018

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF SCIENCE

in the School of Earth and Ocean Sciences

© Benjamin Kumpf, 2024
University of Victoria

All rights reserved. This thesis may not be reproduced in whole or in part, by photocopying or other means, without the permission of the author.

Evaporites Through Phanerozoic Time: Using GeoDeepDive, Macrostrat, and Geochemical Modeling to Investigate and Model Changes in Seawater Chemistry

by

Benjamin Kumpf

B.A., The College of Wooster, 2018

Supervisory Committee

Dr. J. Husson , Co-Supervisor

(School of Earth and Ocean Sciences)

Dr. L. Coogan , Co-Supervisor

(School of Earth and Ocean Sciences)

Dr. J. Cullen, Departmental Member

(School of Earth and Ocean Sciences)

ABSTRACT

Marine evaporites provide a unique insight to the variation in paleo-seawater chemistry throughout the Phanerozoic Era which in turn provides information about various geologic processes and earth history. This study examines changes in paleo-ocean chemistry and evaporite mineralogy by utilizing GeoDeepDive and Macrostrat to derive records of evaporite occurrences and abundance throughout the Phanerozoic. This study provides a more comprehensive list of epsomite and sylvite evaporites, and their temporal occurrence, than has been available to date (Appendix 1). Changes observed in the abundance of epsomite, sylvite, halite, calcium sulfate and dolomite help contextualize changes in paleo-seawater composition and global sea-level fluctuations. Normalizing marine calcium sulfate occurrences to calcium sulfate and halite occurrences (RAC) shows a distinct difference in the abundance of calcium sulfate-bearing evaporites before and after the Mid-Devonian. Prior to the Mid-Devonian the RAC was highly variable and after this it stabilized. Changes in the RAC were evaluated using batch evaporation modeling attempts in PHREEQC that suggest the main drivers of increased calcium sulfate relative to halite could be caused by increases in the product of Ca^{2+} and SO_4^{2-} which could constrain the assumption of a constant product of Ca^{2+} and SO_4^{2-} used in the calculation of seawater chemistry through fluid inclusion analyses. The occurrence and temporal abundance of marine evaporites yields unique insights into the role of global sea-level and its relationship to evaporites and their formation. Evaporite abundance tends to increase during periods where there is significant continental flooding following a decrease relative sea level, then relative sea-level subsequently decreases again. The RAC tends to be elevated when global sea-level is decreasing and lower when sea-level has stabilized or is increasing. Dolomite abundance compared to these global evaporite records suggest that dolomite is primarily formed during continental flooding and less likely during widespread evaporite formation.

Table of Contents

Supervisory Committee ii

Abstract iii

Table of Contents iv

List of Tables vi

List of Figures vii

Acknowledgements x

Chapter 1 Introduction 1

1.1 Sources of information about paleo-seawater chemistry 2

1.1.1 Formation of Evaporites and Interpreting Paleo-seawater Chemistry 2

1.1.2 Evaporite mineralogy across the Phanerozoic 6

1.1.3 Fluid Inclusions in evaporitic halite 8

1.2 Changes in the Phanerozoic carbonate rock record 9

1.3 Sulfur isotopes in Seawater 13

1.4 Goals of this Research 16

Chapter 2 Methods 17

2.1 Macrostrat 17

2.2 GeoDeepDive and Text Mining 19

2.2.1 Program Description 20

Chapter 3 The geological record of Phanerozoic evaporite deposits 25

3.1 GeoDeepDive and Macrostrat Results 25

3.2 KCl and $MgSO_4$ deposits 25
3.3 $CaSO_4$ Deposits 28
3.4 Occurrence of dolomite in the Macrostrat database 36

Chapter 4 PHREEQC Batch Evaporation Modeling 38
4.1 Experiment design and model parameterization 38

4.2: PHREEQC Experimental 43

4.2.1. Varying the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$.....43

4.2.1.1. Results from varying the concentration of $[Ca^{2+}]$ 44

4.2.1.2. Results from varying the concentration of $[SO_4^{2-}]$ 45

4.2.3 Varying Salinity 46

4.2.3 Varying pCO_2 46

Chapter 5 Discussion 55

5.1 Relative Abundance of MgSO4 and KCl Evaporites.....55

5.2 Relative Abundance of Calcium Sulfate.....57

5.3 Phanerozoic Abundance of Marine Evaporites.....63

Summary and Future Work 67

Bibliography 70

Appendices 74

Appendix A.....74

List of Tables

Table 1.1: List of evaporite minerals and their chemical formulas by evaporite mineral group (from Table 2 in Babel and Schreiber, 2014).....7
Table 2.1: Table of terms queried and documents returned from GDD. Bibliography contained in Appendix 1.1.....30
Table 2.2: List of variables used in the text mining program to evaluate correct and incorrect instances of mineral – stratigraphic name tuples The same steps are taken for distant mentions that extended beyond an individual sentence of an evaporite mineral and a stratigraphic entity. This approach is used is to match minerals to units that may not have a full stratigraphic name in the text, but the root words are used in the instance. Applying the same rules as above to identify good and bad matches, all the potential stratigraphic and mineral matches were determined by the program. After all stratigraphic and mineral word tuples have been evaluated by the program, a results table is generated showing the sentence, words determined to be related, and bibliographic information. These were manually examined. Good words provided a higher accuracy of extraction when found in association with a mineral and stratigraphic association. Bad words were words often found in associations that did not have a valid mineral and stratigraphic association.....32
Table 3.1: The number of times a mineral term was found within the document set is the number of "instances" found within the corpus. The number of times a mineral instance was paired with a stratigraphic unit name is deemed the number of "mineral-stratigraphic associations". Unique stratigraphic associations refers to the number of unique stratigraphic names associated with a specific mineral. Lastly, "Unique associations with age" represents the number of unique stratigraphic units that were paired with a mineral instance. Instances of mineral formulas being found within the corpus as a mineral "instance" were assigned under the corresponding mineral, however, any mineral formula instance containing "$CaSO_4$" were allocated to anhydrite due to the variation of formulas containing this string within the corpus. Gypsum was the most found mineral, followed by halite and anhydrite. $MgSO_4$ refers to all the $MgSO_4$-bearing minerals identified including hexahydrite, kieserite, and epsomite. Hand evaluated $MgSO_4$ units are located in Appendix 1, "Epsomite-Filtered".....36
Table 4.1: The amount of evaporation per timestep, where SM is the number of moles of H_2O remaining in the evaporating solution (initial = 55.55 moles in one kilogram at standard temperature and pressure). The decrease in evaporation per time step in the models with decreasing mass of water remaining ensures the timing of saturation of each phase is precisely constrained. The simulations stop after 55.15 moles of water have evaporated... 50
Table 4.2: Minerals allowed to precipitate in PHREEQC with their mineral formulas. Glauberite was withheld as a phase while varying [SO_4^{2-}], as described in the text. ... .51
Table 4.3: Compositions of initial solutions shown as the range of the variables changed for each experiment. The range of batch reaction experiments are shown as *init* and *final* within the simulation name column. Concentrations of ions are in milli-molar (mM) and pCO_2 is in (atm). Charge balance for batch reaction experiments varying Ca^{2+} or SO_4^{2-} by changing concentrations of Na^+ and/or Cl.. ... .61

List of Figures

Figure 1.1: A diagram explaining the conceptual evaporite forming basin. (A) and (B) have a seawater input of water and ions through surface inflow or seepage influx, whereas (C) has no connection to seawater. Figure taken from Babel and Schreiber, (2014). 4
Figure 1.2: Phanerozic record of $MgSO_4$ evaporite deposits. Data from Hardie (1996) and Zharkov (1974). 8
Figure 1.3: Plot showing the Mg^{2+} [Mol]/Ca^{2+} [Mol] ratio of seawater throughout the Phanerozoic based on measurements of fluid inclusion compositions. Circular markers on plot denote fluid inclusion derived concentrations. Star denotes modern seawater Mg/Ca ratio. Alternating states of calcite and aragonite seas outlined by the orange and blue segments on the top of the figure. Fluid inclusion data plotted are from (Brennan and Lowenstein 202; Brennan et al., 2004; Horita et al., 2002; Lowenstein et al., 2001, 2003, 2005; Timofeeff et al., 2006). 19
Figure 1.4: Plot showing first appearance of various carbonate-shelled taxa. Red corresponds with calcite secreting organisms whereas blue corresponds with aragonite producers. Figure obtained from Porter (2007). 11
Figure 1.5: Cartoon of the global cycling of sulfur from Bottrell and Newton (2006). Sulfur is outgassed during volcanism and sourced to the ocean via precipitation as well as from weathering of sulfides and sulfates. Major sinks of sulfate from seawater include evaporite deposition, microbial sulfate reduction along marine shelves and sulfate reduction in pelagic sediments. Units of mass are grams of sulfur and units of fluxes are grams of sulfur per year. 14
Figure 1.6: The Phanerozoic record of δ34S from carbonates and evaporites from Turchyn and DePaolo (2019). 15
Figure 2.1: A Macrostrat map of the North American distribution of dolomite at 350 Ma. The red colored polygons represent columns that contain dolomite, yellow polygons represent columns containing only Ca-Carbonate. 17
Figure 2.2: Diagram describing the four ways a geologic unit can intersect an age bin. A unit can cross either the top age (Ft) or bottom age (lb.) of a time interval. A unit can extend across the top and bottom age of a time interval (bt). Lastly, a unit can be within the top and bottom age of a time interval (FL). Figure from Peters (2006). 19
Figure 3.1: A: Phanerozoic time-series of MgSO4 bearing deposits from Hardie (1996) and sylvite-bearing evaporites reported by Zharkov (1974). B: Time-series of marine KCl and MgSO4 evaporites extracted from the GeoDeepDive database in this study. 27
Figure 3.2: Phanerozoic record of the number of unique units containing halite (blue) and calcium sulfate (orange) minerals using a 1-million-year bin size. 28
Figure 3.3 : Plots showing the abundance of CaSO4-bearing units normalized to the sum of the abundance of CaSO4-bearing and halite-bearing units (i.e., RAC) binned at geologic epochs (B) and 1 Myr intervals (A). The average of the bootstrap results is shown in red and the bounds of 60% of the data is in blue. 31
Figure 3.4: Plots showing temporal distribution of unique $CaSO_4$ occurrences throughout the

Phanerozoic binned at 1-million-year time intervals from Macrostrat. 33
Figure 3.5: The abundance of North American Phanerozoic calcium sulfate evaporites obtained from Part A shows the relative number of occurrences of $CaSO_4$ in comparison to marine carbonate binned in 1-million-year intervals; B shows the volume $CaSO_4$ evaporites found in rocks of any given age; C shows the volume of $CaSO_4$ evaporites normalized to the volume of marine carbonate in 1-million-year intervals. 35
Figure 3.6: Plot showing the ratio of the area of all dolomite bearing columns within the Macrostrat database of a given age to the area of all carbonates of the same age using 1-million-year time increments. 36
Figure 4.1: Model validation using published PHREEQC results from Blättler et al. (2020). (A) My results for degree of evaporation at gypsum saturation are plotted on y-axis and the x-axis shows the results from Blättler et al. (2020). Line of best fit in orange, and the one-to-one line is in green. (B) Histogram showing the residual differences defined as between my results minus the results from Blättler et al. (2020). Most of my results are less than 0.5 units greater. 39
Figure 4.2: The product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ in the starting solution, which varies solely through changing $[Ca^{2+}]$, plotted against the degree of evaporation at which gypsum begins to form. The inset shows the degree of evaporation at which halite forms within this experiment plotted against the same x-axis limits as in the larger plot (note the expanded scale). 45
Figure 4.3: The product of $[Ca^{2+}][SO_4^{2-}]$ in the starting solution plotted against the degree of evaporation at which gypsum begins to form from solution while $[SO_4^{2-}]$ is varied at constant Ca^{2+} (10.3 mmol kg^{-1}). The inset shows the of the degree of evaporation at which halite forms within this experiment plotted on the same axes (note the expanded y-scale). 47
Figure 4.4: The degree of evaporation at which halite and gypsum form are shown against salinity of the starting solution. The degree of evaporation for gypsum formation does not change significantly in comparison to the degree of saturation required to form halite at a given salinity. It should be noted salinity is increased by approximately 25% however the degree of evaporation required to form halite only decreases by roughly 6%. 48
Figure 4.5: Figure showing: (a) various observational estimates of paleo-pCO_2, (b) a "best-estimate" (black line) and uncertainties (grey bars) and (c) number of data used to produce these estimates (from Royer et al., 2004). Parts (a) and (b) both show model estimates from GEOCARB III in orange……59
Figure 4.6: (A) The amount of gypsum formed from batch reaction experiments where $[SO_4^{2-}] > [Ca^{2+}]$ in the initial solution (i.e., using modern seawater composition; Table 4.2). As pCO_2 increases there is less gypsum formed (22.4% decrease). Increasing pCO_2 within ranges possible in the Phanerozoic caused the total amount of gypsum to precipitate to be approximately 20% less than when pCO_2 was lower. **(B)** The degree of evaporation at the onset of gypsum precipitation from the same batch evaporation experiment shown in**.** The inset plots shows the same things but for halite. As pCO_2 increases gypsum precipitation occurs later in the experiment relative to experiments with lower pCO_2 values 52
Figure 4.7: (A) The amount of gypsum formed from batch reaction experiments where $[SO_4^{2-}] < [Ca^{2+}]$ in the initial solution (Table 4.2). As pCO_2 increases there is no increase in the amount of carbonate or gypsum formed throughout the experiments. (B) The degree of evaporation at the onset of gypsum precipitation from the batch evaporation experiment shown in part, the inset plot shows the degree of evaporation at halite saturation doesn't change across these experiments. As pCO_2 increases there is no effect on gypsum saturation from varying pCO_2 when calcium concentrations are greater than sulfate. .. 53
Figure 5.1: Plots showing the quantitative estimate of seawater chemistry and RAC throughout the Phanerozoic. (TOP) 5.1A Shows Sulfate and Calcium concentrations in mmol/L obtained through fluid inclusion analysis through Phanerozoic. (BOTTOM) 5.1B Shows the RAC through Phanerozoic with the fluid inclusion analysis of Lowenstein et al., 2003 overlain to show how this record could be used to infer calcium or sulfate concentrations in fluid inclusion analyses. Note that arrows plotted on 5.1A are qualitative estimates as to how the RAC could help constrain estimates of fluid inclusion data by narrowing the range of the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ and should be considered approximate. 62

Figure 5.2: showing estimates of global sea-level over the Phanerozoic from Marcilly et al. (2022) (LEFT)) 5.2A based on" Modern" and "Continental" flooding. These are two methods of determining the relative coverage of submerged preserved sediments to exposed crust. 5.2B shows the occurrence of $MgSO_4$ and KCl throughout the Phanerozoic compiled from the GDD document set (RIGHT)..... 64

ACKNOWLEDGEMENTS

I would like to thank:

Jon Husson and **Laurence Coogan** for their help over the years. This thesis would not have been possible without them, their patience, and advice over the years.

Chapter 1 Introduction

Understanding past chemical compositions of the oceans is key in developing an understanding of how Earth systems function and the main controls on the major ion composition of seawater during the Phanerozoic. Constraints on past states of the ocean are essential to provide insight into the history of Earth's surface, responses to atmospheric change, and the evolution of life. Previous studies of changes in seawater composition have led to an improved understanding of how the Earth operates as a system. Over the Phanerozoic Eon (the previous ~542 million years (Myr.)), numerous proxies argue for long term cyclic changes (every ~250 Myr.) in the major ion composition of seawater, including variation in the mineralogy of limestones and evaporites. These cycles are linked to icehouse-greenhouse cycles as well as supercontinent assembly. Interpreting records of paleoseawater chemistry requires innovative approaches to collect and analyze data from Earth history. Quantitative models allow for the assessment of the major controls on seawater chemistry. A better understanding of the co-evolution of ocean chemistry and life on Earth may also help in finding life beyond this planet, understanding how planetary oceans evolve and their role in the formation of a habitable planet (Leger et al., 2004; Madhusudhan et al., 2016).

The chemical history of seawater is important given the ocean's fundamental role in shaping our planet biologically, geologically, and geochemically. Currently, the ocean covers 71% of the Earth's surface and plays an important role in various geochemical cycles (Amante and Eakins, 2009). Processes such as dolomitization, volcanic activity and oxygenation of the atmosphere are hypothesized to have significantly influenced the evolution of the paleo-ocean's chemical state (Hardie, 1996; Horita et al., 2001; Berner, 1978). Quantitative constraints on the role of these processes are often estimated from proxies of paleo-ocean chemistry. Several proxies exist for estimating the major ion composition (Ca^{2+}, Mg^{2+}, K^{+}, Na^{+}, SO_4^{2-} and Cl^{-}) of paleo-oceans (Lowenstein et al., 2014; Horita et al., 2002). Sedimentary compilations have proven useful in investigating sedimentation changes, sea-level variation and total ocean salinity throughout the Phanerozoic (Zharkov, 1978; Ronov et al.,

1984; Hay et al., 2006; Peters and Husson, 2017). Specifically, Phanerozoic records of marine evaporites, preservation style and mineralogy of ooids in carbonate rocks, and the composition of fluid inclusions trapped in halite have been interpreted to reflect changes in major ion composition of the oceans (Hardie, 1996; Horita et al., 2001; Berner, 1978).

1.1 Sources of information about paleo-seawater chemistry

Paleoseawater chemistry has been reconstructed using a multitude of proxies to infer the composition of paleoseawater throughout the Phanerozoic. Perhaps the simplest method is using the abundance of evaporite minerals preserved in the sedimentary record. This provides information about the relative proportion of ions in seawater at the time the evaporite formed, as this controls which minerals form and in what order during evaporation. However, inputs other than seawater into evaporitic basins can modify the composition of the water away from that of seawater, and so only basins where such effects are small can be used. In recent years advances in geochemical methods have allowed the use of more advanced analysis when evaluating the composition of paleoseawater. These methods will be discussed in the following sections.

1.1.1 Formation of Evaporites and Interpreting Paleo-seawater Chemistry

One of the most detailed sources of information about paleo-ocean composition is the sedimentary record of marine evaporites. Evaporites are a type of sedimentary deposit consisting of highly soluble salts formed due to the evaporation of natural waters (Babel and Schreiber, 2014). The minerals found in evaporite deposits are controlled by the concentrations of the major ions dissolved in the evaporating solution. Evaporite deposits can form in several different environments such as evaporative continental margins, in lagoons, and continental lakes (Babel and Schreiber, 2014). Broadly, there are two distinct types of evaporite deposits. Marine evaporites have a mineralogy significantly influenced by the composition of seawater. By contrast, non-marine evaporites are formed from the evaporation of waters with no influence from seawater. Generally, modern marine evaporites follow a distinct order of mineral appearance determined by relative ionic

proportions of the ions that make up the minerals in seawater. The typical order of precipitation of evaporite minerals are calcium carbonate ($CaCO_3$), followed by calcium sulfate ($CaSO_4$), then halite (NaCl), then epsomite ($MgSO_4 \cdot 7H_2O$), and carnallite ($KCl\text{-}MgCl_2 \cdot 6(H_2O)$) (Warren, 2006).

It is, however, rare that an evaporite deposit is only influenced by the composition of the evaporating water. In the formation of an evaporite basin, several factors are important. Forming an evaporite deposit generally requires a negative water budget, in which net evaporation is greater than net water input. Evaporation is influenced by variables such as temperature, humidity, and wind speed. Depending on the evaporation rate, relative sea-level change, and total basin volume, deposits can form relatively quickly, such as the Zechstein Supergroup (Z1), a Permian evaporite, which is thought to have formed in ~4 million years and covers >100,000 km^2 (Babel and Schreiber, 2014). Marine evaporite basin are almost always found in marginal (continental) settings, meaning that they will be influenced by non-marine waters (Hardie, 1984; Babel and Schrieber, 2014; Lowenstein et al., 2014). In the case of a marginal marine basin, there are influxes of meteoric, ground, and stream waters which can alter the ionic composition of basin waters and thus affect the evaporite minerals forming in the basin. As a summary, a conceptual model from Babel and Schreiber (2014) outlines three types of basins that permit the formation of evaporite minerals. These basin types consist of lagoon, saline basin, and saline lake (Figure 1.1).

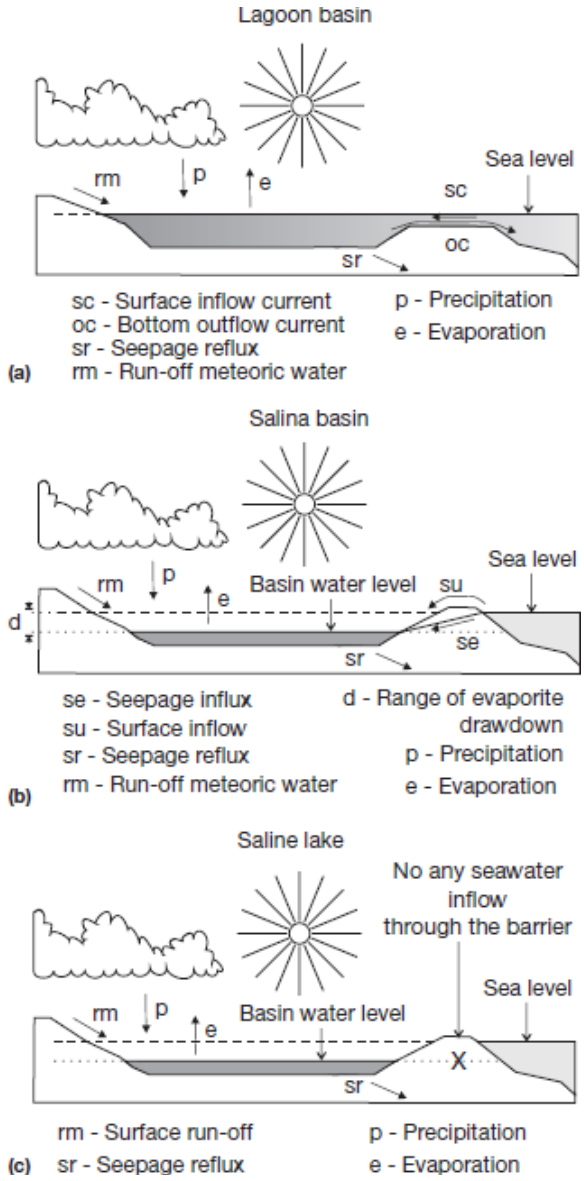


Figure 1.1: A diagram explaining the conceptual evaporite forming basin. (A) and (B) have a seawater input of water and ions through surface inflow or seepage influx, whereas (C) has no connection to seawater. Figure taken from Babel and Schreiber, (2014).

Each type of evaporite-forming basin differs from others based upon its degree of connection to the open ocean and also the sources and sinks of water for the basin. A lagoon has a direct connection to seawater and evaporite minerals can form in lagoons along shallow margins with inputs from stream water or meteoric waters as well as seawater water. Saline basins are flooded periodically or fed seawater through a permeable boundary but also fed water from rivers and rain. Saline lakes have no

input from seawater and are an example of a non-marine evaporite. During a sea-level fall, an evaporite basin can evolve between being a lagoon, a saline basin, and a saline lake stage eventually being completely isolated from the global ocean (Babel and Schreiber, 2014). Therefore, it is possible a marine basin can evolve into a continental basin within a few thousands to a few million years (Trudgill et al., 2011) depending on the main driver of sea level change (e.g., glacio-eustatic or tectonic).

Continental evaporites form in a similar fashion to marine evaporites, except that they have no seawater input. The water budget of a continental evaporite basin consists of inputs of groundwater, stream water, and meteoric water at a rate that is generally less than the total rate of water evaporation from the basin (Figure 1.1C). Distinguishing between evaporites formed in continental and marine basins is fundamental in evaluating which deposits will yield information about paleo-seawater chemistry. This can be done using paleontological, sedimentary, geochemical and mineralogical evidence.

Paleontological analysis can be used to determine if there are marine fauna adjacent to or within the evaporite unit and hence if it formed in a marine environment. However, depending on the stratigraphic distribution of paleontological data, this can be problematic, because basins can evolve from marine to non-marine over time. With little fossil preservation after gypsum formation, the use of marine fossils can be limited in abundance due to ecological limitations in hypersaline environments, generally prior to the formation halite and K-Mg salts (Babel and Schreiber, 2014). Hypersaline environments generally are not conducive to marine life, therefore marine organisms are generally not going to be found within these environments (Röthig et al., 2023).

Geochemical signatures often provide the most reliable information about the origin of source water for an evaporite deposit. Various isotope signatures ($\delta^{18}O$, $\delta^{34}S$, and $^{87}Sr/^{86}Sr$) are useful for assessing the origin of in-flowing waters (Babel and Schreiber, 2014). The $\delta^{34}S$ and $^{87}Sr/^{86}Sr$ composition of evaporites are useful because these can be compared to other records of paleoseawater's S and Sr isotopic compositions to test whether the evaporite minerals formed from seawater (Babel and Schreiber, 2014).

Distinguishing marine from non-marine evaporites based on mineralogy alone is extremely difficult (Babel and Schreiber, 2014). Ionic compositions of a continental lake can be similar to

that of seawater, and hence many of the same phases can precipitate in both localities such as gypsum and halite (Hardie, 1990). However, there are a few minerals that are exclusively found in continental settings, such as sodium carbonates, borates, and lithium bearing salts and the occurrence of these minerals indicates an evaporite deposit is not marine in origin (Table 1.1, Smoot and Lowenstein, 1991).

1.1.2 Evaporite mineralogy across the Phanerozoic

Only a few major evaporite minerals are found in Phanerozoic deposits. Volumetrically, the most important deposits consist of gypsum ($CaSO_4 * H_2O$), anhydrite ($CaSO_4$) and halite (NaCl) which are estimated to make up roughly 90% of the mass of all evaporite minerals deposited within the past 600 Myr. (Warren, 2006; Babel and Schreiber, 2014). Since the ions composing these phases are the most abundant in Phanerozoic evaporite deposits, it is thought the concentrations of the major ions in seawater have not varied dramatically from that of today ($Na^+ > Mg^{2+} \geq Ca^{2+} \geq K^+$ and $Cl^- > SO_4^{2-}, HCO_3^-$) . Despite the abundance of anhydrite, gypsum and halite, several other evaporite minerals exist and are found in many locations throughout the world (Table 1.1).

Table 1.1
Evaporite and Salt Minerals and their Chemical Formulas

Chlorides		**Sulfates**	
Halite	$NaCl$	Anhydrite	$CaSO_4$
Sylvite	KCl	Bassanite	$CaSO_4 \cdot 0.5H_2O$
Hydrohalite	$NaCl \cdot 2H_2O$	Gypsum	$CaSO_4 \cdot 2H_2O$
Bischofite	$MgCl_2 \cdot 6H_2O$	Kieserite	$MgSO_4 \cdot H_2O$
Antarciticite	$CaCl_2 \cdot 6H_2O$	Sanderite	$MgSO_4 \cdot 2H_2O$
Carnallite	$KCl \cdot MgCl_2 \cdot 6H_2O$	Leonhardite	$MgSO_4 \cdot 4H_2O$
Tachyhydrite	$CaCl_2 \cdot 2MgCl_2 \cdot 12H_2O$	Pentahydrite	$MgSO_4 \cdot 5H_2O$
Rhinneite	$FeCl_2 \cdot KCl \cdot NaCl$	Hexahydrite	$MgSO_4 \cdot 6H_2O$
Kainite	$4KCl \cdot 4MgSO_4 \cdot 11H_2O$	Epsomite	$MgSO_4 \cdot 7H_2O$
Carbonates		Vanthoffite	$3Na_2SO_4 \cdot MgSO_4$
Aragonite, Calcite	$CaCO_3$	Bloedite	$Na_2SO_4 \cdot MgSO_4 \cdot 4H_2O$
Natron	$Na_2CO_3 \cdot 10H_2O$	Loeweite	$2Na_2SO_4 \cdot 2MgSO_4 \cdot 5H_2O$
Nahcolite	$NaHCO_3$	Langbeinite	$K_2SO_4 \cdot 2MgSO_4$
Dolomite	$CaCO_3 \cdot MgCO_3$	Leonite	$K_2SO_4 \cdot 2MgSO_4$
Hunite	$CaCO_3 \cdot 3MgCO_3$	Syngenite	$K_2SO_4 \cdot CaSO_4 \cdot H_2O$
Trona	$NaHCO_3 \cdot Na_2CO_3 \cdot 2H_2O$	Polyhalite	$K_2SO_4 \cdot MgSO_4 \cdot 2CaSO_4 \cdot 2H_2O$

Table 1.1: List of evaporite minerals and their chemical formulas by evaporite mineral group (from Table 2 in Babel and Schreiber, 2014)

Changes of the mineralogy of evaporites over Earth history have been suggested to reflect changes in the major ion composition of paleo-seawater. Hardie (1996) reported distinct peaks in the frequency of occurrence of $MgSO_4$ salt deposits, which were interpreted as reflective of changing seawater chemistry (Figure 1.2). This is based upon the analysis of 34 units outlined in Zharkov's (1974) compilation of Paleozoic evaporite deposits. These $MgSO_4$ salts (largely epsomite) are found in various Phanerozoic evaporite deposits and are thought to have formed from the evaporation of seawater with a composition similar to that of modern seawater. Geologic time intervals where there are relatively high abundances of epsomite correlate with times when

aragonitic ooids, or pseudomorphs after them, are found in the geological record. Unfortunately, there are no modern analogs of $MgSO_4$ forming marine evaporites.

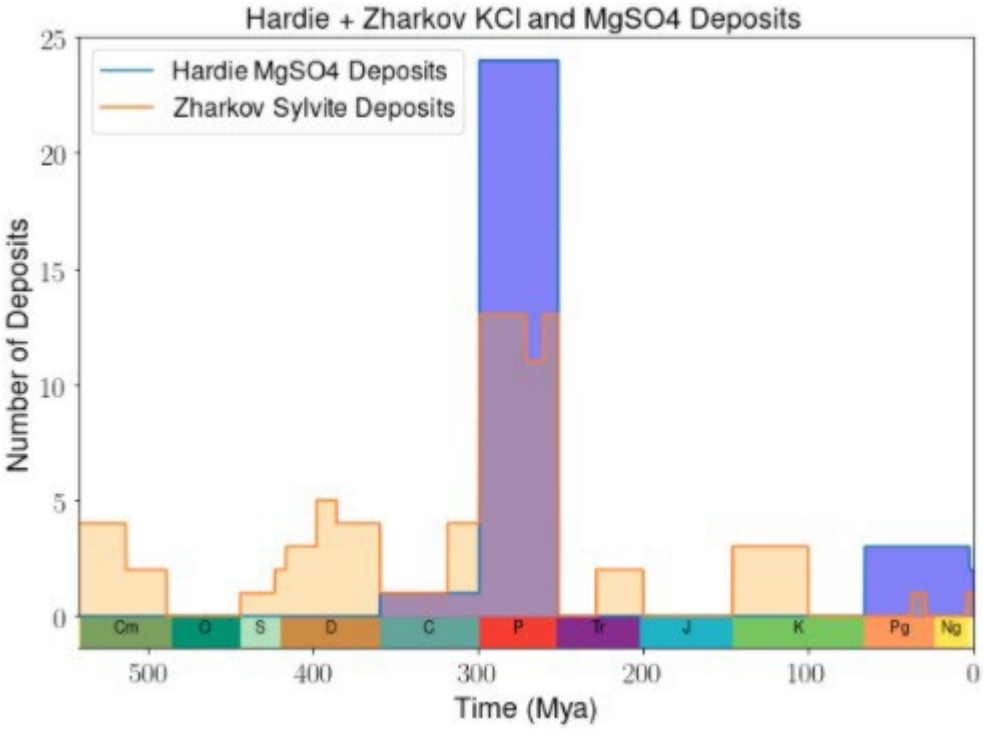


Figure 1.2: Phanerozic record of $MgSO_4$ evaporite deposits. Data from Hardie (1996) and Zharkov (1974).

1.1.3 Fluid Inclusions in evaporitic halite

Analysis of fluid inclusions preserved within marine halite deposits yields important information about paleo-seawater compositions (Timofeeff et al., 2001, Lowenstein et al., 2003, Horita et al., 2001). The water in these inclusions had been concentrated to halite saturation, and therefore do not have the major ion composition of paleo-seawater due to both evaporative concentration and mineral precipitation (such as $CaSO_4$). Therefore, several conditions or assumptions are required to relate their composition to that of paleo-seawater (Timofeeff et al., 2001). First, the halite that bears fluid inclusions must be found stratigraphically above a gypsum or anhydrite unit. Second, the halite deposit must not exhibit textures of dissolution, as interactions

with groundwater can alter the composition of the inclusions. The concentration of highly soluble elements such as Br^- or K^+ are useful for tracking degree of evaporation. Assuming that the concentration of K in seawater has been constant at 10 mM, the degree of evaporation can be estimated from the K concentration in the inclusion, and this can be used in the back calculation of paleo-seawater from which the evaporite was derived. Due to gypsum precipitation prior to halite precipitation, only either [Ca^{2+}] or [SO_4^{2-}] can be calculated, with the other generally estimated based on the assumption that the product of the Ca^{2+} and SO_4^{2-} ion concentrations has remained within 150 mM^2 of the modern value (300 mM^2) throughout the Phanerozoic (Holland and Zimmerman, 2000; Lowenstein et al., 2003). Although sparse, these fluid inclusion analyses provide constraints on seawater composition throughout the Phanerozoic (Figure 1.3).

1.2 Changes in the Phanerozoic carbonate rock record

Since the early 1980's, the major ion composition of Phanerozoic oceans has been hypothesized to have changed based on observations of oscillations in the dominant inferred mineralogy of carbonate ooids and non-skeletal cements (Sandberg, 1983). A threshold value of Mg/Ca ratio of 2 provides a rough segregation of low-Mg (Mg/Ca < 2) calcite from which aragonite or high Mg-carbonate are formed (Mg/Ca > 2) (Figure 1.3). This threshold has been hypothesized to control the variation of low Mg-calcite and high Mg-calcite preserved in the sedimentary record throughout the Phanerozoic. The emergence of carbonate-mineralizing organisms and their skeletal composition shows a general consistency with paleoseawater Mg/Ca derived from fluid inclusions (Porter, 2007). Several models have attributed changes in paleo-seawater Mg/Ca to geologic processes such as mid-ocean ridge activity or dolomitization (Hardie, 1996; Berner, 1985). These modeling attempts have been utilized to consider various drivers of changes in seawater chemistry evident in evaporites and carbonate sediments.

Carbonates are found in deep sea pelagic sediments and in shallow marine environments, preferentially at low latitudes (Warren, 2000). Sedimentary compilations show a secular variation in non-skeletal carbonate mineralogy throughout the Phanerozoic (Figure 1.3) (Sandberg, 1983). There are distinct intervals in which calcite is the dominant carbonate cement whereas other geologic time periods aragonite dominant cements are observed (Figure 1.3). These periods are

known as aragonite and calcite seas and are defined by the dominant cement found of that age.

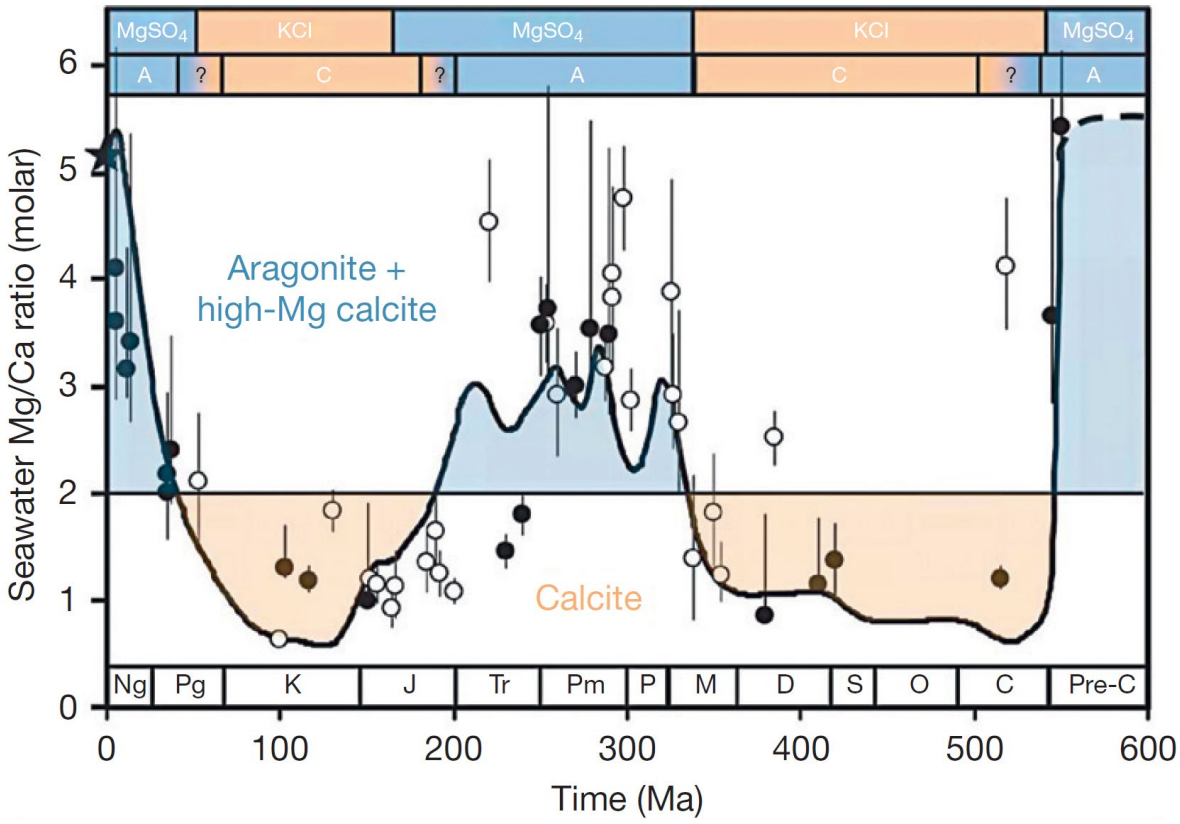


Figure 1.3: Plot showing the Mg^{2+} [Mol]/Ca^{2+} [Mol] ratio of seawater throughout the Phanerozoic based on measurements of fluid inclusion compositions. Circular markers on plot denote fluid inclusion derived concentrations. Star denotes modern seawater Mg/Ca ratio. Alternating states of calcite and aragonite seas outlined by the orange and blue segments on the top of the figure. Fluid inclusion data plotted are from (Brennan and Lowenstein 202; Brennan et al., 2004; Horita et al., 2002; Lowenstein et al., 2001, 2003, 2005; Timofeeff et al., 2006).

A related line of evidence about changes in seawater major ion composition comes from the timing of first appearance of organisms that biomineralize calcite versus aragonite (Fig. 1.4). If an organism first appears in a so-called calcite sea, it has the tendency to produce a calcite shell; the equivalent is true for aragonite seas and aragonite shells. This secular variations in the mineralogy of carbonate precipitating organisms suggest that changes in paleo-seawater compositions were important in controlling what polymorph of $CaCO_3$ organisms biomineralize (Porter, 2007; Dijk et al., 2016, Bottrell and Newton 2006).

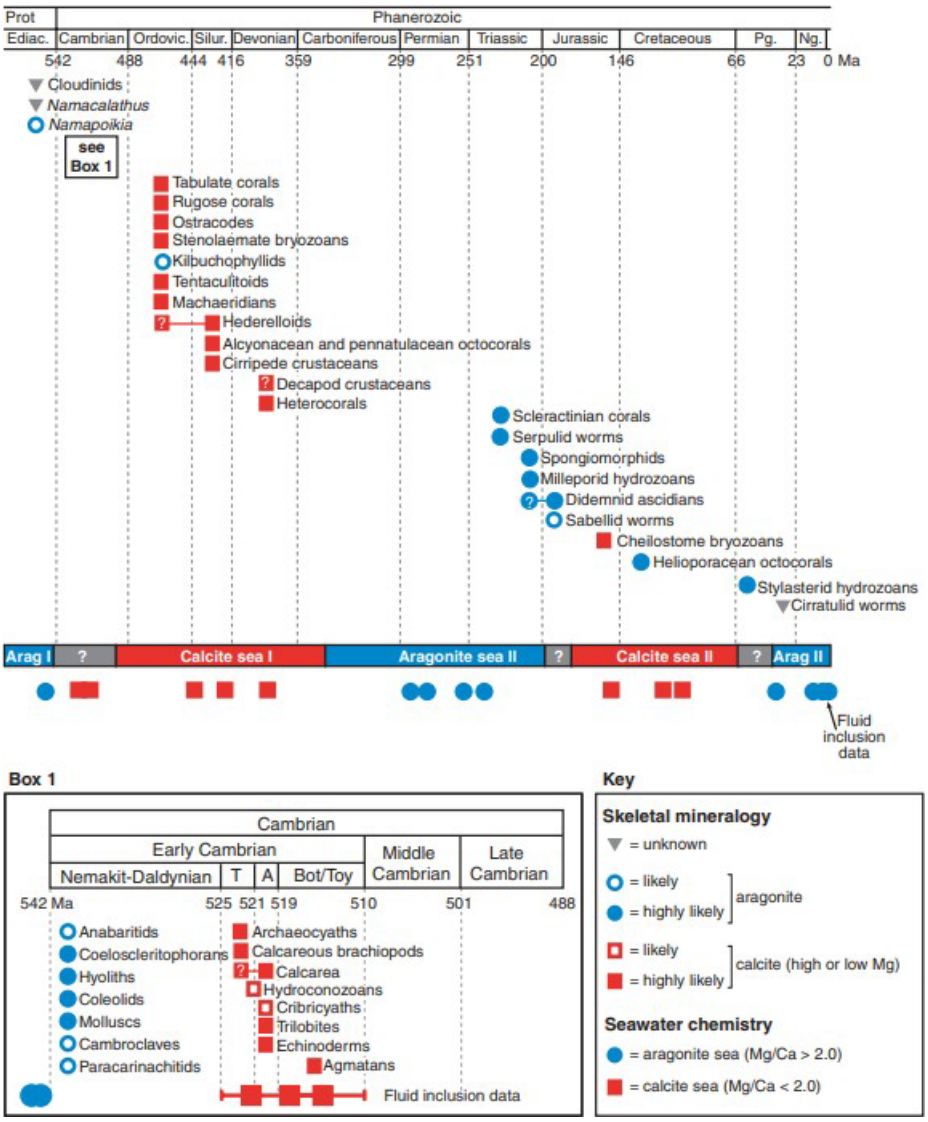


Figure 1.4: Plot showing first appearance of various carbonate-shelled taxa. Red corresponds with calcite secreting organisms whereas blue corresponds with aragonite producers. Figure obtained from Porter (2007).

Although there are oscillations in the mineralogy of carbonate cement, approximately 50% of all carbonates on Earth consist of dolomite ($(Ca,Mg)CO_3$) (Warren, 2000; Sandberg 1983). Despite the large proportion of carbonates made up of dolomite, there is little understanding of how it formed. Little dolomite is forming in modern tropical environments raising questions as to the history of dolomite and how it formed in such large quantities throughout geologic history (Warren, 2000). Discrepancies between the amount of dolomite forming today versus the amount formed in the past is known as the "dolomite-problem" (Arvidson and Mackenzie, 1999).

Several hypotheses exist to explain the variation in Mg/Ca ratio of seawater over the Phanerozoic. One hypothesis involves variations in the alteration of seafloor basalts due to changes in the rate of crustal accretion along mid-ocean ridges (Holland and Zimmermann, 2000). Mid-ocean ridges are hypothesized to significantly influence the Mg/Ca of seawater (Hardie, 1996). Basalt-seawater reaction leads to removal of Mg^{2+} from seawater and addition of Ca^{2+}. Thus, during periods of low rates of crustal accretion, when less seawater is hydrothermally altered, the Mg/Ca ratio in seawater is expected to increase. Periods of higher rates of crustal accretion allow for the alteration of more seawater, thus driving the Mg/Ca of seawater down.

An alternative hypothesis is that changes in the amount of dolomite formed could influence the Mg/Ca of seawater. For example, the increase in seawater Mg/Ca since 150 Mya. could be attributed to decreased dolomitization in shallow-marine carbonates. It has been shown that dolomitization may occur during periods of transgression and higher atmospheric pCO_2 (Given and Wilkinson, 1987). Additional hypotheses state a decrease in the formation of dolomite, a major sink for Mg^{2+} and alkalinity from seawater, is linked to an increase in SO_4^{2-} in the oceans, as recorded in fluid inclusion analyses, and increases in SO_4^{2-} deposition in sediments (Wortmann and Chernyavsky, 2007; Lowenstein et al., 2003; Lippmann, 1973). Experimental studies and models of dolomite formation have shown that higher concentrations of seawater SO_4^{2-}can kinetically inhibit the formation of dolomite (Baker and Kastner, 1981). Hence, increased seawater SO_4^{2-}concentrations would tend to prevent the formation of dolomite, leading to a decline in dolomite formation as SO_4^{2-} increases (Baker and Kastner, 1981) and an increase in seawater Mg/Ca.

1.3 Sulfur isotopes in Seawater

The global cycling of sulfur through Earth's surface consists of several sources and sinks. Sulfur is sourced to the oceans from volcanic activity, as juvenile sulfur or the weathering of sulfate and sulfides on the continents. The formation of evaporites and pyrite burial consume oceanic sulfate (Figure 1.5). Variations in the $\delta^{34}S$ composition of paleo-seawater could be indicative of changes in several of these processes because S buried in pyrite is strongly enriched in ^{32}S relative to sulfate in seawater or sulfate minerals. For example, increases in atmospheric oxygen could have increased the concentration of sulfate. The $\delta^{34}S$ record shows a general curve through the Phanerozoic but exhibits positive and negative excursions that are attributed to 2 main drivers. Within the context of the Phanerozoic sulfur system, two main drivers of isotopic fractionation are due to the metabolism of sulfate reducing bacteria, which prefers lighter ^{32}S isotopes, resulting in positive excursions and the oxidation or less prevalent reduction of sulfate as pyrite, resulting in a negative excursion. Positive excursions are due to the bond strength between ^{34}S and oxygen being more stable and thus more difficult to break than the bond between ^{32}S and oxygen. Therefore, positive signals in carbonate associated sulfate generally suggest that more sulfate reduction or pyrite burial must be occurring. When this record decreases, it generally is a signal that more pyrite is being weathered than buried.

Sulfate is a major ion in seawater and its global cycling is an important indication of Earth processes. Estimates of the sulfur isotopic composition of paleoseawater are often made based on measurements of S associated with marine carbonates or evaporitic gypsum; these suggest fluctuations in the sulfur cycle over the Phanerozoic. Positive excursions in the $\delta^{34}S$, are thought to be times of high pyrite burial because pyrite is depleted in ^{34}S, whereas negative excursions are thought to be

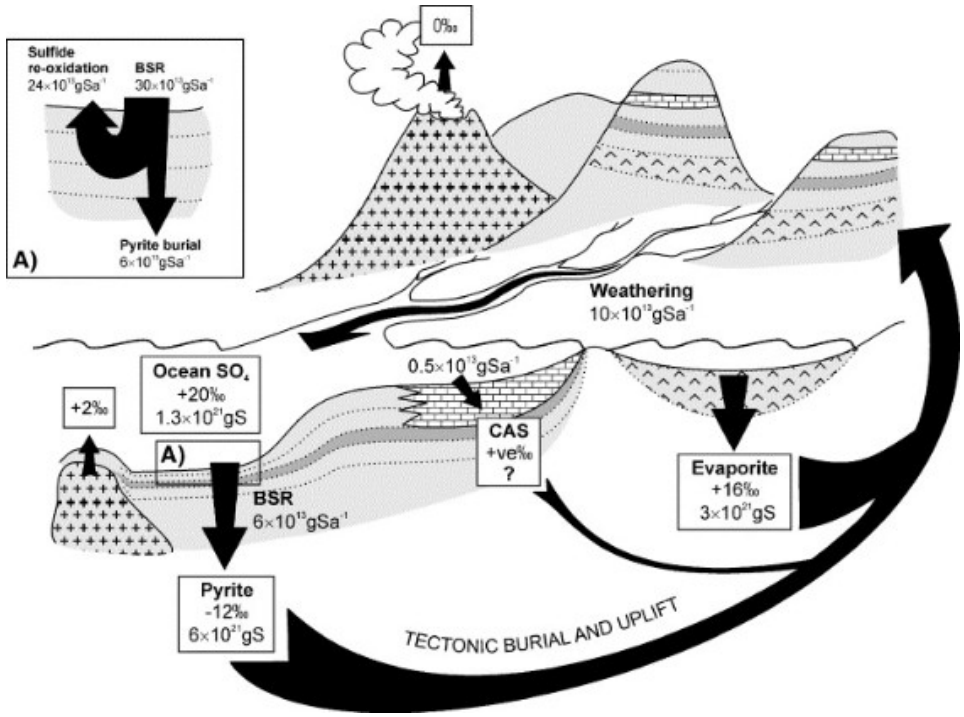


Figure 1.5: Cartoon of the global cycling of sulfur from Bottrell and Newton (2006). Sulfur is outgassed during volcanism and sourced to the ocean via precipitation as well as from weathering of sulfides and sulfates. Major sinks of sulfate from seawater include evaporite deposition, microbial sulfate reduction along marine shelves and sulfate reduction in pelagic sediments. Units of mass are grams of sulfur and units of fluxes are grams of sulfur per year.

times of high concentrations of marine sulfate (Halevy et al., 2007). Comprehensive datasets of Phanerozoic $\delta^{34}S$ indicate several changes in the sulfur cycle (Figure 1.6).

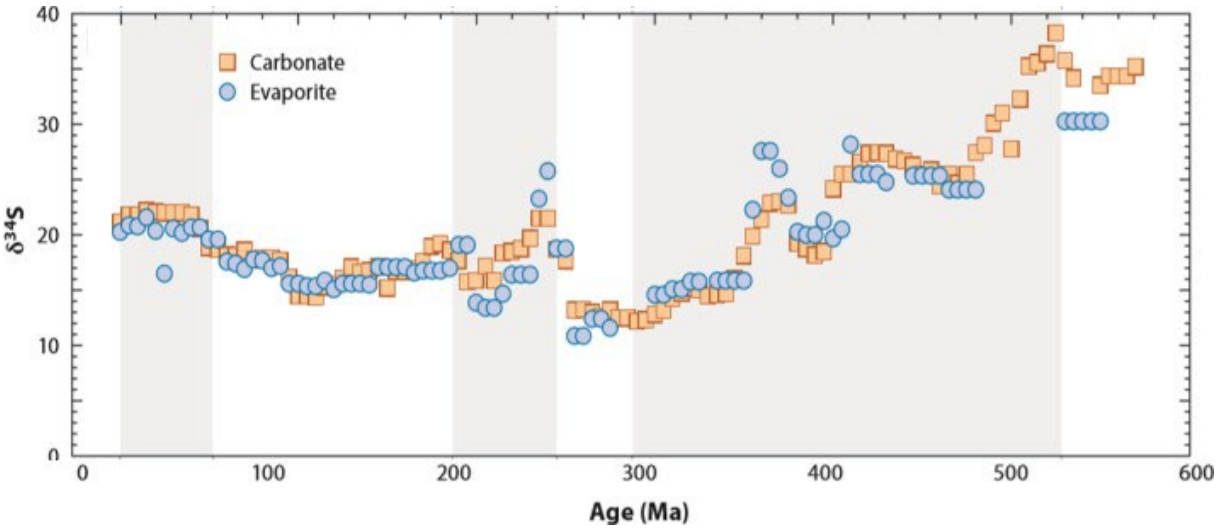


Figure 1.6: The Phanerozoic record of δ34S from carbonates and evaporites from Turchyn and DePaolo (2019).

1.4 Goals of this Research

The aim of this research was to investigate changes in paleo-seawater by analyzing the time-series variation of marine evaporite deposits and their mineralogy. Previous approaches used smaller datasets relative to the data obtained in GeoDeepDive and Macrostrat based approaches developed here. Having more data collected in an unbiased manner allows for the testing of older hypotheses against a more comprehensive dataset. First, a comprehensive record was compiled from GeoDeepDive and Macrostrat of evaporites and their mineralogy through the Phanerozoic to understand and analyze the secular variations marine evaporites. Secondly, by systematically collecting a stratigraphic unit's mineralogy and age information, I analyzed the data to determine if there were any trends indicating a change in seawater composition based upon evaporite mineral occurrences. Lastly, I developed a batch evaporation model using PHREEQC to evaluate different hypotheses about the mechanisms that drove the observed changes in the occurrence of marine evaporite minerals throughout the Phanerozoic.

Chapter 2 Methods

2.1 Macrostrat

Macrostrat is a chronostratigraphic and geospatial database that describes the basic geology of North America, the Caribbean, New Zealand, and some regions of the deep sea. Geographic regions are divided into columns, each of which consist of a set of temporally distinct geologic units that describes the surface and sub-surface geology of that region. The database was developed to aggregate geological descriptions, geological maps and chronostratigraphic columns into a description of Earth's upper crust (Peters et al., 2018) (Figure 2.1). Broadly, the spacing of geologic columns is dictated by the complexity of the geology in a given region, for example, more variability means more columns.

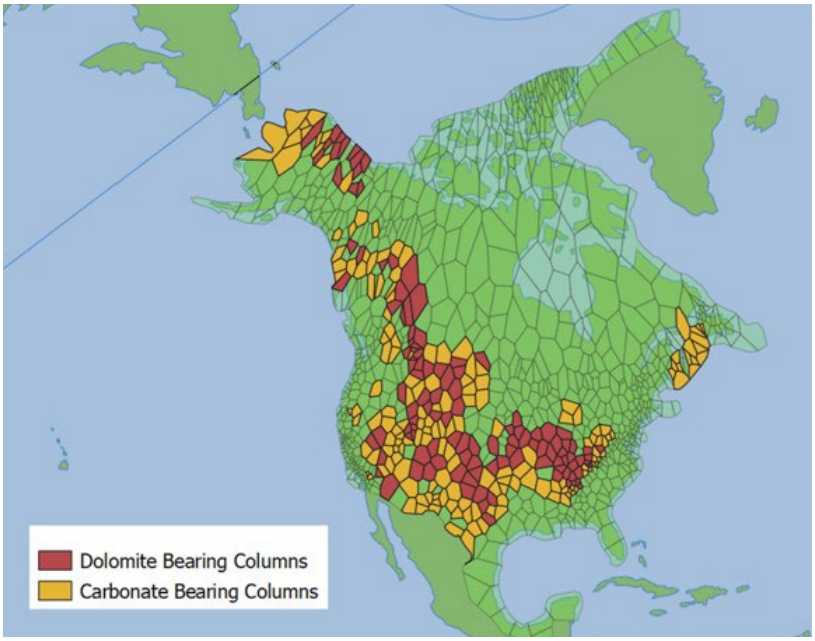


Figure 2.1: A Macrostrat map of the North American distribution of dolomite at 350 Ma. The red colored polygons represent columns that contain dolomite, yellow polygons represent columns containing only Ca-Carbonate.

These columns have been shaped into polygons determined using a Dirichlet tessellation around the geographic position of each of the 1402 chronostratigraphic columns (Meyers and Peters, 2011).

Macrostrat allows for the abundance of any given lithology to be analyzed both spatially and temporally. In this study, the Macrostrat database was used to investigate two things: the fraction of North American carbonates containing dolomite during the Phanerozoic, and to obtain ages of geologic units containing evaporite minerals. The fraction of carbonate rocks containing dolomite was derived by dividing the areal abundance (km^2) of dolomite containing polygons by the areal abundance of all carbonate-containing polygons found in North America over the past 542 Mya. This calculation was performed at 1 Myr intervals.

Analyzing the data in this way requires binning the stratigraphic units using pre-determined age bins (for example, even-sized 1 Myr. bins, or geologic periods). A given rock unit does not exist at only at one point in time, but rather has an estimated top and bottom age, between which sedimentation is considered continuous when performing this kind of analysis (Peters, 2006; Peters et al., 2017). For each age bin, each stratigraphic unit intersects that bin in 1 of 4 distinct ways (Figure 2.2): a unit can range through the top and bottom age of a bin (bt in fig 2.2), a unit's extent can be entirely contained between the top and bottom age of a bin (FL in fig 2.2), a unit can initiate within a bin and cross its top age (Ft in fig 2.2), or a unit can initiate before the age bin and truncate within it (bL in fig 2.2). This way of documenting and analyzing geologic data in time-series can be called time binning and is analogous to paleontological analysis of taxa ranges in the rock record (Foote, 2000).

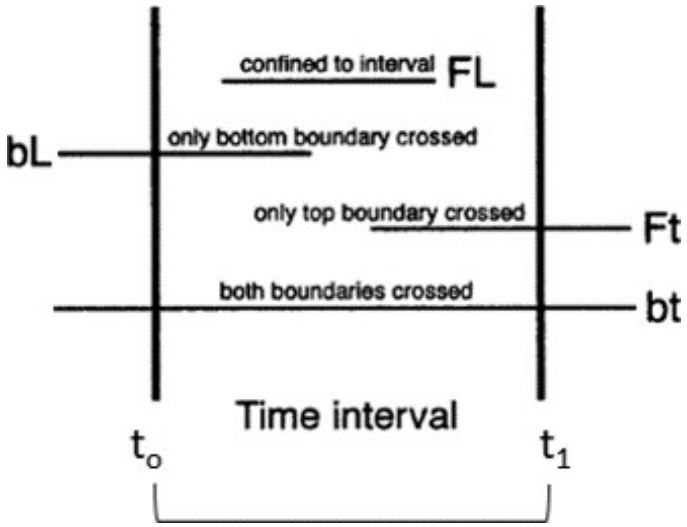


Figure 2.2: Diagram describing the four ways a geologic unit can intersect an age bin. A unit can cross either the top age (Ft) or bottom age (lb.) of a time interval. A unit can extend across the top and bottom age of a time interval (bt). Lastly, a unit can be within the top and bottom age of a time interval (FL). Figure from Peters (2006).

The Macrostrat database was also used to help in determining ages of various stratigraphic units and lithologies found by the text and data-mining program described in the following section. Names of stratigraphic units found by this program were used to search for geologic age information within Macrostrat.

2.2 GeoDeepDive and Text Mining

The GeoDeepDive (GDD) database was used to collect and analyze documents that mention evaporites. GeoDeepDive is a digital library of published scientific documents that cover a broad array of disciplines, including geology. It currently contains nearly 17 million documents parsed by CoreNLP, a natural language processing program (https://geodeepdive.org/). Natural language processing is the procedure of algorithmically parsing a sentence, mapping all grammar and word relationships within the sentence. This processing makes documents in GDD amenable to text and data mining, allowing computer programs to analyze these predetermined relationships, and identify relevant data accurately. Previous work has demonstrated that GDD analyses are useful for compilations of records of Earth History (Peters et al., 2017).

The GDD database is continuously growing in size as new papers are added hourly from

different publishing sources. Subsets of documents that are relevant to a given topic are identified via matching to key words of interest, such as evaporite minerals (Table 2.2). A total of 32,543 GDD documents matched of these keywords and were further analyzed.

Query	Terms Used	Query Size
A	Evaporite, salt, gypsum, anhydrite, halite, epsomite, potash, potash salt, k salt, sylvite, hydrohalite, bischofite, antacitite, carnallite, tachyhydrite, rhinneite, kainite, thermonatrite, soda, nahcolite, basanite, kieserite, siderite, epsomite, thernadite, mirabilite, celestine, glaserite, vanthoffitite, bleodite, loewite, langbeinite , leonine, glauberite, syngenite, polyhalite, northupite, burette, techie, hanksite, lautarite, kernite, borax, colemanite, kieserite, hexahydrite, pentahydrite, kieserite	32,543 Documents

Table 2.1: Table of terms queried and documents returned from GDD. Bibliography contained in Appendix 1.1.

2.2.1 Program Description

The goal of the data mining program I developed was to locate text descriptions of evaporites, determine their mineralogies, ages of these deposits and origin of these deposits (e.g., marine versus non-marine origin). To do this, the program published by Peters et al. (2017) to determine the distribution of stromatolites in the geological record was used as a starting point. Functionally, the program is based upon using simple logical relationships that will extract a *candidate*, which is a pairing between a mineral name and a stratigraphic name (a tuple), using information from within the document to evaluate the relationship between these two names. Evaporite mineral instances are found by searching for specific evaporite mineral names (Table 2.1). Second, all documents containing mention of one or more of the evaporite minerals listed in Table 2.1 were searched for keywords that indicate a stratigraphic name (e.g. Group, Supergroup, Formation, etc.). After such a word was found, preceding words that made up the stratigraphic name were collected. This was done by collecting capitalized words that preceded the stratigraphic keywords. In case the stratigraphic name is near the beginning of a sentence, a list of stop-words, such as “The, They, Although, Moreover” and other common words that indicate the beginning of a sentence, was used to exclude words that are not part of the name (e.g., “Bitter Springs Formation” vs “The Bitter Springs Formation”). Word position within a sentence and the part of speech

determined by NLP are also used to determine the extent of a stratigraphic name. Once a name has been found in a given document, the program searches for any informal use of stratigraphic names found in that paper (e.g., “the Bitter Springs evaporites”).

After finding the location of stratigraphic units and mineral words within a document, the relationship between the stratigraphic word and mineral word are then evaluated. This is done by considering the proximity of the mineral name to the stratigraphic name within a sentence, whether the mineral is within the stratigraphic name, or if the mineral has a direct parent/daughter relationship to the stratigraphic name determined by NLP. Phrases between the evaporite mineral and stratigraphic unit, such as “found in”, “within”, “contains”, and others (Table 2.2) within five words before or after a stratigraphic mention, were considered indications that this is a valid mineral-stratigraphic name tuple. Furthermore, if words such as “overlying”, “lacking”, “underlying”, “over”, or “under” were found between the mineral name and the stratigraphic name it was likely that the mineral stratigraphic association was comparing or contrasting adjacent lithology. Often in these instances there was indication that the mineral in reference is in an adjacent unit due to the sentence describing a section or portion of lithology and the surrounding geologic units. Overlying or underlying formations were often discussed in several papers. To account for this a logical function evaluated if there were more than two stratigraphic units within the sentence which could make it difficult to accurately map it out. Often these formations were discussed in subsequent or preceding sentences individually therefore, the candidate mineral and stratigraphic tuple was is omitted from these instances. Due to the way documents were parsed, the NLP within GeoDeepDive handles tables as if they were text within a sentence. This leads to some sentences within the database to contain table indicators or characters not found within text in scientific literature (Table 2.2). This can lead to very long sentences that can contain multiple stratigraphic names. To handle mineral and stratigraphic associations found in these cases were filtered by evaluating if the stratigraphic word and mineral word were separated by more than 40 words, had more than 7 table indicators, or the mineral was not assigned to that stratigraphic name due to a low signal to noise ratio observed in the training data (Table 2.2). Good mineral and stratigraphic associations were found parsed tables within the dataset, and a lower number of table indicators could provide data within the same row of a table, allowing that information to be extracted. These rules were developed by manually by examining

1,800 labeled mineral and stratigraphic tuples to identify the broadest and most accurate result set.

Variable	Values
Good Words	present, found, abundant, rare, within, contain, contains, includes, crystallized, from, from the, is primarily, formed by, formed, is in, form, within, precipitation, fossil, shell, organisms
Bad Words	not, does not contain, lacking, not in, does not contain, lacks, not found in, not found within, not within, absent missing, overlying, overlays, doesn't, does not include, volcanic, chemical weathering, seafloor
Table Indicators	'Table','Figure',;',':','-RRB-','-LRB-','.','the','The','. . .','...'

Table 2.2 List of variables used in the text mining program to evaluate correct and incorrect instances of mineral – stratigraphic name tuples. The same steps are taken for distant mentions that extended beyond an individual sentence of an evaporite mineral and a stratigraphic entity. This approach is used is to match minerals to units that may not have a full stratigraphic name in the text, but the root words are used in the instance. Applying the same rules as above to identify good and bad matches, all the potential stratigraphic and mineral matches were determined by the program. After all stratigraphic and mineral word tuples have been evaluated by the program, a results table is generated showing the sentence, words determined to be related, and bibliographic information. These were manually examined. Good words provided a higher accuracy of extraction when found in association with a mineral and stratigraphic association. Bad words were words often found in associations that did not have a valid mineral and stratigraphic association.

After a stratigraphic name has been assigned to an evaporite mineral, an age needs to be provided for the stratigraphic unit. First, the Macrostrat database was queried to find defined age boundaries for the unit. However, only 65% of all candidates stratigraphic names were found within the Macrostrat database. To determine the ages of the other units determined to contain evaporite minerals, a program was developed to identify and match geologic age words that describe the unit within a document.

To assign an age within the GDD document, a list of known bin names from the international geologic timescale obtained from Macrostrat were flagged within a five-word window of any stratigraphic name or root found to have a mineral associated with it. Next, several rules were used to determine if it was an accurate age. First, if any keyword of a stratigraphic unit such as: "Group",

"Member", "Bed", "Unit", "Supergroup", or any of their abbreviations was between the stratigraphic unit in question it was omitted due to the likelihood of multiple names in a sentence making it difficult to accurately assign an association. If the sentence had more than seven table indicators the age was not recorded due to the low signal to noise ratio of association found in those instances. Lastly, if the age was near to or immediately adjacent the stratigraphic name it was recorded. Some stratigraphic mentions had age information provided in Macrostrat. To provide the most accurate age information the ages for stratigraphic entities within Macrostrat were assigned first, then if no age information was available for the unit found in the data extraction, the in-text information was used to provide an age association.

Once all age – stratigraphic name tuples were found, the age terms were evaluated to check for internal consistency in the compiled age assignments across different scientific publications. If the ages found in different papers describing one stratigraphic unit were the same, then the age was determined to be accurate. If less than 75% of age words linked to a given unit overlapped with one another (e.g., Late Devonian, Famennian, Paleozoic, Ediacaran, Cryogenian), then no age was assigned this unit.

Determining origin of the evaporite deposit was the last aspect of the workflow. This was done in a similar way to finding age-unit name tuples. First, GDD documents were searched for non-marine indicator words, such as: "lake", "lacustrine", "continental", "non-marine", "playa", "alluvial fan", "hydrothermal", "chemical weathering", "volcanic", "sea floor", "lithium". The term chemical weathering was found to be associated with eolian deposition of gypsum and halite within GDD sentence sets. The terms volcanic and seafloor were found to often refer to mid ocean ridge phase associations (e.g., anhydrite). Good words consisted of: "marine", "sea water", "lagoon", "fossil", "shell", "organisms". Marine/non-marine words were mapped to stratigraphic units using NLP, word proximity, and keywords between the two to find a good match. The marine/non-marine keyword had to be within 20 words of the stratigraphic name and have no other stratigraphic names or less than 5 table indicators between them. Furthermore, if a unit was found to contain commonly non-marine evaporite minerals such as sodium carbonate, borates, or lithium salts, the unit was then considered to be non-marine. Units determined to be non-marine were omitted from further analysis.

Uncertainty in these text extractions was evaluated by reviewing 500 randomly selected results from the program. For each, I manually checked the origin of a deposit, mineralogy of a deposit, and age of the deposit using information from the document. In 89% of cases where a mineral-stratigraphic association was matched with a geologic age, the program correctly assigned the mineralogy, stratigraphic name, and geologic age. Another way uncertainty was estimated was via bootstrapping. Bootstrapping should show larger uncertainty if the deposit only is mentioned in one paper as it has a higher chance of being left out of any given bootstrap. The bootstrap approach used to evaluate the error in the text-mining results sampled the "docid" field of the results set, randomly sampled 21,432 documents allowing for replacement, and generated a synthetic results set of the mineral and stratigraphic associations found within those documents. The bootstrap was used to create 1,000 synthetic datasets to approximate error within the text-mining program. Error was evaluated by calculating the 20^{th} and 80^{th} quartiles from the average of the data result.

Chapter 3 The geological record of Phanerozoic evaporite deposits

3.1 GeoDeepDive and Macrostrat Results

As described in Chapter 2, a text-mining program was written to extract mineralogic data and descriptions from papers describing marine sedimentary deposits to characterize the mineralogy of salt bearing deposits (Section 2.2). This program was used to collect and evaluate if the mineralogical data collected from a paper was describing a marine salt deposit or a non-marine salt deposit. Using the stratigraphic name of the deposits and the Macrostrat database, ages were assigned to each unique stratigraphic name discovered by the extractor. This approach was used to describe the mineralogy of salt bearing deposits throughout the Phanerozoic (Section 2.2.1), extracting 22,083 (mineral-stratigraphic name) tuples from 21,432 documents. The results from this analysis are presented below.

3.2 KCl and $MgSO_4$ deposits

Evaporites containing KCl or $MgSO_4$-bearing minerals were documented for the Phanerozoic (Figure 3.1). There were 534 extractions that mentioned either or both of these two minerals as being present in an evaporite bearing deposit. Due to the small number of reports of these minerals, all unique associations with an assigned age containing $MgSO_4$-bearing minerals were evaluated manually (Appendix 1). Deposits that were manually evaluated as a marine occurrence of $MgSO_4$ were determined by: (i) a correct association of a stratigraphic name with an evaporite deposit with a definite geologic age, (ii) a direct description of marine deposition, and (iii) the lack of diagenetic

alteration descriptions describing the identified unit. Of the 791 results, only 303 were unique stratigraphic units with an associated age bearing KCl or $MgSO_4$. Following this evaluation, the data produced by the text mining program including the identified geologic age, marine or non-marine origin, and stratigraphic name were compiled into a time-series plot for all results mentioning either KCl or $MgSO_4$ salts. Of these 303 combined extractions KCl or $MgSO_4$, 51 unique $MgSO_4$ units and 83 unique KCl units were associated with a geologic age. (Table 3.1). When evaluating deposit origin, only 11 unique $MgSO_4$ units associated with a geologic age were definitively described as marine in origin from the supplementary text information.

Mineral	**Instances**	**Mineral Stratigraphic Associations**	**Unique Stratigraphic Associations**	**Unique Associations w/ Age**
Gypsum	57,209	6,099	1,204	630
Anhydrite	24,673	4,580	841	475
Halite	43,752	6,826	874	448
$MgSO_4$	3,542	263	104	51
Sylvite	6,941	762	199	83

Table 3.1 : The number of times a mineral term was found within the document set is the number of "instances" found within the corpus. The number of times a mineral instance was paired with a stratigraphic unit name is deemed the number of "mineral-stratigraphic associations". Unique stratigraphic associations refers to the number of unique stratigraphic names associated with a specific mineral. Lastly, "Unique associations with age" represents the number of unique stratigraphic units that were paired with a mineral instance. Instances of mineral formulas being found within the corpus as a mineral "instance" were assigned under the corresponding mineral, however, any mineral formula instance containing "$CaSO_4$" were allocated to anhydrite due to the variation of formulas containing this string within the corpus. Gypsum was the most found mineral, followed by halite and anhydrite. $MgSO_4$ refers to all the $MgSO_4$-bearing minerals identified including hexahydrite, kieserite, and epsomite. Hand evaluated $MgSO_4$ units are located in Appendix 1, "Epsomite-Filtered".

The age distribution of evaporite deposits containing $MgSO_4$ and KCl found in this work, and

those reported by Hardie (1996) and Zharkov (1974) are compared in Figure 3.1. Marine sylvite deposits recorded in Zharkov (1974) and from this work show that sylvite is a common mineral found in evaporite deposits throughout the Phanerozoic, and that sylvite bearing evaporites can overlap in age with evaporites containing $MgSO_4$-bearing minerals. (Figure 3.1). The new results show that sylvite-bearing evaporite deposits are most common in the Permian Period, which was also reported by Zharkov (1974). It is important to note that simply from the occurrence of sylvite deposits, as documented here, it is not possible to differentiate between sylvite produced by carnallite dissolution and sylvite precipitated as a primary phase.

The time-series of $MgSO_4$ evaporites produced here (Fig. 3.1) is in good agreement with the results of Hardie (1996), with $MgSO_4$-bearing evaporites occurring only during specific intervals in the Phanerozoic. However, two deposits found within GDD data are outside the age-range reported by Hardie (1996). These are from the late Devonian and the early Triassic.

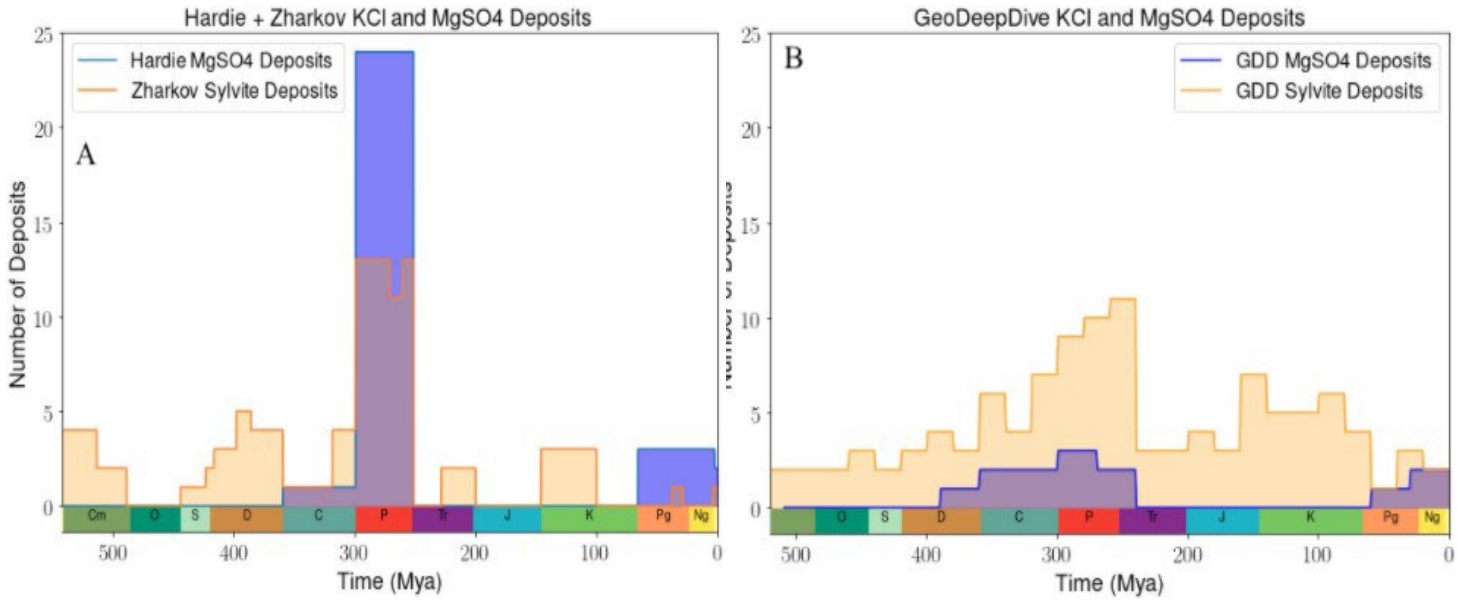


Figure 3.1: A: Phanerozoic time-series of MgSO4 bearing deposits from Hardie (1996) and sylvite-bearing evaporites reported by Zharkov (1974). B: Time-series of marine KCl and $MgSO_4$ evaporites extracted from the GeoDeepDive database in this study.

3.3 $CaSO_4$ Deposits

Of all instances describing a mineral with a stratigraphic unit associated with a geologic age, 1,544 contained either halite, anhydrite, or gypsum (Table 3.1). Gypsum is reported to occur in 448 stratigraphic units with associated age, being more commonly observed than halite (630 associations with age) and anhydrite (475 associations with age). The next most common mineral within the dataset is carnallite which is only reported in 125 stratigraphic units associated with a geologic age. The largest number of units containing gypsum, halite, anhydrite, and many other evaporite minerals formed during the late Permian. To illustrate the relative occurrence of evaporite deposits during the Phanerozoic, halite, gypsum, and anhydrite are plotted in a time-series in 1-million-year intervals (Figure 3.2). This shows the number of deposits containing each mineral that intersect in age with each 1 Myr interval.

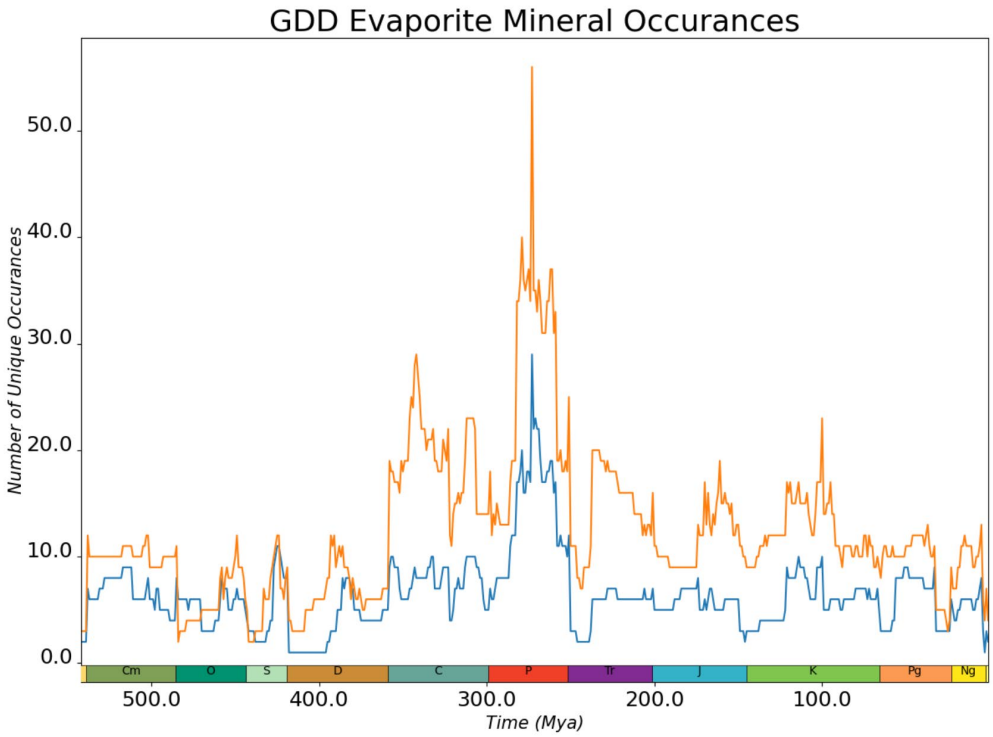


Figure 3.2: Phanerozoic record of the number of unique units containing halite (blue) and calcium sulfate (orange) minerals using

a 1-million-year bin size.

Since one of the largest sinks of SO_4^{2-} from seawater is $CaSO_4$ precipitation, the temporal distribution of $CaSO_4$-bearing evaporites, and the abundance of $CaSO_4$-bearing units relative to the abundance of halite bearing units is described next. The relative occurrence of calcium sulfate (RAC) was determined by normalizing the number of unique evaporites that contain gypsum and/or anhydrite (i.e., a $CaSO_4$ mineral) at a given time to the sum of the number of unique evaporites that contain halite and the number of unique evaporites that contain either calcium sulfate mineral during the same time interval. This approach was used based on the assumption that the record of halite-bearing evaporites simply tracks the occurrence of conditions appropriate for evaporite deposit formation (and preservation); i.e., assuming that this does not vary substantially due to changes in seawater Na^+ and Cl^- concentrations over the Phanerozoic. While small changes in Na^+ and Cl^- concentrations are likely to have occurred (Hay et al., 2006), these are generally thought to have been small relative to the changes in concentration of $Ca^{2+}$and SO_4^{2-}. The relative occurrence of calcium sulfate is thus calculated:

$$\mathrm{RAC} = \sum_x^n \mathrm{CSD} / \left(\sum_x^n \mathrm{CSD} + \sum_x^n \mathrm{HD} \right) \qquad \text{Eq. 3.1}$$

Where RAC is the relative abundance of calcium sulfate evaporites occurring within between times x and n, CSD is unique calcium sulfate evaporites from a given time interval, HD is unique halite bearing evaporites from the same time interval.

The results shown on Figure 3.3 are the bootstrapped approximation of RAC binned in 1-million-year time bins (Figure 3.3A) and international epochs (Figure 3.3B). The uncertainty shown on the results is approximated by showing the 20th and 80th quartiles from a bootstrap. This was performed by randomly selecting the documents, with replacement, within the results obtained from the GDD document set for each trial and tabulating the mineral occurrences found therein

(Figure 3.3). The uncertainty observed within the bootstrap attempts was determined to be sufficiently precise after 1,000 random trials.

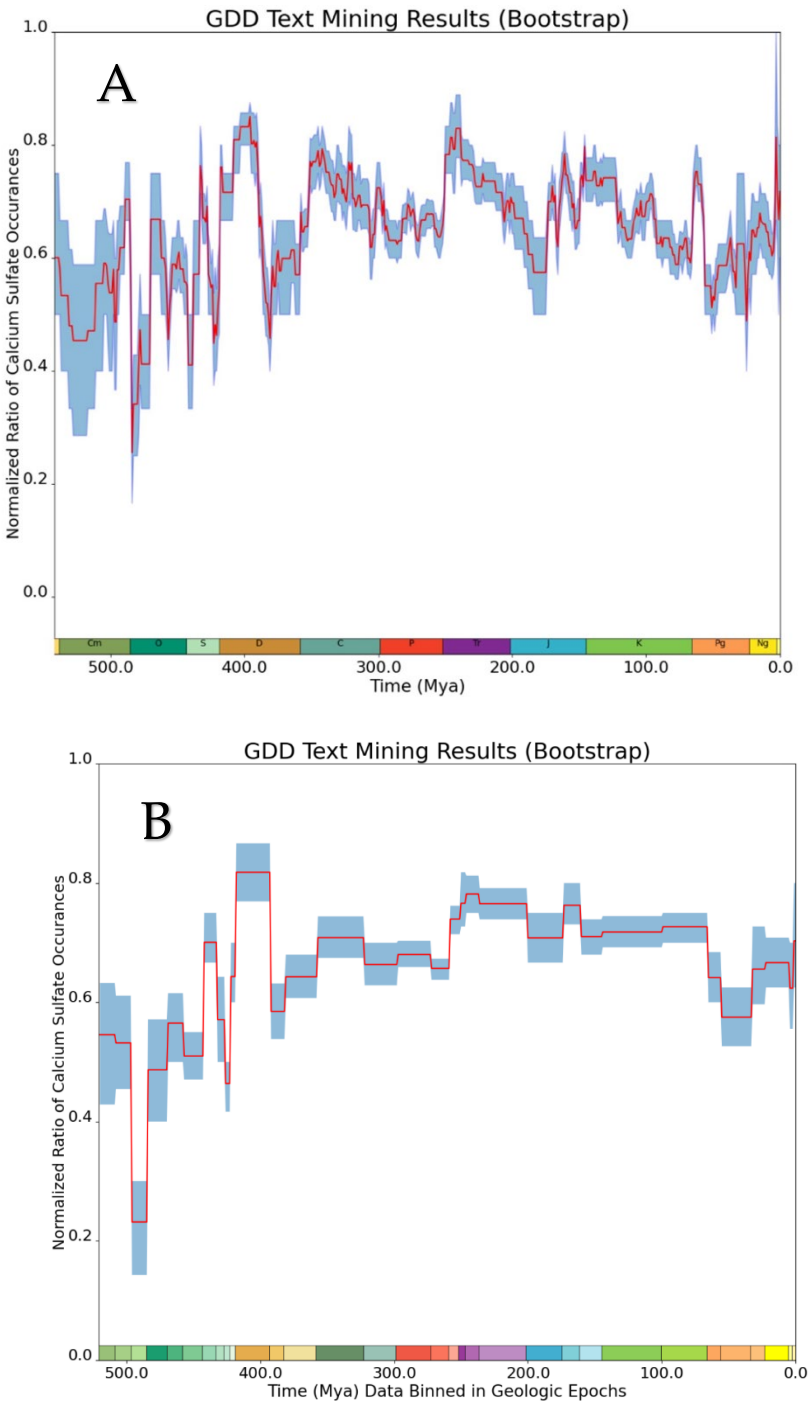


Figure 3.3 : Plots showing the abundance of $CaSO_4$-bearing units normalized to the sum of the abundance of $CaSO_4$-bearing and halite-bearing units (i.e., RAC) binned at geologic epochs (B) and 1 Myr intervals (A). The average of the bootstrap results is shown in red and the bounds of 60% of the data is in blue.

When binned in 1 Mya intervals there are various temporal changes seen in the relative sulfate record. For example, there are abrupt increases in the RAC at 350 million years and 250 million

years although these are less obvious when the data are binned in larger time intervals. When considering the full time series, the RAC increases steadily from the start of the Phanerozoic until approximately the Permian-Triassic boundary and then stays roughly constant, perhaps slightly decreasing, until present. The uncertainty in this record is greater for older deposits meaning the ratio of $CaSO_4$ evaporites is less well constrained during the Cambrian than in more recent Periods.

Macrostrat Evaporite Record

The Phanerozoic record of gypsum-bearing evaporites, anhydrite-bearing evaporites, halite-bearing evaporites, and marine carbonates within the North America set of the Macrostrat database was analyzed to compare the RAC from this dataset with the results from the GDD document set. As with the GDD data, gypsum-bearing evaporites and anhydrite-bearing evaporites were combined into $CaSO_4$-bearing evaporites. Additionally, data was compiled for marine carbonate mineral bearing units. There were 650, 65, and 12,562 unique deposits for $CaSO_4$, halite, and marine carbonate, respectively. The temporal occurrence of halite-bearing evaporites, $CaSO_4$-bearing evaporites, and marine carbonates are plotted in Figure 3.4. $CaSO_4$-bearing evaporites are found throughout the Phanerozoic with the highest number of occurrences being in the Permian as observed in the GDD dataset (Fig. 3.2). Halite-bearing evaporites are found sporadically through the Phanerozoic N. America database in Macrostrat, with many geologic periods having little to no halite evaporite occurrences. Marine carbonates are found in rocks of all ages through the Phanerozoic.

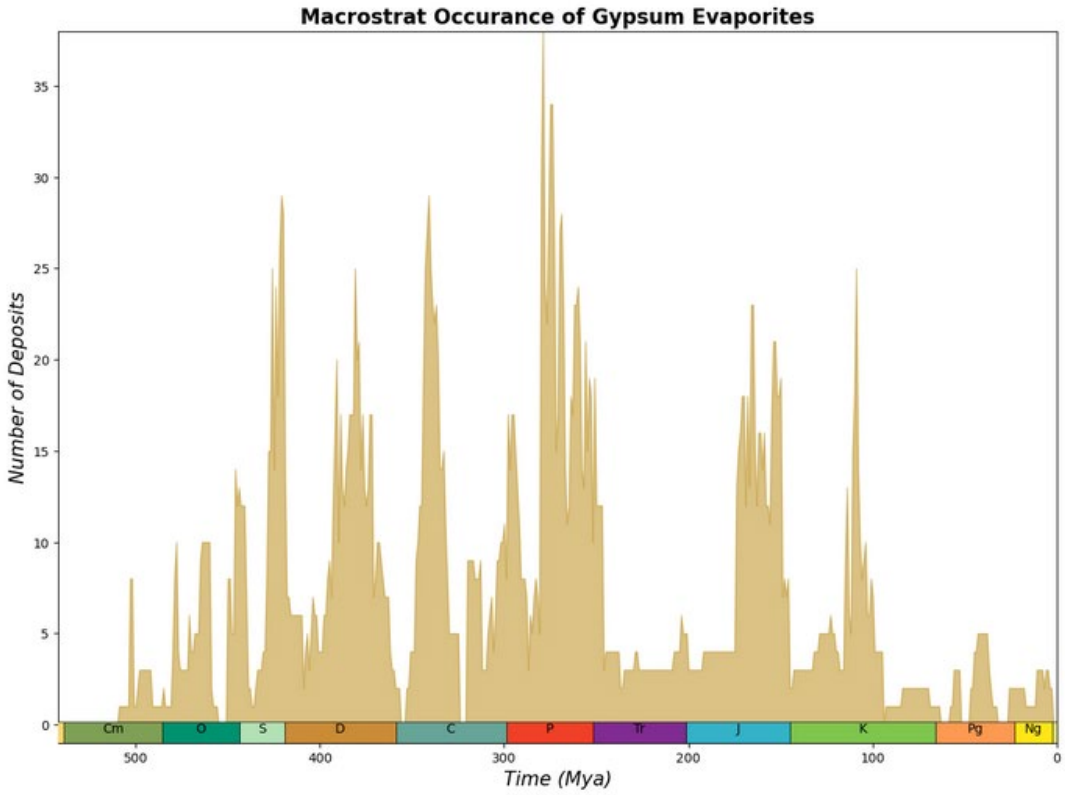
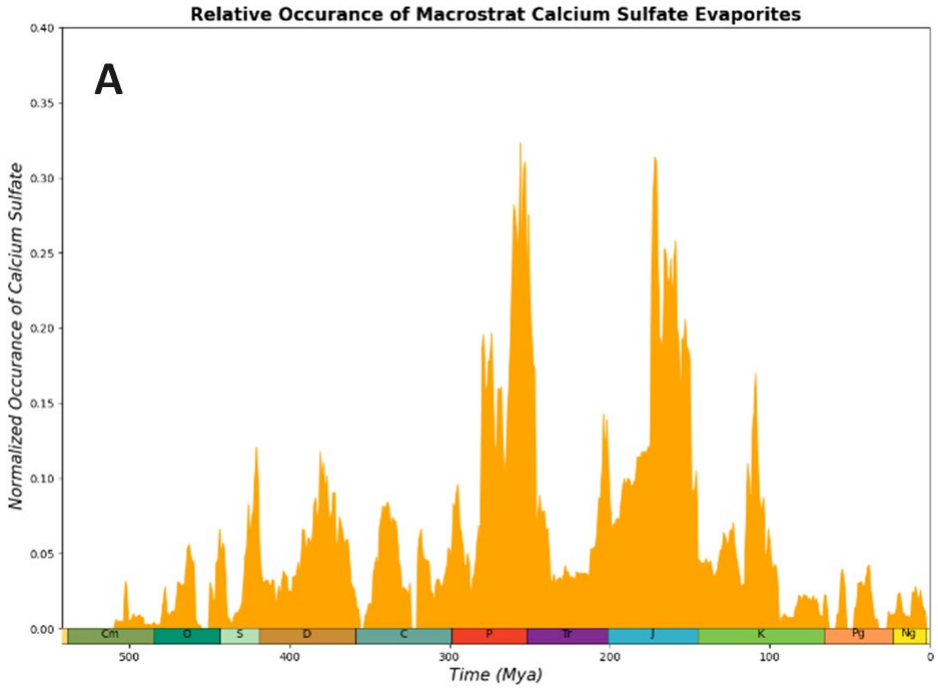
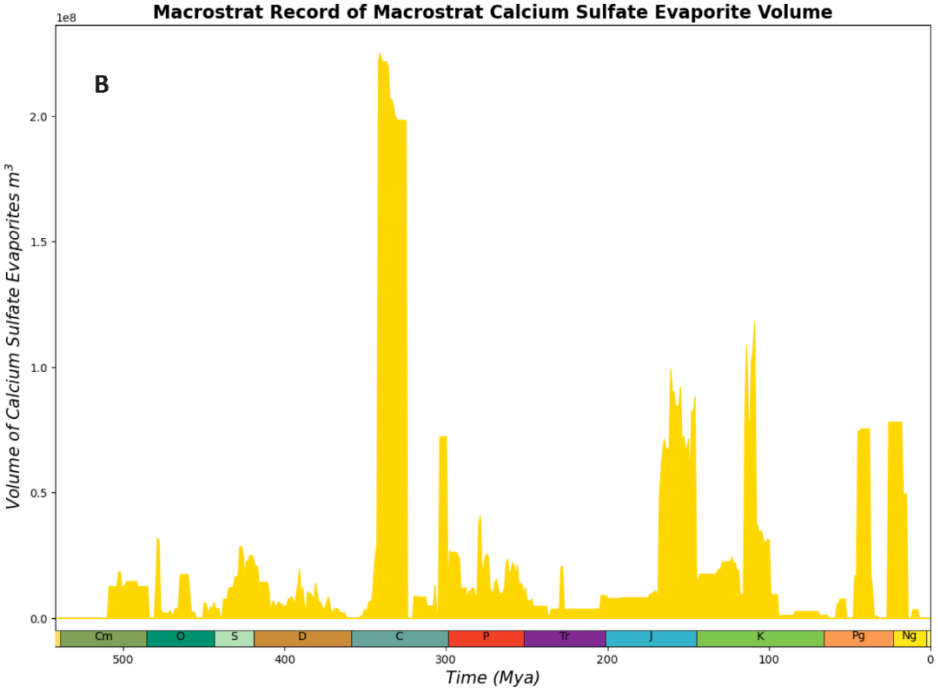


Figure 3.4: Plots showing temporal distribution of unique $CaSO_4$ occurrences throughout the Phanerozoic binned at 1-million-year time intervals from Macrostrat.

Far fewer occurrences of halite are present within the Macrostrat Database in comparison to the GDD document set, therefore the relative occurrence and proportion of $CaSO_4$ could not be analyzed in the same way. Instead, due to the prevalence of marine carbonate in Macrostrat, the volume of $CaSO_4$-bearing evaporites of any age was normalized to volume of marine carbonate. The "col_area", "prop", and "min_thick", "max_thick" data fields in Macrostrat were used to determine the volume of $CaSO_4$ bearing evaporites and marine carbonate at any given time with the results shown in Figure 3.5.


Relative Occurance of Macrostrat Calcium Sulfate Evaporites
A
Normalized Occurance of Calcium Sulfate
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Cm
O
S
D
C
P
Tr
J
K
Pg
Ng
500
400
300
200
100
0
Time (Mya)


Macrostrat Record of Macrostrat Calcium Sulfate Evaporite Volume
1e8
B
Volume of Calcium Sulfate Evaporites m³
2.0
1.5
1.0
0.5
0.0
Cm
O
S
D
C
P
Tr
J
K
Pg
Ng
500
400
300
200
100
0
Time (Mya)

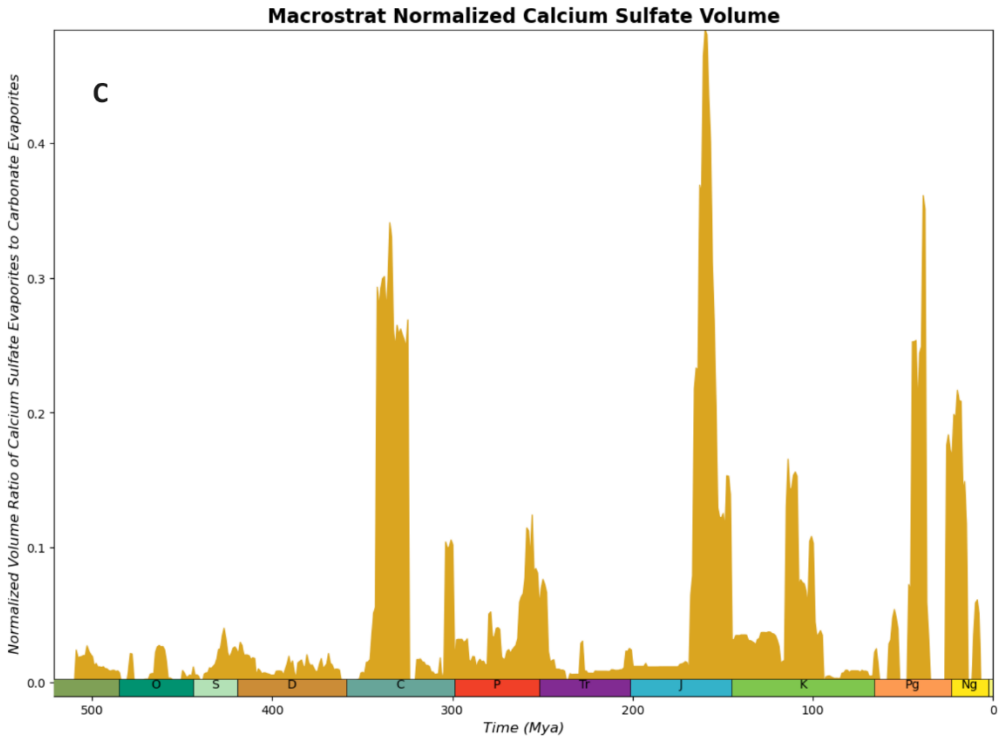


Figure 3.5: The abundance of North American Phanerozoic calcium sulfate evaporites obtained from Part A shows the relative number of occurrences of $CaSO_4$ in comparison to marine carbonate binned in 1-million-year intervals; B shows the volume $CaSO_4$ evaporites found in rocks of any given age; C shows the volume of $CaSO_4$ evaporites normalized to the volume of marine carbonate in 1-million-year intervals.

The results in Figure 3.5 show that the ratio of the number of $CaSO_4$-bearing evaporites to marine carbonates is highest during the Permian and Jurassic within the Macrostrat N. American database (Figure 3.5A). In contrast, the largest volumes of $CaSO_4$-bearing evaporites preserved in the geologic record are in the Carboniferous (Figure 3.5B). This could help provide context to understand the relative increase of calcium sulfate observed in Figure 3.3A occurring near the beginning of the Cretaceous. Peaks in the ratio of $CaSO_4$-bearing evaporites to marine carbonates are also observed in the Cretaceous and Jurassic (Figure 3.5C).

3.4 Occurrence of dolomite in the Macrostrat database

The Macrostrat database was also queried to provide the area of any column, with a lithology described as a carbonate, which contained dolomite. This was tabulated and recorded for all other carbonates separate from dolomite. To analyze the aerial extent of dolomite throughout the Phanerozoic the relative abundance of dolomite was calculated. This was achieved by normalizing the area of all dolomite bearing columns during a given time interval to the area of all carbonates bearing columns at the same time. A 1-million-year time bin was used and a time series of the Phanerozoic relative abundance of dolomite in comparison to all carbonates was generated (Figure 3.6).

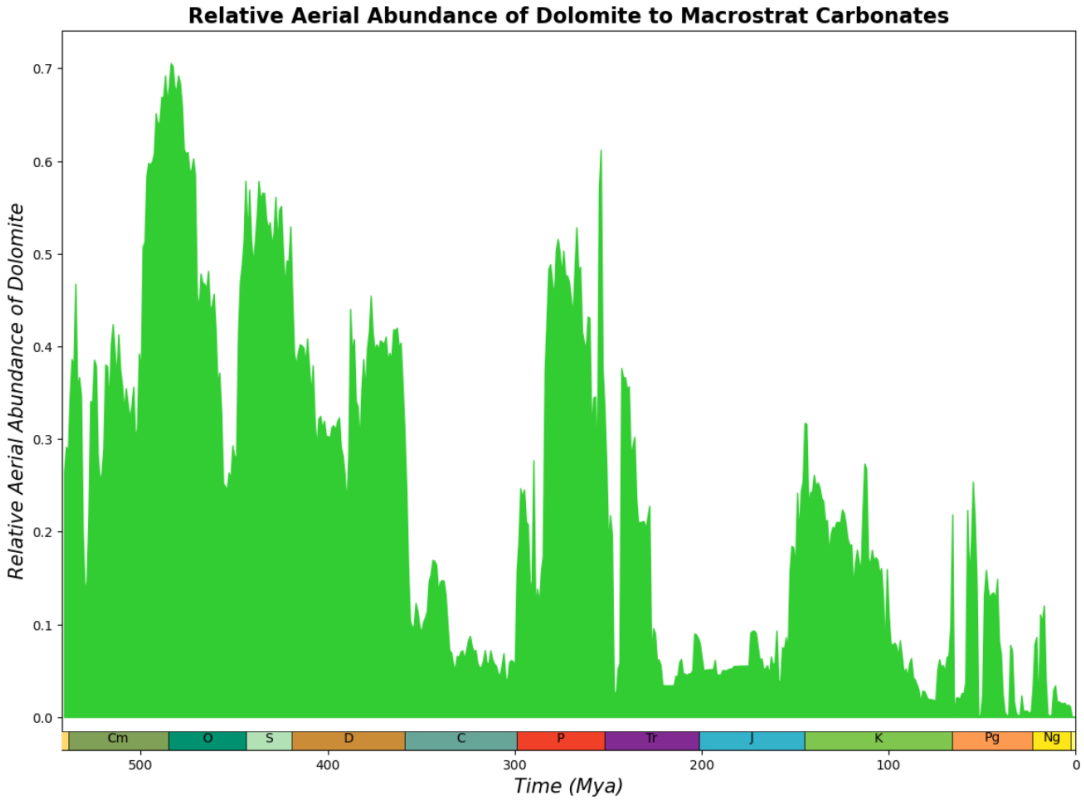


Figure 3.6: Plot showing the ratio of the area of all dolomite bearing columns within the Macrostrat database of a given age to the area of all carbonates of the same age using 1-million-year time increments.

In the Macrostrat database the ratio of dolomite to all marine carbonates is highest between 541-350 Mya and 289-240 Mya. The large decrease in the fraction of carbonates that are dolomite at approximately 350 million years ago occurs at the same time that the largest volume of $CaSO_4$ evaporites are preserved in N. America as obtained from the Macrostrat database (Figure 3.5B).

Chapter 4 PHREEQC Batch Evaporation Modeling

To explore a possible explanations an increase in the RAC from the Cambrian to the Cretaceous (Fig. 3.3), as well as rapid changes in RAC at various times in Earth history, a batch evaporation model was developed to better understand how changes in atmospheric or ocean chemistry can influence the amount of $CaSO_4$ that precipitates before halite saturation. A python code was written to do this based around the PHREEQC aqueous chemistry model (Parkhurst and Appelo, 2013).

4.1 Experiment design and model parameterization

To test the hypothesis that variation in the major ion composition of seawater over the Phanerozoic control's the relative amounts of $CaSO_4$ and halite found in evaporite deposits, I undertook several experiments using a geochemical model I developed based on a python implementation of PHREEQC (Parkhurst and Appelo, 2013). These are aimed at evaluating which changes in seawater chemistry can affect the abundance or presence of evaporite minerals. Specifically, this approach is an attempt to clarify if changes of seawater composition, within the ranges postulated by existing proxies, may have influenced the mineral occurrences observed within marine evaporites and affect the formation of halite vs $CaSO_4$ within an ideal marine evaporite forming basin. Batch evaporation experiments were performed by varying the initial concentrations of $[Ca^{2+}]$, $[SO_4^{2-}]$, Salinity, and pCO_2 to examine the influence of major chemical components of seawater and the subsequent evaporite formations they produce. An atmosphere of

CO_2 (g) held at $10^{-3.5}$ atmospheres (atm) was equilibrated with the solution at every reaction step except in the models where pCO_2 was varied.

To benchmark the results of the model, the model batch evaporation experiments conducted by Blättler et al. (2020), also based on the PHREEQC aqueous chemistry model, were replicated and analyzed by comparing the degree of evaporation at which gypsum becomes saturated, using 95 different initial fluid compositions (Figure 4.1A, Appendix 1). The comparison indicates my results match those from Blattler et al. (2020) with good accuracy. In comparing the results (Figure 4.1B), the values obtained from my experiment were on average 0.5 units greater than Blättler et al. (2020), over degree of evaporation values that range from 0.1 to 55. Such small differences probably reflect difference in the step size in the evaporation process and numerical rounding. These tests were performed using the input files provided in the appendix of Blattler et al. (2020), and the exact same input parameters listed within their supplementary data.

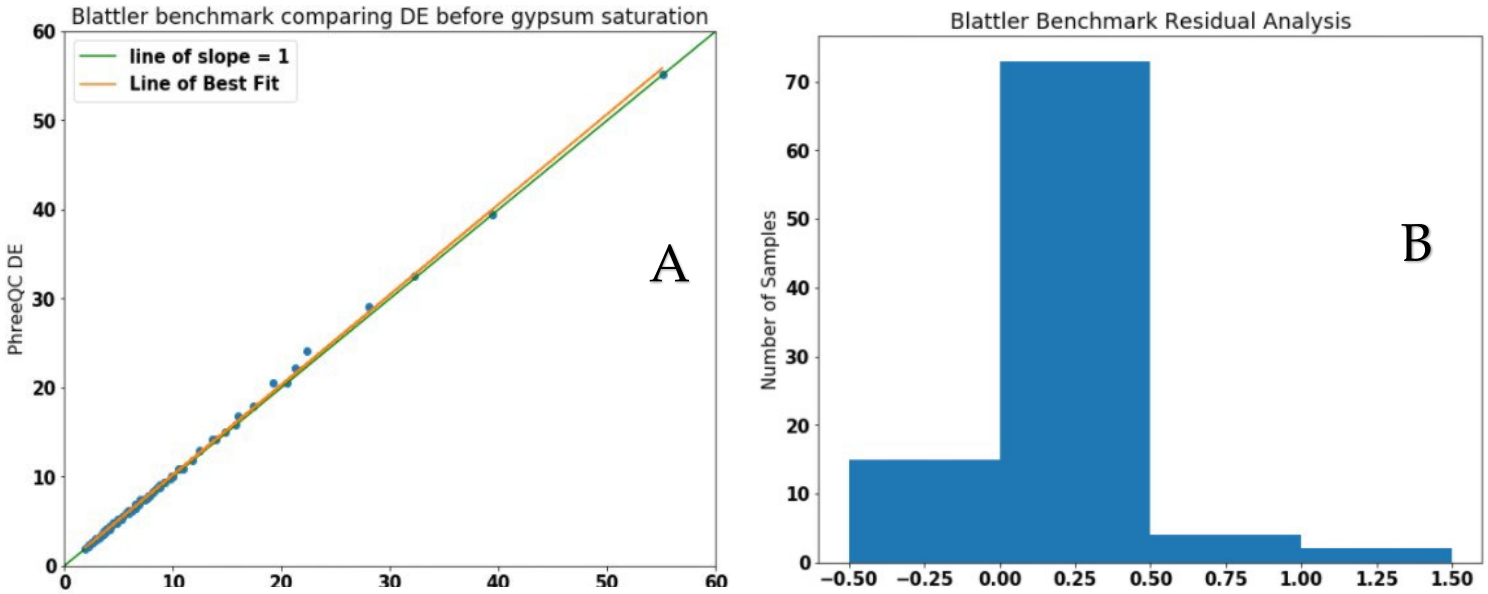


Figure 4.1: Model validation using published PHREEQC results from Blättler et al. (2020). (A) My results for degree of evaporation at gypsum saturation are plotted on y-axis and the x-axis shows the results from Blättler et al. (2020). Line of best fit in orange, and the one-to-one line is in green. (B) Histogram showing the residual differences defined as between my results minus the results from Blättler et al. (2020). Most of my results are less than 0.5 units greater.

Several batch evaporation experiments were conducted within PHREEQC V. 3.9 by implementing a similar method to Blättler et. al. (2020). My experiments invoked an idealized scenario for evaporite formation that neglects freshwater input and any external mixing components, such as recharge. I also restricted the phases allowed to precipitate within the model to prevent glauberite from crystallizing. The Pitzer database was used to calculate ion activity coefficients in the model solutions due to their high ionic strength. Models were performed starting with a solution mass of 1 kg, temperature was fixed at 25°C, and a constant redox state of 8.413 mV. The solution was evaporated by removing water in progressively decreasing quantities of 1, 0.5, 0.2 0.1, or 0.05 moles of water per evaporation step, with the step size depended on the moles of water remaining (Table 4.1).

The amount of evaporation per reaction step in PHREEQC				
SM > 10.1 M	10.05 M>SM>7.55 M	7.55 M>SM>1.55 M	1.55 M>SM>0.45 M	0.45 M > SM
1 mol	0.5 mol	0.2 mol	0.1 mol	0.05 mol

Table 4.1: The amount of evaporation per timestep, where SM is the number of moles of H_2O remaining in the evaporating solution (initial = 55.55 moles in one kilogram at standard temperature and pressure). The decrease in evaporation per time step in the models with decreasing mass of water remaining ensures the timing of saturation of each phase is precisely constrained. The simulations stop after 55.15 moles of water have evaporated.

The following phases were allowed to precipitate: Anhydrite, Arcanite, Bischofite, Bloedite, CO_2, Calcite, Carnallite, Celestite, Epsomite, Glaserite, Glauberite, Gypsum, Halite, Hexahydrite,

Kainite, Kieserite, Leonhardite, Leonoite, $MgCl_2$, Mirabilite, Pentahydrite, Polyhalite, Schoenite, Sylvite, Syngenite, and Thenardite (Table 4.2). The concentrations of the following species were specified in the initial system modelled: Ca^{2+}, Mg^{2+}, Sr^{2+}, Na^{+}, K^{+}, Cl^{-}, SO_4^{2-}, and CO_2 (g).

Precipitating Phases	
Anhydrite	$CaSO_4$
Arcanite	K_2SO_4
Bischofite	$MgCl_2 \cdot 6H_2O$
Bleodite	$Na_2Mg(SO_4)_2 \cdot 4H_2O$
Carbon Dioxide	CO_2
Calcite	$CaCO_3$
Celestite	$SrSO_4$
Epsomite	$MgSO_4 \cdot 7H_2O$
Glaserite	$(K,Na)_3Na(SO_4)_2$
Glauberite	$Na_2Ca(SO_4)_2$
Gypsum	$CaSO_4 \cdot H_2O$
Halite	NaCl
Hexahydrite	$MgSO_4 \cdot 6H_2O$
Kainite	$KMg(SO_4)Cl \cdot 3H_2O$
Kieserite	$MgSO_4 \cdot H_2O$
Leonhardite	$CaAl_2Si_4O_{12} \cdot 3H_2O$
Leonite	$K_2Mg(SO_4)_2 \cdot 4H_2O$
Magnesium Chloride	$MgCl_2$
Mirabilite	$Na_2SO_4 \cdot 10H_2O$
Pentahydrite	$MgSO_4 \cdot 5H_2O$
Polyhalite	$K_2Ca_2Mg(SO_4)_4 \cdot 2H_2O$
Schoenite	$K_2Mg(SO_4)_2 \cdot 6H_2O$
Sylvite	KCl
Syngenite	$K_2Ca(SO_4)_2 \cdot H_2O$
Thenardite	Na_2SO_4

Table 4.2: Minerals allowed to precipitate in PHREEQC with their mineral formulas. Glauberite was withheld as a phase while varying [SO_4^{2-}], as described in the text.

Batch evaporation calculations were stopped when 55.15 moles out of one liter of water has been removed via evaporation. Alkalinity was held constant across all initial solution concentrations at 2.4 m_{eq}/kg accounting for the charge imbalance of the major ions in seawater.

The mass of evaporite phases formed during evaporation, and the degree of evaporation required for phase saturation, were tabulated and analyzed across all batch evaporation experiments. The degree of evaporation (DE) required for phase saturation is the DE when the phase first becomes saturated; for example, the DE required for phase saturation for calcite is 0 because the solution is initially saturated with respect to calcium carbonate. For the experiments pertinent to the questions of this study, the degree of evaporation is defined as the percentage of the initial mass of water that has been removed from solution at any given stage, where *DE(x)* is the degree of evaporation of the solution ranging from 0 to 99.98 and is inversely proportional to the solutions mass. M_i denotes the initial mass of solution, which is 1 kg of water in all simulations, *S(x)* denotes the mass of water at reaction step *x* (Eq. 4.1).

$$DE(x) = \frac{(M_i - M)}{M_i} \times 100 \qquad \textbf{Eq. 4.1}$$

The mass of each phase formed throughout the model, degree of evaporation at which a precipitated phase begins to form, and the internal PHREEQC solution parameters were tabulated in the model results. All results were obtained from parsing PHREEQC output files.

Numerical experiments were performed to test how changes in seawater [Ca^{2+}], [SO_4^{2-}] and salinity, as well as atmospheric pCO_2, could change the RAC. While intuition could be used to make predictions, such as that higher Ca^{2+}would lead to earlier gypsum saturation all other things being equal, the complexity of the system makes such an approach questionable. For example, if increases in the concentration of one species leads to saturation of a different phase the result may be non-intuitive. Further, changes in activity coefficients can complicate the results.

4.2: PHREEQC Experimental

4.2.1. Varying the product of [Ca^{2+}] and [SO_4^{2-}]

The concentration of Ca^{2+} and SO_4^{2-} in seawater have a direct control on the formation of gypsum, and it is widely believed that the concentration of these species in seawater changed over the Phanerozoic (e.g., Horita et al., 2002; Lowenstein et al., 2003). To test whether changes in the concentrations of [Ca^{2+}] and [SO_4^{2-}] in seawater could have controlled the changes in the relative proportions of gypsum and halite observed in evaporites (Fig 3.3), experiments were performed using PHREEQC in which the concentration of these species were varied independently of one another. Charge balance was maintained for experiments using variable Ca^{2+}concentrations via increasing [Cl^-] and [Ca^{2+}] and decreasing [Na^+] in 1 mmol/kg increments from their initial value in the PHREEQC model. In the first experiment, [Ca^{2+}] in the starting solution was varied between 4 and 33 mmol/kg while holding SO_4^{2-} constant at 20 mmol/kg. In a second experiment the [SO_4^{2-}] concentration in the solution was varied at constant [Ca^{2+}]. The charge balance of solution when [SO_4^{2-}] was varied was maintained by increasing concentrations of [Na^+] and [SO_4^{2-}] and decreasing [Cl^-] in 1 mmol increments from their initial value. The batch evaporation experiment with variable concentrations of SO_4^{2-} used initial solution concentrations ranging from 4 mmol/kg to 33 mmol/kg in 1 mmol increments, with Ca^{2+} held constant a 10.3 mmol/kg. Parameter space explored by these models was set in order to see if there were any changes in the relationship between the degree of evaporation required to form the phase and the initial solution concentrations of [Ca^{2+}] and [SO_4^{2-}] for their respective experiments.

Changes in the degree of evaporation required for phase saturation, and in the quantity of the phase formed were recorded for different starting solution compositions. Glauberite

($Na_2Ca(SO_4)_2$) was artificially prevented from precipitating in the PHREEQC code (i.e., suppressed) because otherwise changes in solution Na^+ content, used to maintain charge balance in the starting solutions, would drive glauberite saturation and draw Ca^{2+} and SO_4^{2-} out of the solution. Due to glauberite's relatively low abundance in natural systems, in comparison to $CaSO_4$ and halite, its omission should not impact the model results significantly.

4.2.1.1. Results from varying the concentration of [Ca^{2+}]

PHREEQC simulation results show that as the concentration of Ca^{2+} in the starting solution increases, at constant [SO_4^{2-}], the precipitation of gypsum occurs earlier in the evaporation process (Figure 4.2). The degree of evaporation required for gypsum saturation decreases approximately 38% as the starting solution Ca^{2+} concentration increases from 4 to 33 mol/kg. The change in Ca^{2+} concentration had negligible effect on the degree of evaporation required for halite saturation even though charge balance was maintained by manipulating the concentration of Na^+ and Cl. All other things being equal, this suggests that the Ca^{2+} concentration in seawater may have played an important role in controlling the relative abundance of gypsum in Phanerozoic evaporites; i.e., higher Ca^{2+} concentrations would lead to gypsum precipitation at a lower degree of evaporation, but with no change in the degree of evaporation required for halite saturation, and hence there would be a higher probability of forming an evaporite deposit containing gypsum but not halite.

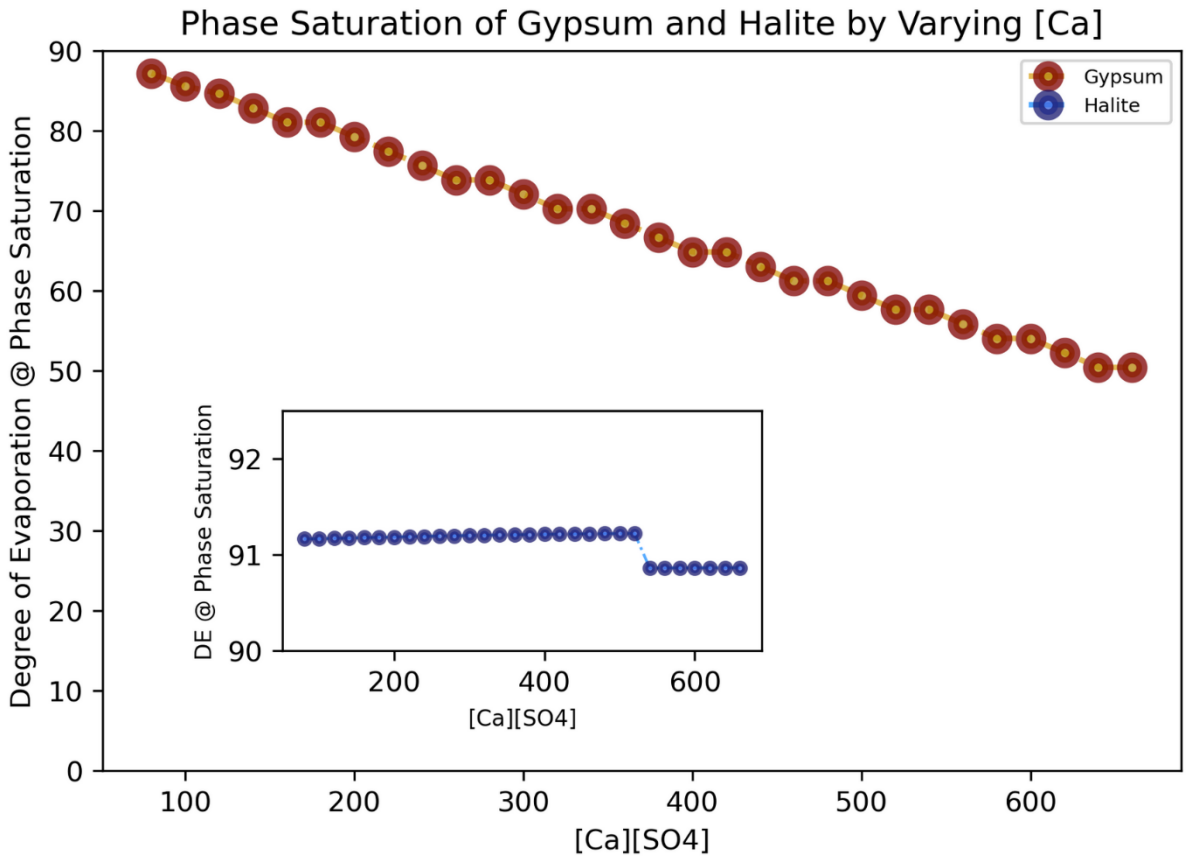


Figure 4.2: The product of [Ca^{2+}] and [SO_4^{2-}] in the starting solution, which varies solely through changing [Ca^{2+}], plotted against the degree of evaporation at which gypsum begins to form. The inset shows the degree of evaporation at which halite forms within this experiment plotted against the same x-axis limits as in the larger plot (note the expanded scale).

4.2.1.2. Results from varying the concentration of [SO_4^{2-}]

A PHREEQC simulation was run to analyze changes in the precipitation of gypsum or halite when the concentration of sulfate in seawater was varied with [Ca^{2+}] held constant. This simulation allowed me to investigate how different levels of sulfate in seawater affect the degree of evaporation required for the formation of gypsum and halite, and hence their relative abundance in evaporite deposits.

The results of the PHREEQC simulation showed that the degree of evaporation at

gypsum saturation decreased with increasing [SO_4^{2-}] as was observed in the models varying [Ca^{2+}]. Model results show that the degree of evaporation required to precipitate gypsum from solution is approximately the same for [SO_4^{2-}] as it was for [Ca^{2+}], decreasing the degree of evaporation at phase formation by 37% as [SO_4^{2-}] increased from 4 to 33 mol/kg with [Ca^{2+}] held constant and, again, with no change in the degree of evaporation required for halite saturation (Figure 4.3). Thus, increases in concentrations of Ca^{2+} or SO_4^{2-} can significantly impact the relative timing of $CaSO_4$ versus halite saturation, and are potential explanations for the changes in RAC documented in Chapter 3.

4.2.3 Varying Salinity

The salinity of seawater has been hypothesized to have changed over the Phanerozoic

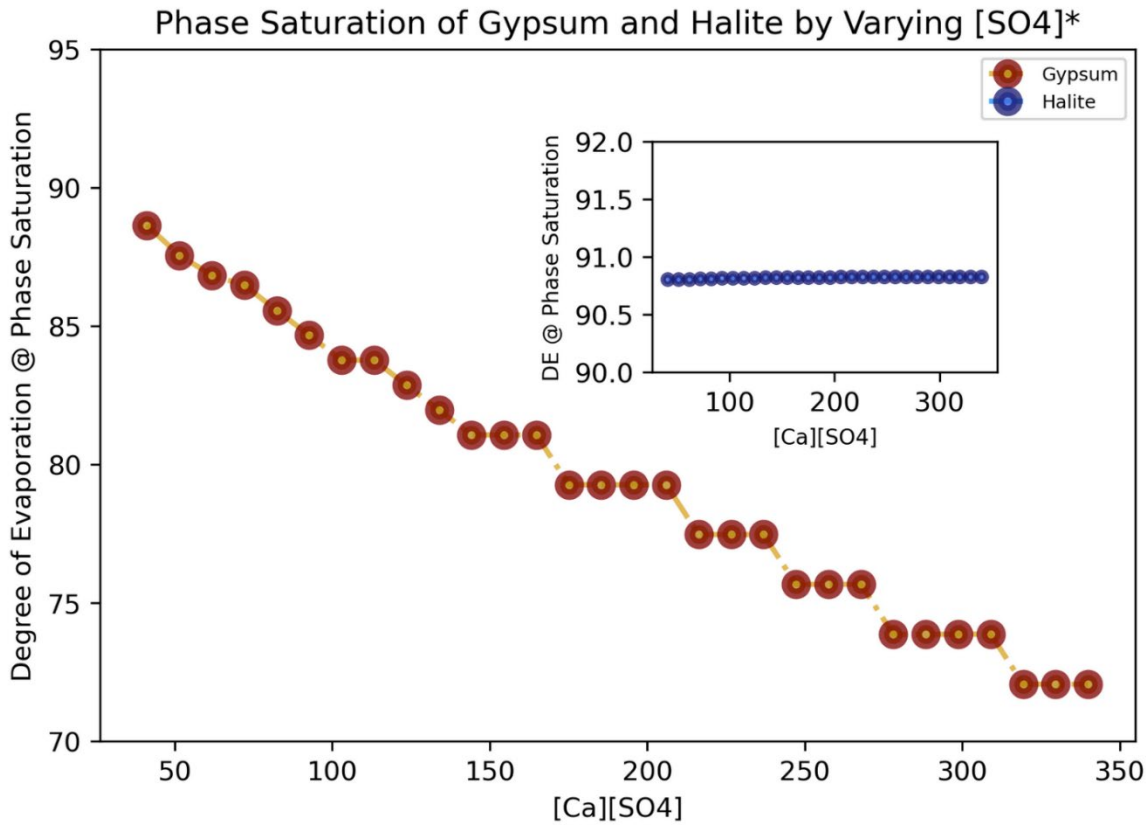


Figure 4.3: The product of [Ca^{2+}] and [SO_4^{2-}] in the starting solution plotted against the degree of evaporation at which gypsum begins to form from solution while [SO_4^{2-}] is varied at constant Ca^{2+} (10.3 mmol kg^{-1}). The inset shows the of the degree of evaporation at which halite forms within this experiment plotted on the same axes (note the expanded y-scale).

(e.g., Hay et al., 2006). Estimates of the salinity of seawater during the Phanerozoic range from ~34‰ to ~57 ‰ (e.g., Hay et al., 2006). To test whether the salinity of seawater has a significant impact on the degree of evaporation at which halite begins to form, the concentrations of Cl^- and Na^+ were varied in the initial solution. For this batch evaporation experiment, all ions except Na^+ and Cl^- were held constant at modern values, while Na^+ and Cl^- were varied from modern values to 57 ‰ salinity to explore the parameter space suggested by Hay et al. (2006). Charge balance was maintained by increasing the concentration of Cl^- in equal molar amounts to that of Na. All the phases listed in Table 4.2 were allowed to precipitate in these experiments.

Results of the PHREEQC simulation showed that halite saturation occurred earlier in the evaporation process (lower DE) as the salinity of the starting solution increased. However, the results show only a 6.2% decrease in DE while the concentrations of [Na^+] and [Cl^-] were increased by 33% from the lowest salinity starting solution to the highest salinity starting solution (Figure 4.4). The results of this simulation demonstrate that the degree of evaporation required for halite precipitation is only weakly sensitive to the [Na^+] and [Cl^-] concentrations in the starting solution across the range of seawater compositions thought to have existed in the Phanerozoic. Based on this, it seems unlikely that the changes in relative abundance of $CaSO_4$ and halite deposits over the Phanerozoic (Fig. 3.3) are controlled by changes in seawater salinity.

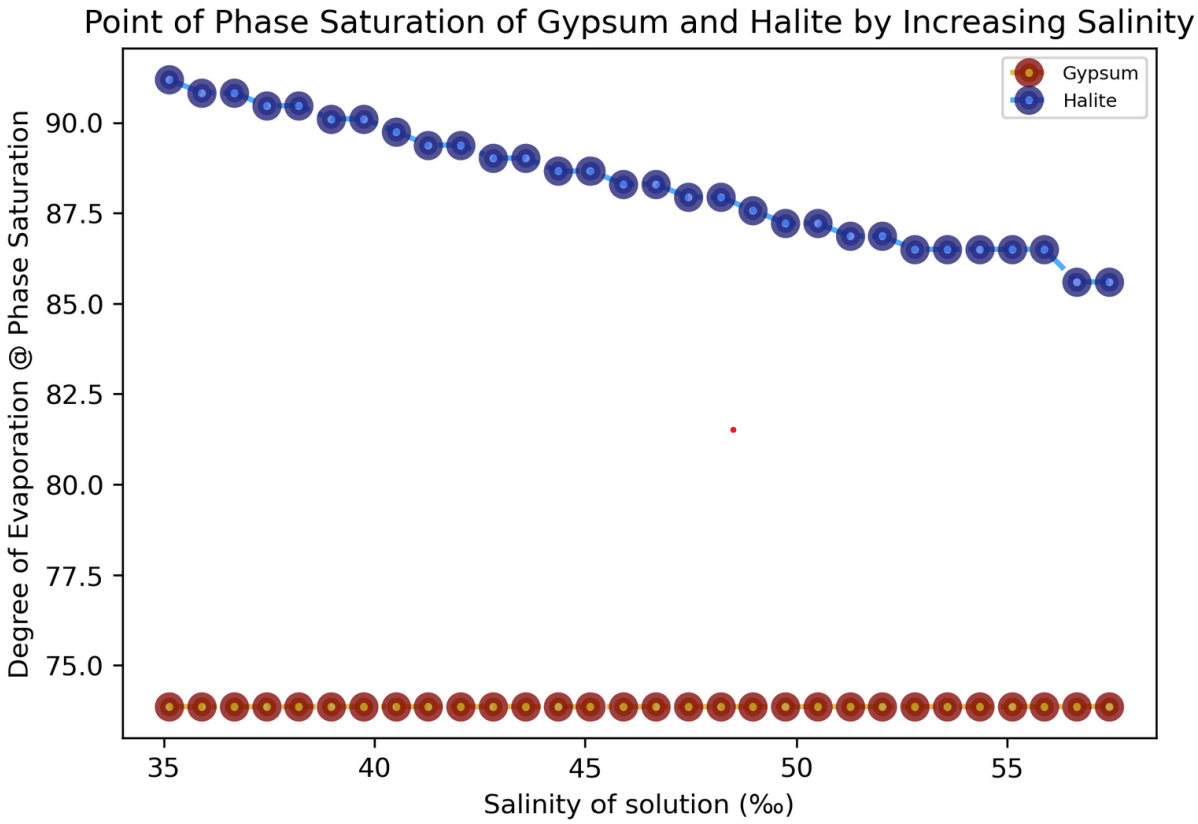


Figure 4.4: The degree of evaporation at which halite and gypsum form are shown against salinity of the starting solution. The degree of evaporation for gypsum formation does not change significantly in comparison to the degree of saturation required to form halite at a given salinity. It should be noted salinity is increased by approximately 25% however the degree of evaporation required to form halite only decreases by roughly 6%.

4.2.4. Varying pCO_2

Carbon dioxide is hypothesized to have varied dramatically over the Phanerozoic (Fig. 4.5; Berner and Kothavala, 2001). Dissolved carbon provides the ions to form marine carbonate minerals; however, the carbonate system is more complex and formation of carbonate minerals depends on several factors including alkalinity and also the concentration of CO_3^{2-} not simply DIC (total dissolved inorganic carbon). The speciation of DIC is a function of pH. Systems with

low solution pH have a smaller fraction of their DIC as the carbonate ion than systems with high pH. Changes in the saturation state of calcium carbonate minerals may play an important role in controlling the degree of evaporation at $CaSO_4$ mineral saturation through changing the concentration (and activity) of Ca^{2+} in the solution. Therefore, in an attempt to quantify the effect of atmospheric CO_2, another PHREEQC experiment was performed to analyze if pCO_2 has a significant effect on the degree of evaporation required to drive gypsum and halite saturation in seawater. Exact concentrations of the partial pressure of CO_2 across Earth history are poorly constrained; however, proxy data and modeling (e.g., Berner and Kothavala, 2001) suggest substantial variations in atmospheric CO_2 over the Phanerozoic. The values of pCO_2 used in the batch evaporation experiments explore the parameter space postulated by (e.g., Berner and Kothavala, 2001) which is a range from $10^{-3.5}$ to $10^{-2.15}$ atm (Figure 4.5).

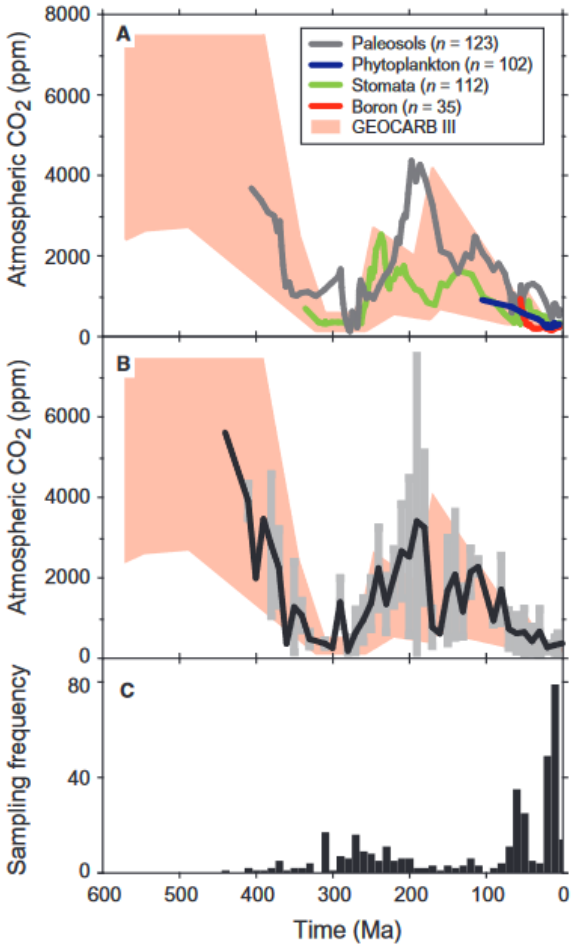


Figure 4.5: Figure showing: (a) various observational estimates of paleo-pCO_2, (b) a "best-estimate" (black line) and uncertainties (grey bars) and (c) number of data used to produce these estimates (from Royer et al., 2004). Parts (a) and (b) both show model estimates from GEOCARB III in orange.

PHREEQC ion concentrations were varied between two different scenarios, one using the composition of modern seawater (Table 4.2) and the other using an ionic composition similar to a Cretaceous seawater (Table 4.2).

Simulation Name	Temp (°C)	Alk	Ca	Cl	K	Mg	Na	SO_4	Sr	Log[pCO_2]
pCO_2 {Ca > SO_4} $_{init}$	25	2.4	35	603.18	12	49	445	11	0.09	-2.15
pCO_2 {Ca > SO_4} $_{final}$	25	2.4	35	603.18	12	49	445	11	0.09	-3.6
pCO_2 {Ca < SO_4} $_{init}$	25	2.4	10.3	549.08	9.9	53.2	468	28	0.09	-2.15
pCO_2 {Ca < SO_4} $_{final}$	25	2.4	10.3	549.08	9.9	53.2	468	28	0.09	-3.6
Varying Ca $_{init}$	25	2.4	10	599.2	9.9	53.2	502.9	20	0.09	-3.5
Varying Ca $_{final}$	25	2.4	31.75	592.24	9.9	53.2	452.44	20	0.09	-3.5
Varying SO_4 $_{init}$	25	2.4	10.3	584.78	10	53	456	4	0.09	-3.5
Varying SO_4 $_{final}$	25	2.4	10.3	555.78	10	53	485	33	0.09	-3.5
Varying Salinity $_{init}$	25	2.4	10.3	548.5	9.9	53.2	468	28.2	0.09	-3.5
Varying Salinity $_{final}$	25	2.4	10.3	896.5	9.9	53.2	816	28.2	0.09	-3.5

Table 4.3: Compositions of initial solutions shown as the range of the variables changed for each experiment. The range of batch reaction experiments are shown as *init* and *final* within the simulation name column. Concentrations of ions are in milli-molar (mM) and pCO_2 is in (atm). Charge balance for batch reaction experiments varying Ca^{2+} or SO_4^{2-} by changing concentrations of Na^+ and/or Cl.

Models of evaporation of these two seawater compositions, with different atmospheric pCO_2 concentrations, were used to examine if changes in pCO_2 and dissolved carbon changes the relative timing of gypsum and halite saturation and whether any effect is greater when calcium concentrations are higher than the concentration of sulfate and vice versa. Charge balance of the initial solution was maintained across the range of inputs in this experiment by holding the concentrations of major ions constant. All phases specified in Table 4.2 were allowed to

precipitate.

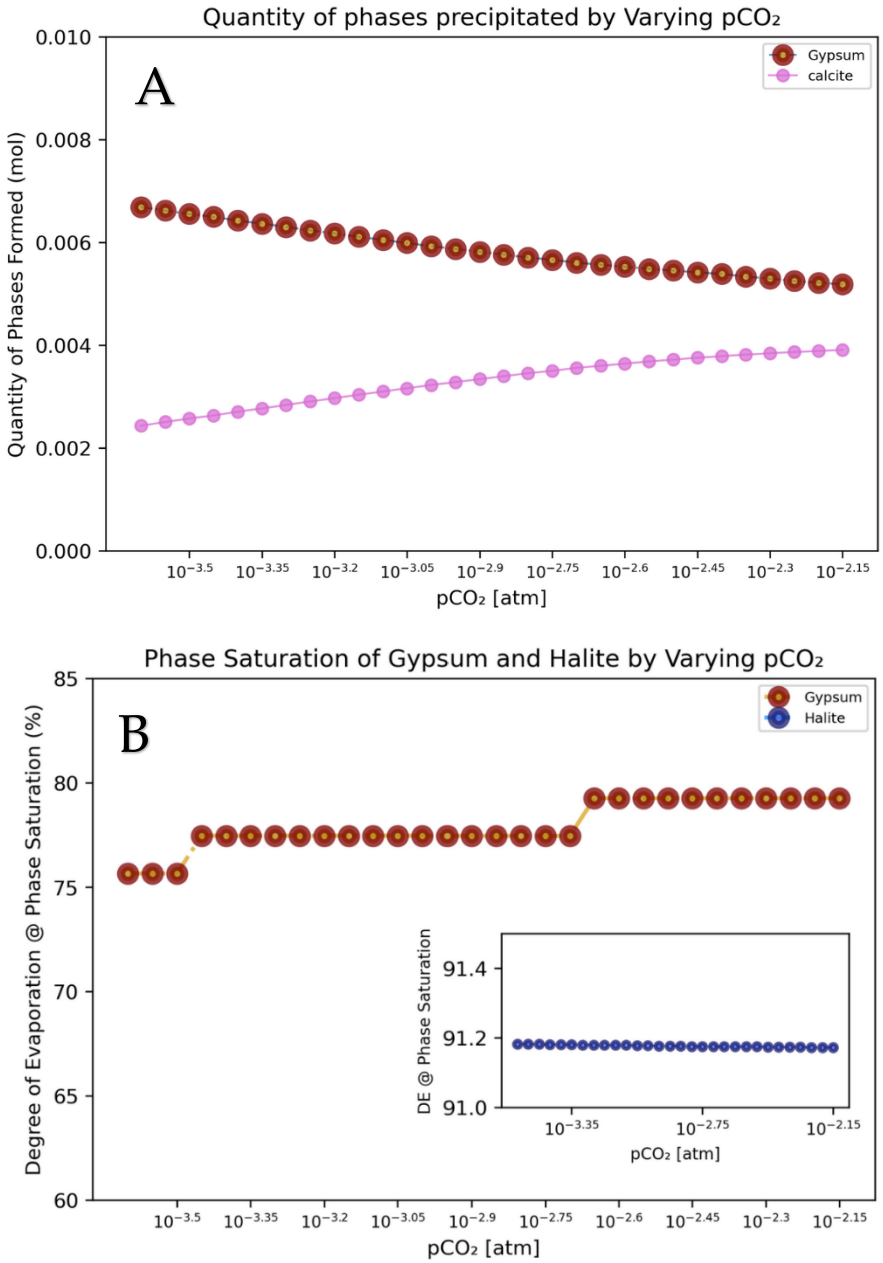


Figure 4.6: (A) The amount of gypsum formed from batch reaction experiments where $[SO_4^{2-}] > [Ca^{2+}]$ in the initial solution (i.e., using modern seawater composition; Table 4.2). As pCO_2 increases there is less gypsum formed (22.4% decrease). Increasing pCO_2 within ranges possible in the Phanerozoic caused the total amount of gypsum to precipitate to be approximately 20% less than when pCO_2 was lower. **(B)** The degree of evaporation at the onset of gypsum precipitation from the same batch evaporation experiment shown in**.** The inset plots shows the same things but for halite. As pCO_2 increases gypsum precipitation occurs later in the experiment relative to experiments with lower pCO_2 values

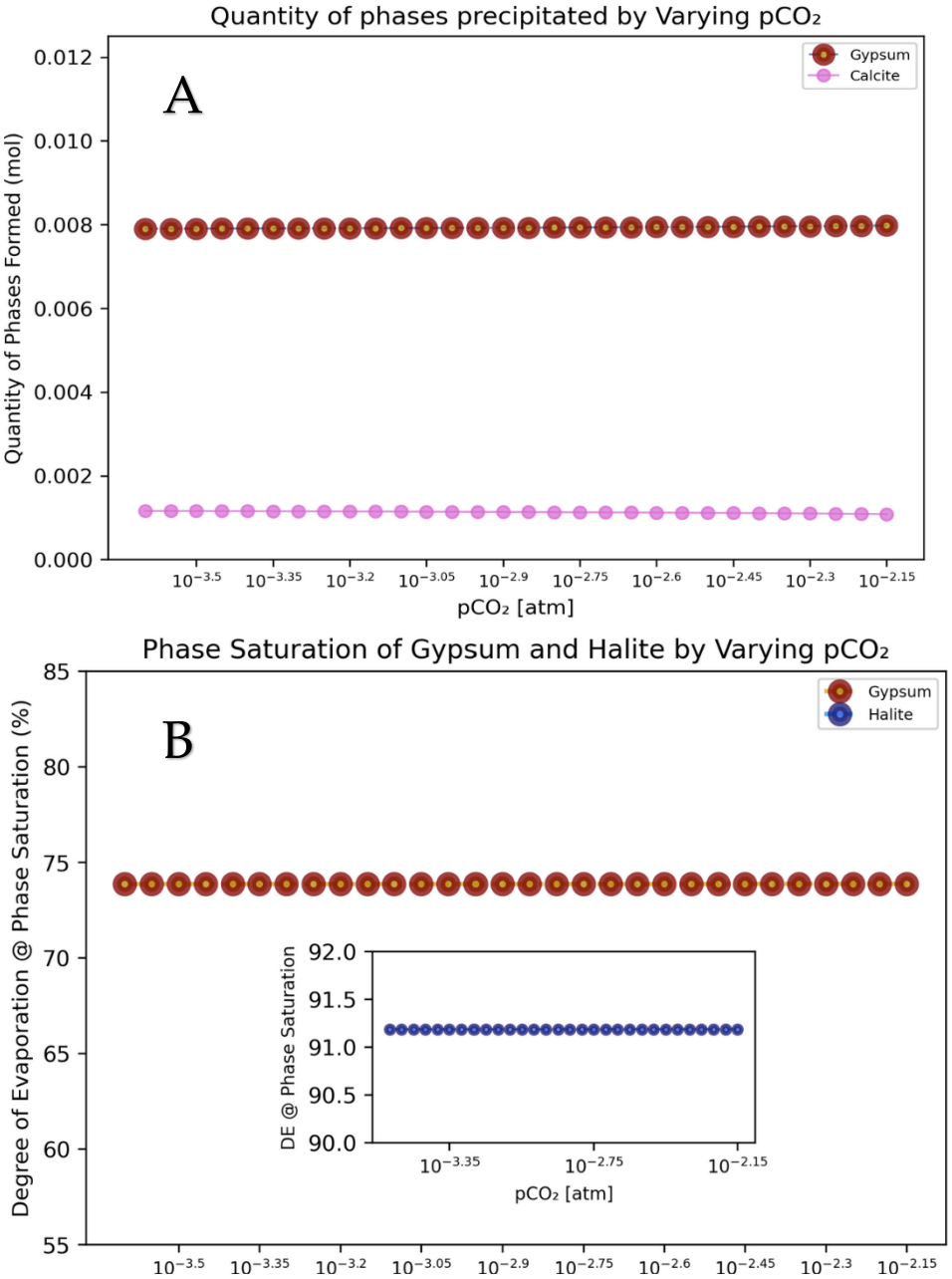


Figure 4.7: (A) The amount of gypsum formed from batch reaction experiments where $[SO_4^{2-}] < [Ca^{2+}]$ in the initial solution (Table 4.2). As pCO_2 increases there is no increase in the amount of carbonate or gypsum formed throughout the experiments. (B) The degree of evaporation at the onset of gypsum precipitation from the batch evaporation experiment shown in part, the inset plot shows the degree of evaporation at halite saturation doesn't change across these experiments. As pCO_2 increases there is no effect on gypsum saturation from varying pCO_2 when calcium concentrations are greater than sulfate.

As shown in Figures 4.6 and 4.7, the effect of varying pCO_2 has a different influence on the degree of evaporation at calcium sulfate saturation, and the amount of calcium sulfate formed, in the experiments where $[SO_4^{2-}] < [Ca^{2+}]$ and $[SO_4^{2-}] > [Ca^{2+}]$ which broadly represent Cretaceous and modern seawater chemistry. When $[SO_4^{2-}] < [Ca^{2+}]$ there is no significant effect of the quantity of carbonate or calcium sulfate minerals precipitated from solution as pCO_2 is changed in the models. Additionally, there is no effect of the onset of saturation of calcium sulfate. Calcium sulfate saturation is not affected because calcium sulfate formation is limited by $[SO_4^{2-}]$ since $[Ca^{2+}]$ is the more abundant ion. In contrast, when $[SO_4^{2-}] > [Ca^{2+}]$ in the initial solution of the batch evaporation experiments, varying $pCO_{2\ does}$ change the degree of evaporation required for saturation of calcium sulfate and also affects the amount of calcium sulfate formed (Figure 4.6A and 4.6B). When using pCO_2 concentrations within the range thought to have existed in the Phanerozoic, the amount of calcium sulfate formed during the times with the highest pCO_2 concentrations is 22.4% lower than when the pCO_2 in the model is at the lowest end of the range believe to have existed in the Phanerozoic (Fig. 4.6). In addition, the onset of calcium sulfate saturation increases as pCO_2 increases by ~5%. These changes reflect changes in the amount of Ca^{2+}removed from the starting solution into carbonate minerals, leaving less $Ca^{2+}$to form $CaSO_4$. The decrease in calcium sulfate formed and the change in the degree of evaporation required for $CaSO_4$ saturation shown in Figure 4.6A and 4.6B, could provide at least part of the explanation of the changes in the relative abundance of carbonate shown in Figure 3.3.

Chapter 5 Discussion

5.1 Relative Abundance of $MgSO_4$ and KCl Evaporites

The abundance of KCl and $MgSO_4$ bearing evaporite deposits observed in the record collected from the GDD document set (Figure 3.1) provides a more complete set of evaporite occurrences from the Phanerozoic than that has hitherto fore been available and provides additional insight into the temporal abundance of these two evaporite minerals. Utilizing this size of a dataset allows a larger set of data to evaluate the temporal abundance of these two evaporite minerals. Within the GDD result set, there is a near continuous occurrence of KCl found in marine evaporite deposits throughout the Phanerozoic (Figure 3.1B). Marine KCl bearing evaporite deposits were found throughout the Phanerozoic overlapping during intervals where $MgSO_4$ bearing evaporite deposits were also present, contrary to the data presented in Hardie (1996). $MgSO_4$ evaporites were far less abundant in the document set. $MgSO_4$ deposits were found in the GDD document set during the late Devonian through the early Triassic and in evaporites formed since the Paleogene. This record provides 41 more KCl units and 21 fewer $MgSO_4$ observations than a comparable dataset compiled by Hardie (1996) and Zharkov, (1974). Despite slightly more units when considering both KCl and $MgSO_4$, these results show a more complex picture of secular occurrence of marine evaporites than previously described in the literature.

The occurrence of KCl-bearing and $MgSO_4$-bearing minerals in distinct evaporite units is the greatest during the Carboniferous to early Triassic time intervals (Figure 3.1). This is consistent with the dataset derived from Hardie (1996) and a review of the evaporite deposits described in Zharkov (1974), however KCl evaporites described in Zharkov (1974) which overlap temporally with marine $MgSO_4$ evaporites were described as forming from carnallite ($KCl.MgCl_2 \cdot 6H_2O$) dissolution and recrystallization into sylvite and not primary occurrences of sylvite (KCl). This

nuance was not provided in entries where KCl evaporites were found from the GDD dataset. Stratigraphic units described as containing marine evaporites are evaluated on a basis if that lithology has a marine origin. Post-diagenetic alteration can occur within a marine evaporite formation distorting the sequence of potash and late-stage evaporite minerals preserved the extent of textures and features required to segregate primary and secondary marine evaporites was not taken into account within the text-mining model, therefore the GDD results from my text-mining program cannot account for these instances. Sylvite occurrences were more abundant in my GDD text-mining results than in the datasets of Hardie and Zharkov. Because most sylvite found in evaporites co-occur with epsomite and could have formed from dissolution of other potassium bearing phases, the primary vs. secondary nature of sylvite units in the GDD data set cannot be determined, but it still provides a high-level record of K-bearing evaporite mineral abundances across the Phanerozoic.

In the dataset provided by GDD, $MgSO_4$ evaporites were found outside the boundaries published in the Hardie (1996) dataset. $MgSO_4$ bearing evaporites were found as early as the middle Devonian and as late as the early Triassic. The number of $MgSO_4$ occurrences within the document set were far fewer than identified by Hardie (1996), however that could be a result of the document set analyzed. If the GDD library did not contain many papers that contained descriptions of $MgSO_4$ as a marine evaporite using in-text descriptions (which are easiest for the text mining program to extract). However, the presence of MgSO4 units older than those documented in Hardie (1996) is broadly consistent with observations in fluid-inclusion analyses, which have recorded an elevated $Mg_{[mol]}/Ca_{[mol]}$ as early as the Mid-Devonian (Figure 1.3). The analysis of these results shows that text-mining a diverse document set using simple logical rules to evaluate information from scientific publications can provide additional insight that is also

observed using modern quantitative methods. As a qualitative analysis of the occurrence of specific evaporite phases, new information can be obtained, and older hypotheses can be evaluated by analyzing the existing literature of a particular field.

The abundance of KCl-bearing evaporites found throughout the Phanerozoic shows that potassium bearing phases were able to precipitate in various evaporite deposits during discrete intervals where it was suggested they should not form. Basins on continental margins are subject to dissolution and influence from continental and rainwater. However, it has been argued that potassium has been nearly constant throughout the Phanerozoic at approximately 10.3 mMol/L and the results from this analysis suggest potassium could not have varied significantly across the Phanerozoic. The large increase of KCl bearing evaporites found in the Permian seem to be due to a preservation bias observed in halite and calcium sulfate bearing evaporite deposits (Figure 3.2). However, this analysis cannot rule out a potential large sink for potassium that would change based upon sea level change. Recent studies are now questioning the long-held assumption that potassium has remained constant throughout the Phanerozoic (Nambiar et al., 2023).

5.2 Relative Abundance of Calcium Sulfate

Using the abundance of halite and calcium sulfate (anhydrite or gypsum) in the document set I have investigated using the relative abundance of calcium sulfate (RAC) can provide a new observation useful for reconstructing paleo-seawater composition. The lowest Phanerozoic values of the normalized ratio of calcium sulfate evaporite occurrences are found 400 million years ago (the Middle to Late Devonian) and older, within the data plotted in 1-million-year bins or bins grouped by International Epochs (Figure 3.3). In addition, prior the Middle to Late Devonian this record is highly variable on a shorter timescale then when compared to more recent periods of

Earth history. This high variability in the RAC could be explained by several geologic phenomena documented in the early Phanerozoic such as tectonic factors, a primitive sulfur cycle, the oceanic redox conditions, variable atmospheric conditions, or a preservation bias.

While poorly constrained, it has been suggested that early in the Phanerozoic the deep oceans had lower dissolved oxygen content than in the second half of the Phanerozoic potentially meaning larger portions of the oceans were anoxic (Stolper and Bucholz, 2019), and did not contain sufficient sulfate to form calcium sulfate that would be preserved as suggested by the RAC before 400 Mya. These are the oldest preserved evaporites in the Phanerozoic record and thus are likely to have eroded away, however, the increased occurrence of halite relative to calcium sulfate suggests that some other mechanism to cause decreased calcium sulfate evaporites is likely the driver. When evaluating the modeling experiments to change the degree of evaporation at gypsum precipitation, changing salinity was evaluated with respect to halite and gypsum formation to explore how changing ocean salinity could impact on the RAC record. When considering a 25% increase in salinity, the degree of saturation for halite formation only decreased by approximately 6%, suggesting even if salinity was at the highest level calculated by Hay et al., (2006), it would only marginally change the degree of saturation of halite and would still be much greater than gypsum.

Modeling results from PHREEQC batch evaporation experiments show that the mechanisms that effect the degree of evaporation at which gypsum is saturated are most influenced by changing pCO_2 where Ca^{2+} is the phase limiting ion ($SO_4^{2-} > Ca^{2+}$) or changing the concentration of Ca^{2+} or SO_4^{2-} (Figure 4.6). When evaluating the other modeling experiments to change the degree of evaporation at gypsum precipitation, salinity and pCO_2 ($SO_4^{2-} < Ca^{2+}$), there was minimal change observed in the batch evaporation experiments suggesting these two scenarios would not impact

the RAC record. Incorporating the record of fluid inclusion analysis from this time interval coupled with PHREEQC batch evaporation experiments, it is likely that Ca^{2+} was more abundant in brine forming solutions, therefore it is likely that varying pCO_2 did not attribute to the decrease or variability of the RAC and was more likely due to lower SO_4^{2-} concentrations in paleo-seawater preceding 400 Mya.

The RAC record after approximately 400 Mya shows variations around a long-term mean, when plotted in 1 Myr time bins (Figure 3.3). When the data is plotted using the 20^{th} and 80^{th} quartiles, there is a cyclic pattern emerging from the RAC ranging from approximately 0.8 to 0.5 where calcium sulfate occurrences as or more common than halite occurrences (Figure 3.3A). This could be explained by changes in Ca^{2+} and SO_4^{2-} concentrations that led to cycles in the saturation state of $CaSO_4$ in seawater within this time frame. When data are binned into International Epochs, the oscillatory behavior of the record is no longer observed, and the variability of the RAC is constrained between 0.65 and 0.57 (Figure 3.3B).

One of the major assumptions regarding paleo-seawater composition is that the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ has ranged between 150 – 450 $mmol^2$, or a value of 300 $mmol^2$ similar to modern seawater concentrations. Which value(s) to use is unconstrained, however the value of the product of Ca^{2+} or SO_4^{2-}, whichever ion which has been completely removed from solution prior to halite precipitation and hence is not measured in fluid inclusion studies (Holland, 1972; Horitia et al., 2002; Lowenstein et al., 2005). For example, when $[Ca^{2+}] > [SO_4^{2-}]$, the concentration of sulfate must be calculated through this assumption, and vice versa. The RAC may provide a constraint on this assumption as follows. When the RAC is higher than the modern value (~0.7), the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ is likely to have been greater than 300 $mmol^2$ and when the RAC is less than the modern value the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ in seawater is likely to have been less than 300

$mmol^2$. While this approach ignores differences in preservation potential of halite and gypsum in the geological record, it provides the first quantitative approach to improving on the assumption used in previous studies that the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ in seawater has remained constant throughout the Phanerozoic.

Using the RAC record to quantitatively constrain the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ in seawater is not possible currently, but qualitatively it can be used to determine whether this product was higher or lower than the modern. In effect this means instead of having error bars on estimates of $[Ca^{2+}]$ and $[SO_4^{2-}]$ concentrations, we have limits on these instead. To show how the RAC record could be qualitatively used in this way, the fluid inclusion derived record of $[Ca^{2+}]$ and $[SO_4^{2-}]$ (Lowenstein et al., 2003) has been annotated with black arrows (Figure 5.1).

If the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ is leading to a higher value observed in the RAC the assumed concentration of the ion measured in fluid inclusion analysis might be greater or lower than previously considered. For example, if the RAC tends to a higher value it is possible that the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ are higher, and therefore the assumed ion concentration could be greater as indicated with the black arrow pointing up, and visa versa for values that are near minimums observed in the RAC. As stated previously, the assumption that the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ were constant throughout the Phanerozoic is not quantitatively constrained and could have varied more than the range originally postulated. Within PHREEQC experiments the greatest product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ considered was 635 $mmol^2$, while the minimum considered was 41.2 $mmol^2$ and did not change the order of evaporite mineral formation to change significantly beyond what has been observed throughout the Phanerozoic record. This evidence suggests that the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ could have been above or below the bounds used in the calculation of fluid inclusion data and that paleo-seawater concentrations could be more concentrated or more

dilute with respect to [Ca^{2+}] and [SO_4^{2-}] while yielding evaporite deposits consistent with the Usiglio sequence observed throughout the Phanerozoic. Using RAC as a general inference as to the behavior of [Ca^{2+}] and [SO_4^{2-}] a qualitative record improves the understanding of seawater chemistry through Earth history, highlighting where a change in the [Ca^{2+}] and [SO_4^{2-}] could have been significant. By using this record and building upon the text-mining extractions, allowing for more data to be collected or future attempts will provide a more constraints on reasonable ranges of product of [Ca^{2+}] and [SO_4^{2-}] throughout the Phanerozoic.

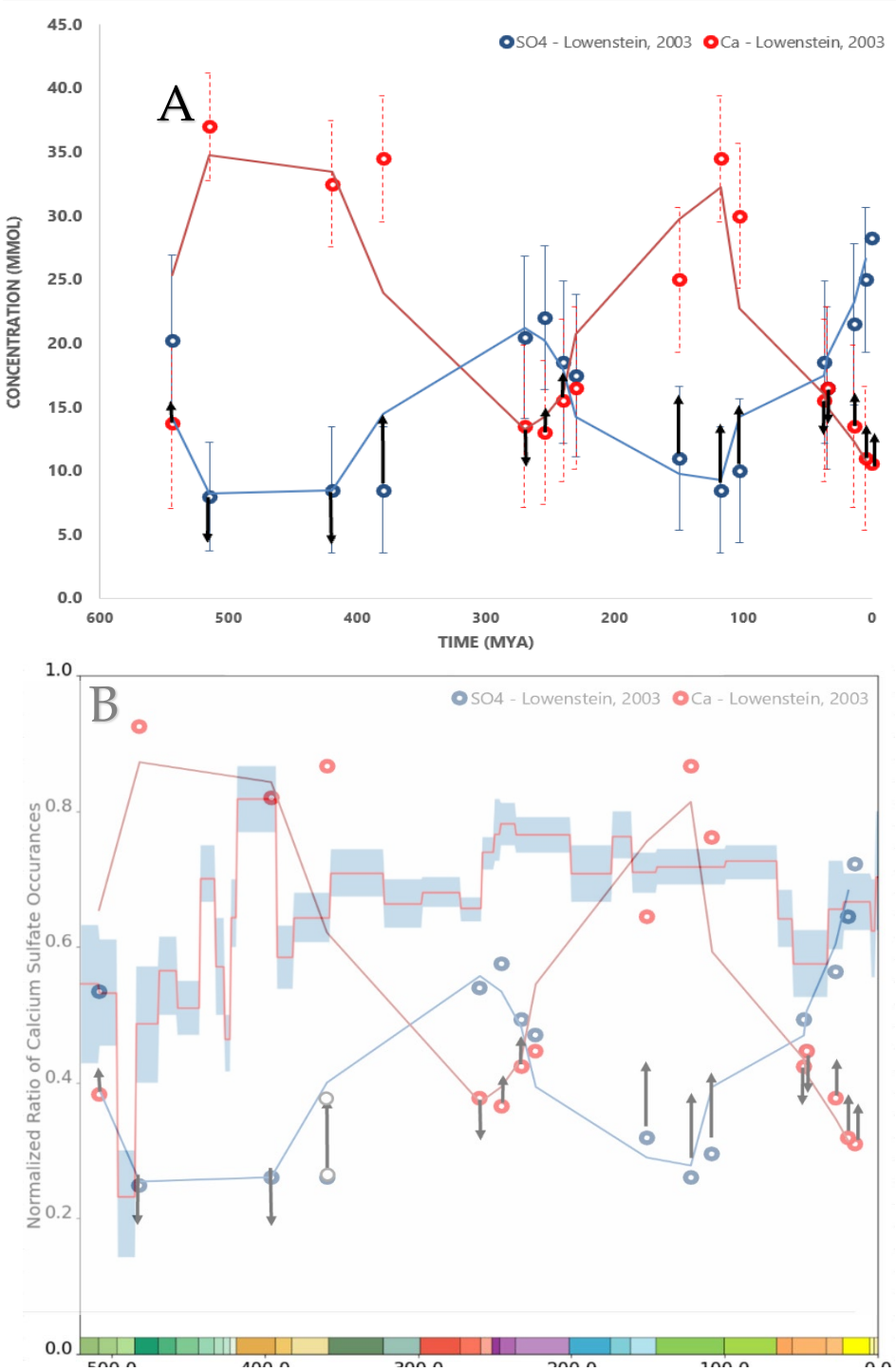


Figure 5.1: Plots showing the quantitative estimate of seawater chemistry and RAC throughout the Phanerozoic. (TOP) 5.1A Shows Sulfate and Calcium concentrations in mmol/L obtained through fluid inclusion analysis through Phanerozoic. (BOTTOM) 5.1B Shows the RAC through Phanerozoic with the fluid inclusion analysis of Lowenstein et al., 2003 overlain to show how this record could be used to infer calcium or sulfate concentrations in fluid inclusion analyses. Note that arrows plotted on 5.1A are qualitative estimates as to how the RAC could help constrain estimates of fluid inclusion data by narrowing the range of the product of $[Ca^{2+}]$ and $[SO_4^{2-}]$ and should be considered approximate.

5.3 Phanerozoic Abundance of Marine Evaporites

The results of this study could offer unique insights into the relationship between the occurrence of evaporite deposits and global sea-level fluctuations throughout the Phanerozoic era. The global record of sea-level change has been quantified using various proxies. Here I compare the evaporite data from Chapter 3 to a sea-level record from a new method based on using a "hypsometric slope", examining the areal difference of exposed vs. submerged landmass (Marcilly et al., 2022). This method allows for a reasonable quantification of submerged land mass in addition to sea-level that has been shown to provide reasonably good results when looking at time periods greater than 10 Mya (Algeo & Wilkinson, 1991). Other proxies provide a reliable metric to measure changes in paleo-sea-level, however, when looking at the results of the GDD text-mining application and Macrostrat records, a broader timescale resolution serves as a better comparison to gauge trends in the results of this study. Other methods have looked at a specific definition of "flooding" in terms of eustatic sea-level change, however Marcilly et al., (2022) has incorporated two methods that look at two definitions of "flooding". The first definition of "Modern Flooding" is "the areal difference between exposed land at a certain time in the past (exposed but moved in time according to the tectonic reconstruction) versus the total land area exposed today" (Marcilly et al., 2022). The second definition of flooding used to gauge the hypsometric slope gauge of eustatic sea-level change is "Continental Flooding". This is defined as the area of land exposed through time including continental shelve inundation and flooding along passive margins (Marcilly et al., 2022). As discussed further below, sea-level is expected to have a significant influence on evaporite formation and preservation in the geologic record due to its influence on the number of potential evaporite forming basing (e.g., shallow, repeatedly flooded, seaways).

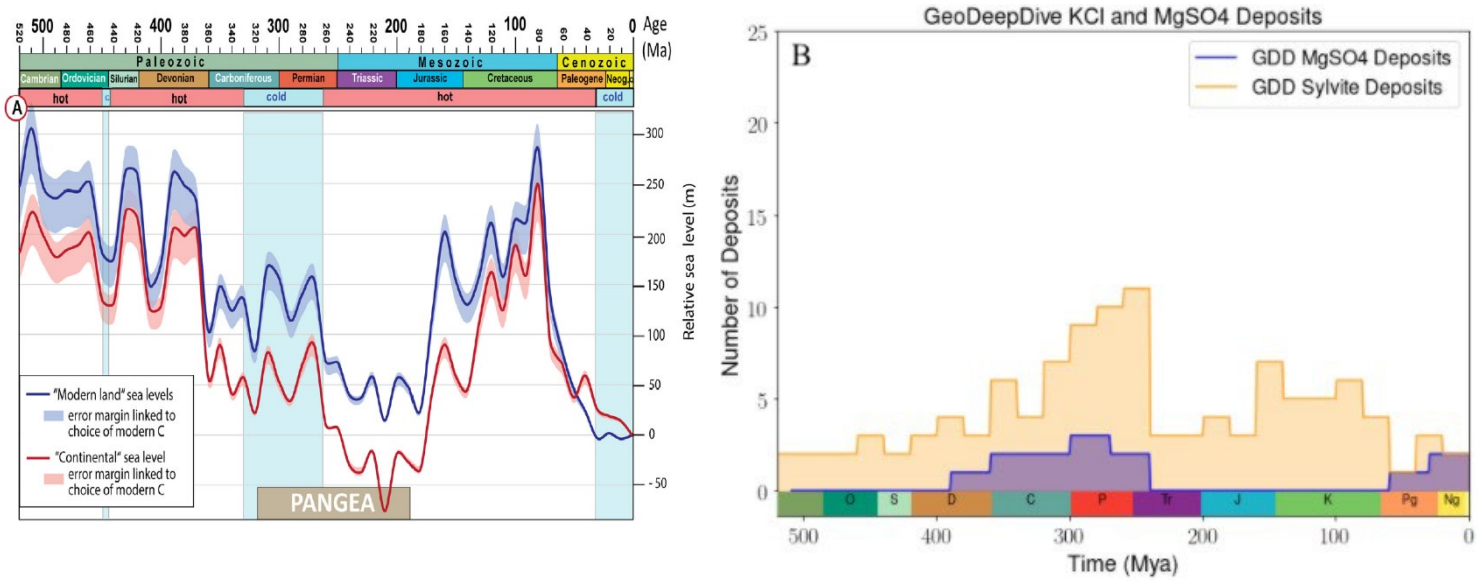


Figure 5.2: showing estimates of global sea-level over the Phanerozoic from Marcilly et al. (2022) (LEFT)) 5.2A based on" Modern" and "Continental" flooding. These are two methods of determining the relative coverage of submerged preserved sediments to exposed crust. 5.2B shows the occurrence of $MgSO_4$ and KCl throughout the Phanerozoic compiled from the GDD document set (RIGHT).

There appears to be a correlation between the abundance of potash evaporites and sea-level fluctuations (Fig 5.2) that I interpret as possibly providing evidence for the impact of eustatic sea-level changes on evaporite deposition. Both the new evaporite record developed here from GDD, and that of Hardie (1996) show that $MgSO_4$ and KCl abundance tends to increase during periods where there is significant continental flooding following a decrease relative sea level, then relative sea-level subsequently decreases again (Fig. 5.2). The presence of more evaporites that contain these late-stage minerals suggests that evaporite formation (and/or preservation) was more favorable during these intervals. Time intervals where sea-level is decreasing for a prolonged period of time would be an important factor influencing evaporite formation. Evaporite formation over the course of a large portion of geologic time would require

a closed or restricted basin where seawater recharge is needed to provide the ions to form an evaporite. Considering sea-level decrease, this would provide a mechanism where seawater has been flooded onto a continental basin or structure that is now cut off from seawater. Further decreases in sea-level would restrict the basin and allow for a full evaporite assemblage.

When examining changes in the amount of $CaSO_4$ evaporites formed after the Carboniferous, calcium sulfate becomes significantly more abundant than unique halite deposits (Figure 3.2) even though the largest number of halite and calcium sulfate deposits found within this study reside within the Permian (Figure 3.2). One of the primary drivers of widespread evaporite formation seems to be the relationship between sea level and the fraction of submerged landmass. When considering the ideal evaporite forming location it would involve some restricted marine basin that is periodically recharged or where evaporation of seawater exceeds the water recharge inputs. This could happen across widespread basins that are approximately the same level or slightly lower than sea level occurring on continental margins. To have widespread evaporite formation where deposits are characterized by their own unique stratigraphic association would either require an abundant area that is suitable for evaporite formation or a rapid sea level drop allowing the paleoseawater trapped in a depression to form an evaporite, thus forming when a significant portion of the continental area is flooded. This observation opens the door to using $CaSO_4$ deposits as proxies for quantifying the removal of calcium sulfate from seawater during specific geological time periods. In support of this notion, the interesting trend observed when comparing Figure 5.2A and Figure 3.3A shows that when there is a significant amount of continental flooding following a decrease in paleo-sea-level. Widespread continental flooding should correlate to a greater rate of evaporite formation and in comparing these two records, peaks in the RAC seem to correlate during widespread continental flooding,

suggesting that these time periods in geologic history could have a greater flux of ions removed as evaporite lithologies.

Summary and Future Work

The findings presented in this study offer a more comprehensive record of evaporites than has been available to-date and can be used to further understand the evolution of paleo-seawater. Changes in seawater chemistry have been modeled and evaluated to conclude the main driver of an increase of calcium sulfate evaporites is most likely an increase in the concentrations of Ca^{2+} or SO_4^{2-}. If the concentration of calcium or sulfate were higher during some periods of the Phanerozoic than others this could provide an explanation for the observed variation in the RAC (Figure 3.3A). When looking at a broader time resolution of the RAC, it appears that seawater chemistry has changed since the Mid-Devonian. Prior to the Mid-Devonian calcium sulfate occurrences were sporadic and highly variable where the RAC record following this change suggests paleo-seawater was more stable with respect to the concentrations of more of a stable system with respect of Ca^{2+} or SO_4^{2-}. These changes can be qualitatively evaluated and could suggest the product of Ca^{2+} or SO_4^{2-} was not constant throughout the Phanerozoic. Further constraining the RAC record using mass abundance of calcium sulfate to halite could aid in determining paleo-seawater composition change derived from fluid inclusions. Evidence for the influence of global sea-level changes on the occurrence of evaporite deposits is apparent in the secular occurrence of Macrostrat and GDD derived records of evaporite occurrences, including potash, calcium sulfate, and dolomite, in the stratigraphic record. These observations are consistent with models that sea-level change is a primary driver in the occurrence and temporal abundance of evaporites. These observations underscore the importance of sea-level reconstructions in understanding paleoenvironmental conditions and have broader implications

for seawater chemistry and global geological processes.

The results of the GDD text mining application, Macrostrat analysis, and PHREEQC modeling show that utilizing unstructured data can provide new mediums to analyze the changes in paleo-seawater throughout earth history. This study was limited in the scope of the text-mining model and future work should allow for a more comprehensive analysis with respect to the evaporite inventory by mass. Attempting to quantify the global extent of evaporite formation could provide a key insight into what processes can significantly influence seawater chemistry and allow for more accurate models constraining sources and sinks of the major ions in paleo-seawater. Future attempts should also consider the extraction of tabulated data within a scientific publication to a greater extent. Due to the limitations of the NLP parsing of documents contained within GDD valuable information that is not readily extractable using a model primarily driven by the in-text extraction of evaporite instances, geologic ages, and marine origins is lost. Advances in machine learning and computer vision should be utilized to allow for the extraction of tabular data within scientific publications and appears to be advancing rapidly. Although this addresses the extraction of data in more recent publications, there is a large majority of stratigraphic data contained in cross-sections and other geologic figures. These shortcomings with respect to tabular and figure data extraction are more difficult to address, however could be achieved with the advances observed in machine learning and computer vision.

Future work could also utilize the text-mining capabilities of GDD and text-mining models similar to this study to analyze the sulfur cycle and generate a global analysis of sulfur containing lithologies. Shales and other sediments abundant in reduced sulfur compared to oxidized sulfate found in evaporites could reconcile sources and sinks of sulfur throughout geologic history and should be investigated to contextualize the sulfur isotope record. Furthermore, the occurrence of

calcium sulfate evaporites could provide additional insight into the sulfur cycle, carbon cycle, or oxygen cycles as mechanisms that could cause the changes observed in calcium sulfate evaporite occurrences derived from GDD. Additionally, these changes could be explored to look at mechanisms of Dolomite formation throughout the Phanerozoic. Analysis of publications outside of GDD show there are a significant number of relevant articles contained within the journal of Economic Geology. The incorporation of this data set will provide more data, evaporite mentions, and an even greater record of evaporite bearing units. With the advent of advanced machine learning algorithms used to extract unstructured data and the continual grown of GDD, more advanced analysis should be performed in the future, deriving not only the occurrences of evaporite minerals through time but also aiding in constructing a global comprehensive database of the sedimentary and evaporite record.

Bibliography

Arvidson, R. S. (1999). The Dolomite Problem; Control of Precipitation Kinetics by Temperature and Saturation State. *American Journal of Science, 299*(4), 257–288. doi:10.2475/ajs.299.4.257

Babel, M., & Schreiber, B. C. (2014). Geochemistry of Evaporites and Evolution of Seawater. In *Treatise on Geochemistry* (pp. 483–560). Elsevier. doi:10.1016/B978-0-08-095975-7.00718-X

Baker, P. A., & Kastner, M. (1981). Constraints on the Formation of Sedimentary Dolomite. *Science, 213*(4504), (pp. 214–216). https://doi.org/10.1126/science.213.4504.214

Babkin, V. I., Klige, R. K., & Vuglinsky, V. S. (2003). The Earth and its physical features. In I. A. Shiklomanov & J. C. Rodda (Eds.), *World Water Resources at the Beginning of the Twenty-First Century* (pp. 1–18). Cambridge University Press.

Berner, R. A. (1978). Equilibrium, Kinetics, and the Precipitation of Magnesian Calcite from Seawater; Discussion. *American Journal of Science, 278*(10), (pp. 1475–1477). doi:10.2475/ajs.278.10.1475

Berner, R. A. (2001). Modeling atmospheric O_2 over Phanerozoic time. *Geochimica et Cosmochimica Acta, 65*(5), 685–694.

Blättler, C. L., et al. (2020). Constraints on Meso- to Neoproterozoic Seawater from Ancient Evaporite Deposits. *Earth and Planetary Science Letters, 532*, (a. 115951). doi:10.1016/j.epsl.2019.115951

Bottrell, S. H., & Newton, R. J. (2006). Reconstruction of Changes in Global Sulfur Cycling from Marine Sulfate Isotopes. *Earth-Science Reviews, 75*(1–4), (pp. 59–83). doi:10.1016/j.earscirev.2005.10.004

Foote, M. (2000). Origination and extinction components of taxonomic diversity: Paleozoic and post-Paleozoic dynamics. *Paleobiology, 26*(4), (pp. 578–605.) https://doi.org/10.1666/0094-8373(2000)026<0578:OAECOT>2.0.CO;2

Godfrey, L. V., Jordan, T. E., Lowenstein, T. K., & Alonso, R. L. (2003). Stable isotope constraints on the transport of water to the Andes between 22° and 26°S during the last glacial cycle. *Palaeogeography, Palaeoclimatology, Palaeoecology, 194*(1–3), (pp. 299–317). doi:10.1016/S0031-0182(03)00283-9

Halevy, I., et al. (2012). Sulfate Burial Constraints on the Phanerozoic Sulfur Cycle. *Science, 337*(6092), (pp. 331–334). doi:10.1126/science.1220224

Hardie, L. A. (1984). Evaporites; Marine or Non-Marine? *American Journal of Science, 284*(3), (pp. 193–240). doi:10.2475/ajs.284.3.193

Hardie, L. A. (1990). The Roles of Rifting and Hydrothermal $CaCl_2$ Brines in the Origin of Potash Evaporites; an Hypothesis. *American Journal of Science, 290*(1), (pp. 43–106). doi:10.2475/ajs.290.1.43

Hardie, L. A. (1996). Secular Variation in Seawater Chemistry: An Explanation for the Coupled Secular Variation in the Mineralogies of Marine Limestones and Potash Evaporites over the Past 600 m.y. *Geology, 24*(3), (pp. 279–283). doi:10.1130/0091-7613(1996)024<0279:SVISCA>2.3.CO;2

Hay, W. W., et al. (2006). Evaporites and the Salinity of the Ocean during the Phanerozoic: Implications for Climate, Ocean Circulation and Life. *Palaeogeography, Palaeoclimatology, Palaeoecology, 240*(1–2), (pp. 3–46). doi:10.1016/j.palaeo.2006.03.044

Holland, H. D. (1974). Marine Evaporites and the Composition of Sea Water During the Phanerozoic. *SEPM (Society for Sedimentary Geology)*. doi:10.2110/

Holland, H. D., & Zimmermann, H. (2000). The Dolomite Problem Revisited. *International Geology Review, 42*(6), (pp. 481–490). doi:10.1080/00206810009465093

Horita, J., et al. (2002). Chemical Evolution of Seawater during the Phanerozoic. *Geochimica et Cosmochimica Acta, 66*(21), (pp. 3733–3756). doi:10.1016/S0016-7037(01)00884-5

Leger, A., et al. (2004). A New Family of Planets ? "Ocean Planets." *Icarus, 169*(2), (pp. 499–504). doi:10.1016/j.icarus.2004.01.001

Lippman, F. (1974). Sedimentary carbonate minerals. *Mineralogical Magazine, 39*(306), (pp.731–732). doi:10.1180/minmag.1974.039.306.19

Lowenstein, T. K., et al. (2001). Oscillations in Phanerozoic Seawater Chemistry: Evidence from Fluid Inclusions. *Science, 294*(5544), (pp. 1086–1088). doi:10.1126/science.1064280

Madhusudhan, N., et al. (2016). Exoplanetary Atmospheres—Chemistry, Formation Conditions, and Habitability. *Space Science Reviews, 205*(1–4), (pp. 285–348). doi:10.1007/s11214-016-0254-3

Marcilly, C. M., Torsvik, T. H., & Conrad, C. P. (2022). Global Phanerozoic sea levels from paleogeographic flooding maps. *Gondwana Research, 110*, (pp. 128–142). doi:10.1016/j.gr.2022.05.011

Meyers, S. R., & Peters, S. E. (2011). A 56-million-year rhythm in North American sedimentation during the Phanerozoic. *Earth and Planetary Science Letters, 303*(3–4), (pp. 174–180). doi:10.1016/j.epsl.2010.12.044

Nambiar, R., et al. (2023). Controls on potassium incorporation in foraminifera and other marine calcifying organisms. *Geochimica et Cosmochimica Acta, 351*, (pp. 125–138). doi:10.1016/j.gca.2023.04.020

Parkhurst, D. L., & Appelo, C. A. J. (2013). Description of input and examples for PHREEQC version 3—A computer program for speciation, batch-reaction, one-dimensional transport, and inverse geochemical calculations. *U.S. Geological Survey Techniques and Methods, 6*(A43). Retrieved from https://pubs.usgs.gov/tm/06/a43/

Peters, S. E. (2006). Macrostratigraphy of North America. *The Journal of Geology, 114*(4), (pp. 391–412). doi:10.1086/504176

Peters, S. E., & Husson, J. M. (2017). Sediment Cycling on Continental and Oceanic Crust. *Geology, 45*(4), (pp. 323–326). doi:10.1130/G38861.1

Peters, S. E., et al. (2017). The Rise and Fall of Stromatolites in Shallow Marine Environments. *Geology, 45*(6), (pp. 487–490). doi:10.1130/G38931.1

Pierce, D. W., et al. (2011). Ocean Circulations, Heat Budgets, and Future Commitment to Climate Change. *Annual Review of Environment and Resources, 36*(1),(pp. 27–43). doi:10.1146/annurev-environ-022610-112928

Porter, S. M. (2010). Calcite and Aragonite Seas and the de Novo Acquisition of Carbonate Skeletons: Calcite and Aragonite Seas and Carbonate Skeletons. *Geobiology, 8*(4), (pp. 256–277). doi:10.1111/j.1472-4669.2010.00246.x

Ronov, A., et al. (1984). Sources of matter and the problem of the sedimentary shell and earth crust evolution. *USSR Academy of Sciences*

Röthig, T., Trevathan-Tackett, S. M., Voolstra, C. R., Ross, C., Chaffron, S., Durack, P. J., Warmuth, L. M., & Sweet, M. (2023). Human-induced salinity changes impact marine organisms and ecosystems. *Global Change Biology*, *29*(17), (pp. 4731–4749). https://doi.org/10.1111/gcb.16859

Royer, D. L., et al. (2004). CO_2 as a primary driver of Phanerozoic climate. *GSA Today, 14*(3), (a. 4). Doi:10.1130/1052-5173(2004)014<4:CAAPDO>2.0.CO;2

Patterson, R, & Kinsm, D (1982). Formation of Diagenetic Dolomite in Coastal Sabkha Along Arabian (Persian) Gulf. *AAPG Bulletin, 66*. Doi:10.1306/03B59A17-16D1-11D7-8645000102C1865D

Sandberg, P. A. (1983). An Oscillating Trend in Phanerozoic Non-Skeletal Carbonate Mineralogy. *Nature, 305*(5929), (pp. 19–22). doi:10.1038/305019a0

Smoot, J. P., & Lowenstein, T. K. (1991). Chapter 3 Depositional Environments of Non-Marine Evaporites. In *Developments in Sedimentology, 50* (pp. 189–347). Elsevier. doi:10.1016/S0070-4571(08)70261-9

Stolper, D. A., & Bucholz, C. E. (2019). Neoproterozoic to early Phanerozoic rise in island arc redox state due to deep ocean oxygenation and increased marine sulfate levels. *Proceedings of the National Academy of Sciences, 116*(18), 8746–8755. doi:10.1073/pnas.1821847116

Timofeeff, M. N., et al. (2006). Secular Variation in the Major-Ion Chemistry of Seawater: Evidence from Fluid Inclusions in Cretaceous Halites. *Geochimica et Cosmochimica Acta, 70*(8), 1(pp. 977–1994). doi:10.1016/j.gca.2006.01.020

Taylor, S. D., et al. (2022). Pushing the limits: Resolving paleoseawater signatures in nanoscale fluid inclusions by atom probe tomography. *Earth and Planetary Science Letters, 599*, (a. 117859). doi:10.1016/j.epsl.2022.117859

Trudgill, B. D. (2011). Evolution of salt structures in the northern Paradox Basin: Controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture. *Basin Research, 23*(2), (pp. 208–238). doi:10.1111/j.1365-2117.2010.00478.x

Turchyn, A. V., & DePaolo, D. J. (2019). Seawater Chemistry Through Phanerozoic Time. *Annual Review of Earth and Planetary Sciences, 47*(1), (pp. 197–224). doi:10.1146/annurev-earth-082517-010305

van Dijk, I., et al. (2016). The Long-Term Impact of Magnesium in Seawater on Foraminiferal Mineralogy: Mechanism and Consequences: Living in the Wrong Ocean. *Global Biogeochemical Cycles, 30*(3), (pp. 438–446). doi:10.1002/2015GB005241

Warren, J. K. (2000). Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis. *Australian Journal of Earth Sciences, 47*(2), (pp. 179–208). doi:10.1046/j.1440-0952.2000.00781.x

Warren, J. K. (2006). *Evaporites: Sediments, Resources, and Hydrocarbons*. Springer.

Wortmann, U. G., & Chernyavsky, B. M. (2007). Effect of evaporite deposition on Early Cretaceous carbon and sulfur cycling. *Nature, 446*(7136), (pp. 654–656). https://doi.org/10.1038/nature05693

Zharkov, M. A. (1974). *Paleozoic Salt Formations of the World*. (N.d.).

Zharkov, M. A., Zharkova, T. M., & Merzlyakov, G. A. (1978). On the evolution of the salt composition of the world ocean's waters in the Paleozoic. *Geology and Geophysics*, (3), (pp. 3–18). [In Russian with English abstract]

Appendix A

Results obtained in the results of this research were tabulated in a Microsoft Excel workbook, however, are provided within the thesis as a PDF. Reach out via email to Benjamin.kumpf@gmail.com to obtain the Excel copy. The columns provided in the pdf version of Appendix 1 are described below:

- GeoDeepDive DocID to reference the source document for the extracted data;
- Sentence ID to identify which sentence the data came from;
- The stratigraphic name that a specific evaporite mineral was matched to in this research;
- The assigned Top Age of the stratigraphic unit;
- The assigned Bottom Age of the stratigraphic unit;
- Document Title;
- Journal Name;
- Journal Volume;
- Journal Publication Year;
- Publisher;
- Article DOI information.

This information is divided into 6 spreadsheets of which the first 5 correspond to the entries provided in Table 3.1. The spreadsheet name is located on the footer of each page. The sixth spreadsheet provides a list of hand filtered marine epsomite units that were manually evaluated and incorporated into Figure 3.1.

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a048d65cf58f1b96402a09e	160	Coboconk mention	455.615	455.725	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
57a43018cf58f11204e17fe0	152	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54d2216be13823302d02428b	221	Northwich Halite Formation	242	247.2	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
550895c3e138237a6f7391ae	191	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b43280e138239d8685381d	337	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
57a43018cf58f11204e17fe0	868	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54bedb19e13823023e43d91d	119	Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
572cf900cf58f13d86a1bdc8	214	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55afeeece138238f9de483c5	54	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
55c171fbcf58f1a8110b8064	382	Burns Formation	23.03	33.9		Goldschmidt Abstracts 2008- M	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.016
54b43246e138239d86849721	195	Newark mention	192.9	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
55b690a7e138238e2d05483f	1026	Bowser Formation	165.3	167.475	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55992c92e1382390cc64115f	5	Galana mention			Alfieris, D. et al.	Shallow submarine epithermal Pb–Zn–Cu–Au–Ag–Te mineralization on western Milos Island, Aegean Volcanic Arc, Greece: Mineralogical, geological and geochemical constraints	Ore Geology Reviews		2013	Elsevier	10.1016/j.oregeorev.2013.01.007
57c1b591cf58f173fefe15b4	198	Watts Bight Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
54b5345de138239571b90a0d	199	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
54b43245e138239d8684952a	173	Antalo Limestone			Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
558bbed5e13823109f3ed4f8	19	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
558bbed5e13823109f3ed4f8	175	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
57320459cf58f19ced0f7bc5	79	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
58b6daf1cf58f11f2b0dde84	257	Salado Formation	251	260.4	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
579aae1bcf58f112b1fd775d	103	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54b4324de138239d8684aa17	153	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57e65deecf58f186b6da86bd	76	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5a850dffcf58f13f065e41c5	269	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
56c1fcefcf58f15c72c90a17	511	Khorat Group	65.5	251	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
54b4327fe138239d868537ad	249	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
557cbb8ae138239225f8697d	1261	Verde mention	4.1777	8.342	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
55c35bc5cf58f1a8110b8fcc	141	Boulby mention			Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a0493edcf58f1b96402aae7	198	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54fb3438e138239936c6d321	442	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5a0493edcf58f1b96402aae7	332	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54fab87ce138239936c6cfbb	924	Prairie Evaporite Formation	385.3	397.5	Risacher, François and Fritz, Bertrand	Bromine geochemistry of salar de Uyuni and deeper salt crusts, Central Altiplano, Bolivia	Chemical Geology	3-4	2000	Elsevier	10.1016/S0009-2541(99)00251-X
54fb3438e138239936c6d321	93	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5b6d936dcf58f1a92c2d33b5	41	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54b43248e138239d86849e30	327	Zaragoza mention	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
5732032ecf58f19cbcbc550f	10	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5732032ecf58f19cbcbc550f	1	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b30ea3e138231cbdd6cfcd	294	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5906cf0dcf58f15ad9553b8a	52	Salina Group	416	443.7	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
557bfbc7e138239225f86664	646	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
579aae1bcf58f112b1fd775d	46	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
577c41d6cf58f188cebdd1fb	539	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
58c18a43cf58f1a6ba4ea493	66	Parachute Creek Member	33.9	55.8	Tänavsuu-Milkeviciene, Kati et al.	Depositional Cycles and Sequences In An Organic-Rich Lake Basin: Eocene Green River Formation, Lake Uinta, Colorado and Utah, U.S.A.	Journal of Sedimentary Research	87	2017	Society for Sedimentary Geology	10.2110/jsr.2017.11
550895c3e138237a6f7391ae	152	Prairie mention	383.95	389.1	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b4328ee138239d86855f3a	129	Wieliczka mention			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
5a850dffcf58f13f065e41c5	74	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5c2bea2e1faed655488b221b	107	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
55a7c745e13823757cc70251	40	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56c1ca03cf58f15c72c90620	332	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54e7c15ae138237cc9150ae2	346	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5a850dffcf58f13f065e41c5	275	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54bffee9e1382389c54c3458	165	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b64a4de1382314227d0039	365	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
56c1a95dcf58f15c72c903aa	389	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a82328e13823757cc7049a	1314	Saude Formation	145	251.902	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b31289e138231cbdd6cfe3	694	Verde mention	4.1777	8.342	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
55f49f72cf58f16256a225dc	52	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
56c1a95dcf58f15c72c903aa	284	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5683349ccf58f1479a0abb4e	129	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55986cdae1382390cc640d7c	431	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
54e735bbe138237cc9150896	66	Telemark Supergroup				Index	Chemical Geology	155	1999	Elsevier	10.1016/S0009-2541(99)00017-0
57126a16cf58f140fa5c33f2	20	Brittle Bed			Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5a21053ecf58f18a3170d1ed	231	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
550ab8aae138238460c4fe5e	47	Windsor Group	318.1	359.2	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
55986e49e1382390cc640d84	170	S.D.B. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
58c18a99cf58f1a6ba4ea54d	119	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
578b8ab6cf58f1645f54f0c6	252	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55f49f72cf58f16256a225dc	68	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
558c6b00e13823109f3ed87c	2239	Creek mention			Brobst, Donald Albert and Tucker, Jerry D	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803
579fe160cf58f15528a4466f	25	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54fb1bf8e138239936c6d27b	71	Haynesville Formation	150.8	155.7	Eastoe, C.J et al.	Stable chlorine isotopes in halite and brine from the Gulf Coast Basin: brine genesis and evolution	Chemical Geology	1-4	2001	Elsevier	10.1016/S0009-2541(00)00374-0
579fe160cf58f15528a4466f	146	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b35463e138231cbdd6d13e	273	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
557f199ce13823bc80ba25a0	840	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5682e272cf58f1479a0ab716	322	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
572e90c3cf58f10a55fa1b31	373	Salado Formation	251	260.4	Enrique Casas (2) and Tim K. Lowenstei	Carnallite Mineralization in the Nonmarine, Qaidam Basin, China: Evidence for the Early Diagenetic Origin of Potash Evaporites	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a05-2b26-11d7-8648000102c1865d
558bbed5e13823109f3ed4f8	290	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
56a038b2cf58f1079fd4ba21	55	Edwards Group	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
550901a3e138238460c4f59b	257	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54b4327fe138239d868537ad	310	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1a95dcf58f15c72c903aa	395	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
578aea2bcf58f13920dc7baa	126	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5731ac74cf58f18e0ffaff50	94	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
56c1effacf58f15c72c9090b	416	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
5c319a241faed655488b9bcc	84	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5674a234cf58f12215607647	316	Salado Formation	251	260.4	Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
54e733ace138237cc9150889	437	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
54be90c7e13823299564b137	43	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
54faf2e4e138239936c6d161	243	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
55baa3b5e1382373b63b89e7	94	Halite Dolomite	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56831341cf58f1479a0ab983	8	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54fb3438e138239936c6d321	13	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5733004ccf58f1066ffdaeaa	155	Halite Group	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55a82328e13823757cc7049a	1717	Dakota mention	98.85	119.3	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
5504e6e5e1382326932d8a23	248	Anorthite Montmorillonite Dolomite			Park, Jungjae et al.	Holocene climate change and human impact, central Mexico: a record based on maar lake pollen and sediment chemistry	Quaternary Science Reviews	29	2010	Elsevier	10.1016/j.quascirev.2009.10.017
55f2ced1cf58f16256a21973	523	Röt Formation			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b7869fe13823bd29ba8231	1499	Prairie Formation	359.2	416	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55765d83e138234790a011f0	30	Salt IV mention			Keely, B.J. et al.	A molecular stratigraphic approach to palaeoenvironmental assessment and the recognition of changes in source inputs in marls of the Mulhouse Basin (Alsace, France)	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90007-X
55c0d379cf58f16e99a378b9	39	HALITE SAMPLES Salado Formation			Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b5345de138239571b90a0d	146	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
5d3f58060b45c76cafa2004f	246	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b35463e138231cbdd6d13e	2343	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
559147b8e138236ee2217b0d	57	Rock Group			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55bfc14ecf58f16e99a3703b	37	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5713034ccf58f175a32a0111	217	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a0493edcf58f1b96402aae7	128	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b78281e13823bd29ba8218	780	Abo Formation	270.6	280	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5503421ae1382326932d7e6d	2242	Zaragoza Gypsum Formation	5.332	23.03	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55a470efe13823757cc6f241	82	Green River Formation	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
55c48dc6cf58f1a8110b94db	110	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55ad3126e13823763a8303a0	180	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55f49f72cf58f16256a225dc	135	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55185d29e1382394b500db56	514	Zaragoza Gypsum Formation	5.332	23.03	Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
5682e272cf58f1479a0ab716	803	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5c3458ec1faed655488bed8f	794	Prairie Evaporite Formation	385.3	397.5	Stoffers, P. and Kuhn, R.	Red Sea Evaporites: A Petrographic and Geochemical Study	Initial Reports of the Deep Sea Drilling Project	23		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.23.122.1974
58d042d8cf58f13a8ae55cf9	186	Corella/Doherty Formation			Oliver, N. H. S.	Hydrothermal history of the Mary Kathleen Fold Belt, Mt Isa Block, Queensland	Australian Journal of Earth Sciences	42	1995	Taylor and Francis	10.1080/08120099508728201
55bfc14ecf58f16e99a3703b	354	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
572cf1fccf58f13accaa0e61	205	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55bfbd79cf58f16e99a3701c	570	Prairie Evaporite Formation	385.3	397.5	oberts, Sheila M. and Spencer, Ronald J	Paleotemperatures preserved in fluid inclusions in halite	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00253-V
579ed180cf58f1030df9c51e	304	Minas Viejas Formation			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55c48dc6cf58f1a8110b94db	40	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5732032ecf58f19cbcbc550f	365	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	319	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57126f9fcf58f142fd277238	94	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5a0493edcf58f1b96402aae7	372	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
577bca4acf58f1538dda98fd	260	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5906dd0fcf58f15fea53aef7	446	Jackson mention	10.08	11.04	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b77fd5e1382373b63b7cce	250	Norphlet Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
558eb5d6e13823109f3ee517	769	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54dc2da6e138238a47f96228	187	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
57c19e14cf58f16bf61df64c	61	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
558df7d7e13823109f3ee082	2344	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	395	Salado Formation	251	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558ec3e3e13823109f3ee570	110	Salado mention	256.0278	262.2168	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
55c35bc5cf58f1a8110b8fcc	147	Salado Formation	251	260.4	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
55b7869fe13823bd29ba8231	2793	Supai Formation	251	299	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55c0d379cf58f16e99a378b9	250	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c01a9ecf58f16e99a37305	313	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57a43018cf58f11204e17fe0	685	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5c31d9181faed655488ba2e1	42	Retiro Fm	113	114.05	Basso, M. et al.	THREE-DIMENSIONAL SEISMIC GEOMORPHOLOGY OF PALEOKARST IN THE CRETACEOUS MACAÉ GROUP CARBONATES, CAMPOS BASIN, BRAZIL	Journal of Petroleum Geology	41	2018	Wiley	10.1111/jpg.12719
585b644ecf58f1a722daada6	92	Fort Union Formation	55.8	65.5	McMahon, P.B. et al.	Chemical Considerations for an Updated National Assessment of Brackish Groundwater Resources	Groundwater	54	2016	Wiley	10.1111/gwat.12367
54beea51e13823023e43d994	5	Zechstem Evaponte Group			Fabricius, Johannes	Natural Na□□Mg□□ solutions and solid derivatives trapped in euhedral quartz from Danish Zechstein salt	Chemical Geology	61	1987	Elsevier	10.1016/0009-2541(87)90031-3
5579c265e138231c7c52c464	51	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
578fb2c8cf58f1bdcd2df236	430	Salado Formation	251	260.4	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
578fb2c8cf58f1bdcd2df236	236	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54e733ace138237cc9150889	117	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5a2b7516cf58f108104211ac	713	Zaragoza Gypsum Formation	5.332	23.03	Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55b8484be13823bd29ba869d	78	Paradox Member	299	318.1	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
55c2e5c8cf58f1a8110b8c08	220	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
578fb2c8cf58f1bdcd2df236	258	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5a850dffcf58f13f065e41c5	84	Me'arat Sedom Mbr			Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5a0493edcf58f1b96402aae7	175	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5c19917c1faed65548891586	737	Clay mention	175.6	199.6	The Shipboard Scientific Party	Site 374: Messina Abyssal Plain	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.105.1978
572cf1fccf58f13accaa0e61	291	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55917250e13823109f3ef5b1	1495	Maha Sarakam Formation	65.5	145.5	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
58c18a99cf58f1a6ba4ea54d	119	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5c3e6d6c1faed655488cd35a	76	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57c3d54ccf58f146d5b258bd	57	Zechstein Group	251	260.4	Drijkoningen, Guy et al.	Seismic time-lapse effects of solution salt mining - a feasibility study	Geophysical Prospecting	60	2012	Wiley	10.1111/j.1365-2478.2011.00979.x
57a43018cf58f11204e17fe0	46	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
58bf2d90cf58f1867eb10946	135	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
54fb03c7e138239936c6d1e1	339	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
572cf900cf58f13d86a1bdc8	64	General Rustler Formation			Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2a9cacf58f1a8110b8a1e	91	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
577c41d6cf58f188cebdd1fb	229	Second Red Bed			WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5b6d22edcf58f18ba5e73c75	6	Middle Evaporire Bed			Stewart, F. H.	Replacements involving early carnallite in the potassium-bearing evaporites of Yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	31	1956	Mineralogical Society	10.1180/minmag.1956.031.233.02
550901a3e138238460c4f59b	30	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
577c41d6cf58f188cebdd1fb	539	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
558bbed5e13823109f3ed4f8	226	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55c48dc6cf58f1a8110b94db	149	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b6d6a7e13823bd29ba7dcc	8133	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
550915e7e138238460c4f632	543	Salina Group	416	443.7	Wilson, T.P. and Long, D.T.	Geochemistry and isotope chemistry of CaNaCl brines in Silurian strata, Michigan Basin, U.S.A.	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90079-V
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b43287e138239d86854dad	65	LITHOLOGY Dolomite			Amiri-Garroussi, K. and Taylor, J.C.M.	Displaced carbonates in the Zechstein of the UK North Sea	Marine and Petroleum Geology	9	1992	Elsevier	10.1016/0264-8172(92)90090-2
54c04652e1382389c54c3686	30	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55ae9887e13823763a830cad	107	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
579f1578cf58f1168e64ad7f	8	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
572cf1fccf58f13accaa0e61	395	Prairie Evaporite Formation	385.3	397.5	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5730cdcccf58f16acaf6b5aa	250	Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
55f49f72cf58f16256a225dc	68	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54c04652e1382389c54c3686	83	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
579f1578cf58f1168e64ad7f	382	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5517bae4e1382394b500d8af	302	San Andres Formation	251	299	Last, William M.	Salt dissolution features in saline lakes of the northern Great Plains, western Canada	Geomorphology	8	1993	Elsevier	10.1016/0169-555X(93)90027-Y
54be7fc1e13823299564b0b3	308	Salina Formation	416	443.7	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
578fb2c8cf58f1bdcd2df236	195	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
550901a3e138238460c4f59b	32	Guendulain Fm	199.6	251	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
583caececf58f171e038b756	148	Abu Dhabi Fm	-5.5012E-05	0.01143	Wood, Warren W. and Böhlke, J.K.	Density-Driven Free-Convection Model for Isotopically Fractionated Geogenic Nitrate in Sabkha Brine	Groundwater		2016	Wiley	10.1111/gwat.12463
55ae0df7e13823763a830928	1374	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c3cb05cf58f1a8110b918f	239	Salina Group	416	443.7	Timofeeff, M.N et al.	Evaluating seawater chemistry from fluid inclusions in halite: examples from modern marine and nonmarine environments	Geochimica et Cosmochimica Acta	65	2001	Elsevier	10.1016/S0016-7037(01)00591-9
55c0d379cf58f16e99a378b9	345	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b78281e13823bd29ba8218	1950	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	144	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54e733ace138237cc9150889	495	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
54b4324de138239d8684aa17	284	Serrata Fm			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55baa3b5e1382373b63b89e7	79	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
578f2c07cf58f19aabebdf04	110	San Andres Formation	251	299	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55c48dc6cf58f1a8110b94db	71	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55c2a9cacf58f1a8110b8a1e	195	Maha Sarakham mention	33.9	100.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5c6237091faed65548958f65	35	Soligorsk Formation	359.2	385.3	Plax, Dmitry P. et al.	A new genus of eurypterid (Chelicerata, Eurypterida) from the Upper Devonian salt deposits of Belarus	Journal of Paleontology	92	2018	Cambridge University Press (CUP)	10.1017/jpa.2018.11
56833ddfcf58f1479a0abbcc	129	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b7869fe13823bd29ba8231	82	Castile Formation	253.8	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55baa3b5e1382373b63b89e7	75	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54b4328ee138239d86855f3a	242	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
558eb5d6e13823109f3ee517	350	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
572cf1fccf58f13accaa0e61	235	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b43277e138239d86851f14	141	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57c19a92cf58f16ab04df2ec	414	Salina Group	416	443.7	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
54c060fbe1382389c54c3757	343	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57a43018cf58f11204e17fe0	485	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
550901a3e138238460c4f59b	279	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55afeeece138238f9de483c5	360	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
5a0493edcf58f1b96402aae7	332	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682d639cf58f1479a0ab68d	3	Evaporite mention			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
55c319eacf58f1a8110b8db1	34	Sedom Fm	5.332	23.03	Klein-BenDavid, Ofra et al.	The evolution of marine evaporitic brines in inland basins: The Jordan-Dead Sea Rift valley	Geochimica et Cosmochimica Acta	68	2004	Elsevier	10.1016/j.gca.2003.08.002
557f199ce13823bc80ba25a0	1111	Capitan Limestone	251	299	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57320459cf58f19ced0f7bc5	306	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
572cf900cf58f13d86a1bdc8	237	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5c3e6d6c1faed655488cd35a	294	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
578aea2bcf58f13920dc7baa	121	San Andres mention	150.6	154.8	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55afeeece138238f9de483c5	56	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
54e97acfe138237cc915120b	121	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
579f1578cf58f1168e64ad7f	384	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b4328ce138239d86855aad	223	Middle Member			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55baa3b5e1382373b63b89e7	338	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55af1c5ce13823763a830fe9	92	Salado Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
574f1369cf58f10afd57189e	47	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55bfc14ecf58f16e99a3703b	237	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55b3dfb4e138231cbdd6d442	900	White Rocks Sandstone	323.2	325.1667	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
54e733ace138237cc9150889	206	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
55afeeece138238f9de483c5	51	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
55a0946ee1382381ff364540	278	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55ad3126e13823763a8303a0	112	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55baa3b5e1382373b63b89e7	159	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
550ab33ee138238460c4fe4c	302	Oseberg mention	161.2	175.6	Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3
54be90c7e13823299564b137	9	Mannville Group	99.6	145.5	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
54fb51c0e138239936c6d400	69	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
570fe41dcf58f114a862267f	258	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a850dffcf58f13f065e41c5	208	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
56c1a95dcf58f15c72c903aa	373	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
579f1578cf58f1168e64ad7f	64	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
55b64a4de1382314227d0039	340	SaJado mention			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55c35bc5cf58f1a8110b8fcc	108	Louann Formation	145.5	199.6	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
550ee523e1382369a6f93f9e	205	Oligocene-Miocene Zaragoza Formation			Gutiérrez, Francisco et al.	Leakage problems in dams built on evaporites. The case of La Loteta Dam (NE Spain), a reservoir in a large karstic depression generated by interstratal salt dissolution	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2014.12.009
578b8ab6cf58f1645f54f0c6	505	Prairie Evaporite Formation	385.3	397.5	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57d0097ccf58f145d627bfaf	67	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
558e3094e13823109f3ee1d7	65	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
572ee8a5cf58f11bb5bc1a43	91	Castile Formation	253.8	260.4	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
578aea2bcf58f13920dc7baa	174	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
56830b14cf58f1479a0ab918	604	Mavqi'im Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5713034ccf58f175a32a0111	143	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54ef9042e138237cc9152b85	208	Ariri mention	109.5278	115.1	Dooley, Tim P. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 2: Mechanical explanation from physical modeling	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.009
54b4328de138239d86855c34	566	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b8b7f4e13823bd29ba8982	974	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1223	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1effacf58f15c72c9090b	429	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55c2a9cacf58f1a8110b8a1e	192	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
57320459cf58f19ced0f7bc5	324	Seven Rivers mention	261.76	264.5725	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b35463e138231cbdd6d13e	1052	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
5a2b7516cf58f108104211ac	131	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55ad3126e13823763a8303a0	122	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
589ae556cf58f12d2e4ca5c3	56	DNA-Dst-A Complex Formation			Minchenkova, L. and Zimmer, Ch.	Reversion of theB toA transition of DNA induced by specific interaction with the oligopeptide distamycin A	Biopolymers	19	1980	Wiley-Blackwell	10.1002/bip.1980.360190408
55928493e138236ee2218034	285	Battle Formation	299	318.1	Theodore, Ted G. et al.	Geochemical and fluid zonation in the skarn environment at the tomboy—minnie gold deposits, Lander County, Nevada	Journal of Geochemical Exploration	25	1986	Elsevier	10.1016/0375-6742(86)90009-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54b43250e138239d8684b46c	168	Maha Sarakham Formation	65.5	145.5	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
57c19e14cf58f16bf61df64c	155	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54b4328ce138239d86855b5a	39	Hondo Formation			Taberner, C. et al.	The use of environmental markers to distinguish marine vs. continental deposition and to quantify the significance of recycling in evaporite basins	Sedimentary Geology	137	2000	Elsevier	10.1016/S0037-0738(00)00105-6
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
558020ace13823bc80ba29e2	476	Christmas Canyon Formation	0.0117	2.58	Smith, George I. et al.	Core KM-3, a surface-to-bedrock record of late Cenozoic sedimentation in Searles Valley, California	Professional Paper		1983	United States Geological Survey	10.3133/pp1256
55afeeece138238f9de483c5	61	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
54d2216be13823302d02428b	475	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
57132e62cf58f183d20b8a53	346	Colemanite mention			Helvaci, C. and Orti, F.	Sedimentology and diagenesis of Miocene colemanite-ulexite deposits (western Anatolia, Turkey)	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.1021
55ae0df7e13823763a830928	1461	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b5b47ce1382314227cfdae	88	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54fb03c7e138239936c6d1e1	14	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
54b5345de138239571b90a0d	428	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
54bf3328e13823023e43dbcf	17	Caspe Formation			Birnbaum, Stuart J. and Coleman, Max	Source of sulphur in the Ebro Basin (northern Spain) Tertiary nonmarine evaporite deposits as evidenced by sulphur isotopes	Chemical Geology	25	1979	Elsevier	10.1016/0009-2541(79)90091-3
557bfbc7e138239225f86664	697	Praire Evaporite Formation	385.3	397.5	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55ae4f4be13823763a830ada	816	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
557f199ce13823bc80ba25a0	418	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57a43018cf58f11204e17fe0	868	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54d8fa70e138238471e80530	210	Main Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
579f5bc9cf58f12a53c41a24	30	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55af1c5ce13823763a830fe9	850	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b6d4bfe13823bd29ba7dc0	1166	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
577c41d6cf58f188cebdd1fb	35	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
570fe41dcf58f114a862267f	219	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b70b93e1382373b63b7aed	138	Salado Fm.	251	260.4	Knauth, L.Paul and Beeunas, Mark A.	Isotope geochemistry of fluid inclusions in Permian halite with implications for the isotopic history of ocean water and the origin of saline formation waters	Geochimica et Cosmochimica Acta	50	1986	Elsevier	10.1016/0016-7037(86)90195-X
5ce2f9b20b45c76caf8ae21e	417	Lyne Formation	323.2	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56b4fb9ecf58f14c238d30ea	396	Matallana mention			Ayllon, F. et al.	Re-equilibration of fluid inclusions in diagenetic-anchizonal rocks of the Cinera-Matallana coal basin (NW Spain)	Geofluids	3	2003	Wiley-Blackwell	10.1046/j.1468-8123.2003.00048.x
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55ad3126e13823763a8303a0	163	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55afeeece138238f9de483c5	304	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
54b4328ce138239d86855aad	505	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5682e3a8cf58f1479a0ab727	378	Salado Formation	251	260.4	/ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
58b65c8fcf58f1b2fdd8b58a	69	Loeme Formation	112	125	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
55c48dc6cf58f1a8110b94db	580	Salina Formation	416	443.7	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55c48dc6cf58f1a8110b94db	41	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5683006acf58f1479a0ab88f	65	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
5a0493edcf58f1b96402aae7	349	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54b4328de138239d86855c7b	51	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
5c2bea2e1faed655488b221b	132	Nugget Formation	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
5508c83fe138238460c4f3ef	231	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
54b4328ae138239d86855586	129	Prairie Evaporite mention	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
55c2e5c8cf58f1a8110b8c08	120	San Andres mention	150.6	154.8	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54b4328ee138239d86855ef7	115	Jindong Formation	65.5	99.6	Paik, I.S. and Kim, H.J.	Playa lake and sheetflood deposits of the Upper Cretaceous Jindong Formation, Korea: Occurrences and palaeoenvironments	Sedimentary Geology	187	2006	Elsevier	10.1016/j.sedgeo.2005.12.006
572cf900cf58f13d86a1bdc8	95	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5a850dffcf58f13f065e41c5	246	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5713034ccf58f175a32a0111	335	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5682e272cf58f1479a0ab716	34	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b43277e138239d86852025	244	Catoche Formation	471.8	488.3	Conliffe, J. et al.	Dolomitization of the lower Ordovician Catoche formation: Implications for hydrocarbon exploration in western Newfoundland	Marine and Petroleum Geology	30	2012	Elsevier	10.1016/j.marpetgeo.2011.10.007
5713034ccf58f175a32a0111	77	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
577c41d6cf58f188cebdd1fb	39	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54b4327ce138239d86852d2c	202	Ariri Formation	109.5278	115.1	Jackson, Martin P.A et al.	Role of subaerial volcanic rocks and mantle plumes in creation of South Atlantic margins: implications for salt tectonics and source rocks	Marine and Petroleum Geology	17	2000	Elsevier	10.1016/S0264-8172(00)00006-4
55ae4f4be13823763a830ada	758	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682ea89cf58f1479a0ab77c	300	Nippewalla Group	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55a7c745e13823757cc70251	146	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
559c3f39e138230816dad2ff	504	Capitan mention	259.51	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
56c1effacf58f15c72c9090b	246	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5a0493edcf58f1b96402aae7	89	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
55af1c5ce13823763a830fe9	513	Culebra mention	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
578653e1cf58f10c846f939b	36	Green River Formation	33.9	55.8	Dyni, John R. and Hawkins, James E.	Lacustrine turbidites in the Green River Formation, northwestern Colorado	Geol	9	1981	GSA	10.1130/0091-7613(1981)9<235:ltitgr>2.0.co;2
579f1578cf58f1168e64ad7f	147	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b43246e138239d86849919	581	Blomidon Formation	203.6	216.5	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b7c5a4e13823bd29ba8382	324	Salado Formation	251	260.4	Harrington, James Foster et al.	Sources of fertilizer minerals in South America; a preliminary study	Bulletin		1966	United States Geological Survey	10.3133/b1240
56830b14cf58f1479a0ab918	443	Rosetta Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
574f1369cf58f10afd57189e	199	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55baa3b5e1382373b63b89e7	359	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55baa3b5e1382373b63b89e7	227	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54fb1bf8e138239936c6d27b	594	Frio Formation	23.03	33.9	Eastoe, C.J et al.	Stable chlorine isotopes in halite and brine from the Gulf Coast Basin: brine genesis and evolution	Chemical Geology	1-4	2001	Elsevier	10.1016/S0009-2541(00)00374-0
5599341be1382390cc641189	283	Caños Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
550ab8aae138238460c4fe5e	247	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
5a2b7516cf58f108104211ac	5	UXG mention			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
56831341cf58f1479a0ab983	451	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
56833ddfcf58f1479a0abbcc	233	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b78281e13823bd29ba8218	1944	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5682e3a8cf58f1479a0ab727	349	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
572ea708cf58f10f9db0ebad	275	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	297	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55c0d379cf58f16e99a378b9	77	Hutchinson Salt Member	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5508d3cde138238460c4f445	161	Sdom mention	-5.5012E-05	23.03	Stiller, Mariana et al.	Cl-37 in the Dead Sea system---preliminary results	Applied Geochemistry	13	1998	Elsevier	10.1016/S0883-2927(98)00017-1
55c0d379cf58f16e99a378b9	320	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579aae1bcf58f112b1fd775d	101	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
574c1c0bcf58f1957a2a36f7	224	Clover Hill Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
55b6d4bfe13823bd29ba7dc0	601	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c36968cf58f1a8110b9014	84	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
579f1578cf58f1168e64ad7f	64	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54ef9078e138237cc9152b86	137	Salt mention	251	260.4	Jackson, Christopher A.-L. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 1: Geometry and kinematics from 3D seismic reflection and well data	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.010
55b6d4bfe13823bd29ba7dc0	119	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5674a234cf58f12215607647	313	Nippewalla Group	251	299	Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
55989c99e1382390cc640e84	252	Central Rhodopes Group			Marchev, Peter et al.	2: Hydrothermal ore deposits related to post-orogenic extensional magmatism and core complex formation: The Rhodope Massif of Bulgaria and Greece	Ore Geology Reviews	27	2005	Elsevier	10.1016/j.oregeorev.2005.07.027
57464969cf58f165ff103f08	97	Blomidon Formation	203.6	216.5	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
558ecdcbe13823109f3ee5af	5012	Wilkins Peak Member	33.9	55.8	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
579aae1bcf58f112b1fd775d	33	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55b6d6a7e13823bd29ba7dcc	8136	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54e7c15ae138237cc9150ae2	38	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55ae9887e13823763a830cad	120	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55bf96d4cf58f16e99a36eea	65	Sedom Formation	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
57a1b61ecf58f1154eb55fb9	12	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
57c1a06bcf58f16cbd621551	149	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
5d3f58060b45c76cafa2004f	30	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
579fe160cf58f15528a4466f	209	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5c3e6d6c1faed655488cd35a	391	Larne Halite Member			Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
56831341cf58f1479a0ab983	43	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5a048d65cf58f1b96402a09e	361	Black River Group	443.7	488.3	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
57a43018cf58f11204e17fe0	878	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b43246e138239d86849721	195	Newark mention	192.9	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
55c48dc6cf58f1a8110b94db	110	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
578fb2c8cf58f1bdcd2df236	311	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5682e272cf58f1479a0ab716	475	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b73032e13823bd29ba8000	45	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
557f199ce13823bc80ba25a0	500	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bf2d90cf58f1867eb10946	135	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5a048d65cf58f1b96402a09e	160	Coboconk mention	455.615	455.725	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
57126f9fcf58f142fd277238	94	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
572cf900cf58f13d86a1bdc8	126	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57484ab3cf58f13effae7ac5	173	Halite Clover Hill Fm			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
54fb3438e138239936c6d321	326	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
557f199ce13823bc80ba25a0	1766	SollstOl'e Rustler Formation			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5590d1bfe13823109f3ef23b	1380	Rustler mention	253.9652	256.0278	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
54b4328de138239d86855ceb	472	Glorieta Formation	273.01	282	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55c2a9cacf58f1a8110b8a1e	114	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
578b8ab6cf58f1645f54f0c6	477	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b6d4bfe13823bd29ba7dc0	5	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5713034ccf58f175a32a0111	179	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
570fe41dcf58f114a862267f	173	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
54fb03c7e138239936c6d1e1	336	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
558e232de13823109f3ee187	70	Salado Formation	251	260.4	Rowe, Jack James et al.	The quinary reciprocal salt system Na, K, Mg, Ca/Cl, SO4; a review of the literature with new data	Professional Paper		1972	United States Geological Survey	
55c2a9cacf58f1a8110b8a1e	195	Maha Sarakham mention	33.9	100.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5590c038e13823109f3ef1c7	61	Delaware Mountain Group	260.4	270.6	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
5682e272cf58f1479a0ab716	326	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57a43018cf58f11204e17fe0	471	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b73032e13823bd29ba8000	131	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
579f1578cf58f1168e64ad7f	274	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55c36968cf58f1a8110b9014	55	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55ae4f4be13823763a830ada	794	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
558bbed5e13823109f3ed4f8	229	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550895c3e138237a6f7391ae	202	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
579f1578cf58f1168e64ad7f	384	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
579f1578cf58f1168e64ad7f	284	Tamarisk mention	251.902	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5c2bea2e1faed655488b221b	118	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
5a39ee95cf58f1314cf12808	63	Sedom Formation	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
56aaa9f0cf58f19442532ee1	147	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
5c3e6d6c1faed655488cd35a	365	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b5345de138239571b90a0d	148	Haynesville mention	147.52	155.939	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
558df7d7e13823109f3ee082	345	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56c1b6a3cf58f15c72c904b4	288	GessosoSolfifera Formation	5.332	7.246	SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
578fb2c8cf58f1bdcd2df236	81	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
578aea2bcf58f13920dc7baa	208	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
558b2c2be13823109f3ed1ee	452	Horse Spring Fm	5.332	23.03	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
55b7869fe13823bd29ba8231	2591	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf1fccf58f13accaa0e61	227	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b7869fe13823bd29ba8231	1338	Castile Formation	253.8	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	1188	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57c91310cf58f17b7ba8638b	116	Clean Chamber Formation			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5c2fe60d1faed655488b6bad	217	Leikoupo Formation	228	245	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
54b43281e138239d86853bfd	130	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
5a850dffcf58f13f065e41c5	236	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55ae0df7e13823763a830928	1370	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55f49f72cf58f16256a225dc	2	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
54b4327fe138239d868537ad	1	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
55a69d57e13823757cc6fac4	104	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
5906dd0fcf58f15fea53aef7	286	Loma Plata Limestone	99.6	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
54e8207fe138237cc9150c61	93	Bulldog Shale	65.5	145.5	Costelloe, Justin F. et al.	Identifying fluvial recharge and artesian upwards leakage contributions to arid zone shallow, unconfined groundwater	Chemical Geology		2012	Elsevier	10.1016/j.chemgeo.2012.08.014
54c04652e1382389c54c3686	313	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550895c3e138237a6f7391ae	177	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5682e272cf58f1479a0ab716	713	Sun Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55f49f72cf58f16256a225dc	212	Nippewalla Group	251	299	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
550895c3e138237a6f7391ae	189	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
58b6daf1cf58f11f2b0dde84	835	Haselgebirge Formation	245	251	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
54b4328de138239d86855ceb	82	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54b4327ee138239d86853305	55	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
574f9a2fcf58f13bebe8af72	551	Prairie Evaporite Formation	385.3	397.5	McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
5906dd0fcf58f15fea53aef7	323	Bluff mention	393.3	419.2	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
550dedb5e1382369a6f93ba1	94	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
558f973ae13823109f3eea81	8291	Mineral Occurrence Dolomite			Geological Survey (U.S.)	Geological Survey research 1961; Short papers in the geologic and hydrologic sciences; Articles 1-146	Professional Paper		1961	United States Geological Survey	10.3133/pp424B
55afeeece138238f9de483c5	1	Green River Formation	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
56830ae3cf58f1479a0ab915	259	Prairie Evaporite mention	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
579aae1bcf58f112b1fd775d	72	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5c3e6d6c1faed655488cd35a	294	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
579fe160cf58f15528a4466f	122	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5733004ccf58f1066ffdaeaa	239	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5682e3a8cf58f1479a0ab727	374	Salado mention	256.0278	262.2168	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55b5b776e1382314227cfdc2	1242	Arbuckle Group	471.8	488.3		Geochimica et Cosmochimica Acta List of Referees, List of Contents, Subject Index, and Author Index	Geochimica et Cosmochimica Acta		1990	Elsevier	10.1016/0016-7037(90)90256-K
5732032ecf58f19cbcbc550f	82	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	203	Anhydrite Shale			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57320459cf58f19ced0f7bc5	89	Seven Rivers mention	261.76	264.5725	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55933fbae138236ee2218347	88	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
557bfbc7e138239225f86664	110	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55ada974e13823763a830682	449	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
55b5afc2e1382314227cfd95	407	Salado Formation	251	260.4	Wopenka, Brigitte et al.	Analysis of individual fluid inclusions by Fourier transform infrared and Raman microspectroscopy	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90349-P
579f1578cf58f1168e64ad7f	288	Tamarisk mention	251.902	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b30ea3e138231cbdd6cfcd	1650	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55c0d379cf58f16e99a378b9	242	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54faf2e4e138239936c6d161	208	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
5503421ae1382326932d7e6d	1353	Prairie Fm	385.3	397.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55a7c745e13823757cc70251	49	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56c1a95dcf58f15c72c903aa	192	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
579fe160cf58f15528a4466f	236	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5509217ee138238460c4f689	310	Forty-niner mention			Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c36968cf58f1a8110b9014	66	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55c48dc6cf58f1a8110b94db	179	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
558df7d7e13823109f3ee082	1242	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54be90c7e13823299564b137	459	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
54b4328ae138239d86855597	22	Pak Reichenhall Fm			Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
5d35e56c0b45c76caf93f034	468	Kootenai mention	113	145	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
59c8efefcf58f1167c615d5f	11	SI Group				Business digest	Chemistry & Industry	78	2014	Wiley-Blackwell	10.1002/cind.786_5.x
57a43018cf58f11204e17fe0	822	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57a43018cf58f11204e17fe0	817	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
579fd7fccf58f151a1b6ac91	192	Phase Calcite Dolomite			Nield, Joanna M. et al.	Climate-surface-pore-water interactions on a salt crusted playa: implications for crust pattern and surface roughness development measured using terrestrial laser scanning	Earth Surface Processes and Landforms	41	2016	Wiley-Blackwell	10.1002/esp.3860
54b5345de138239571b90a0d	146	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
54b4328ce138239d86855aad	28	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54beea51e13823023e43d994	5	Zechstem Evaponte Group			Fabricius, Johannes	Natural Na□K□Mg□□ solutions and solid derivatives trapped in euhedral quartz from Danish Zechstein salt	Chemical Geology	61	1987	Elsevier	10.1016/0009-2541(87)90031-3
55c2a9cacf58f1a8110b8a1e	77	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5743e12ccf58f15a87556580	49	Coal Huangmaqing Fm			Mianping, ZHENG et al.	Regional Distribution and Prospects of Potash in China	Acta Geologica Sinica - English Edition	85	2011	Wiley-Blackwell	10.1111/j.1755-6724.2011.00376.x
55765c01e138234790a011e8	140	Salado Formation	251	260.4	Canals, A. et al.	Microanalysis of primary fluid inclusions in halite: constraints for an evaporitic sedimentation modeling. Application to the Mulhouse Basin (France)	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90005-V
57a1b61ecf58f1154eb55fb9	124	Salina Formation	416	443.7	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
579aae1bcf58f112b1fd775d	33	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
580b91b8cf58f14ba918ac36	184	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and “Cline” shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55184839e1382394b500daf7	566	Zaragoza Gypsum Formation	5.332	23.03	Galve, J.P. et al.	Evaluating and comparing methods of sinkhole susceptibility mapping in the Ebro Valley evaporite karst (NE Spain)	Geomorphology	111	2009	Elsevier	10.1016/j.geomorph.2009.04.017
5c319a241faed655488b9bcc	156	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55af1c5ce13823763a830fe9	523	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55c0f018cf58f16e99a3799f	30	Salado Formation	251	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
578fb2c8cf58f1bdcd2df236	201	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
577bca4acf58f1538dda98fd	272	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55b31289e138231cbdd6cfe3	583	Supai Formation	251	299	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
558bbed5e13823109f3ed4f8	184	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54d4bb37e138238471e7f379	51	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
55b64a4de1382314227d0039	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55a7c745e13823757cc70251	134	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
56c1a95dcf58f15c72c903aa	253	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
578fb2c8cf58f1bdcd2df236	264	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b5b47ce1382314227cfdae	2	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
57a43018cf58f11204e17fe0	429	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55090847e138238460c4f5cc	540	Magnesite Dolomite			Harrison, Wendy J. et al.	Geochemical interactions resulting from carbon dioxide disposal on the seafloor	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00018-F
550895c3e138237a6f7391ae	189	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
579f1578cf58f1168e64ad7f	153	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55a0946ee1382381ff364540	118	Salado mention	256.0278	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
572cf900cf58f13d86a1bdc8	65	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
559c3f39e138230816dad2ff	157	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54b4324de138239d8684aa17	158	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559cd25ee138230816dad548	332	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
572cf1fccf58f13accaa0e61	200	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55987595e1382390cc640dae	168	Graça mention			Moura, António	Metallogenesis at the Neves Corvo VHMS deposit (Portugal): A contribution from the study of fluid inclusions	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.04.004
55c2e5c8cf58f1a8110b8c08	100	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55986e49e1382390cc640d84	135	B.O.M.Z. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5c2bea2e1faed655488b221b	115	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
5509217ee138238460c4f689	77	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56c1effacf58f15c72c9090b	5	Carribuddy Group	416	443.7	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54e733ace138237cc9150889	313	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
57c19e14cf58f16bf61df64c	196	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5733004ccf58f1066ffdaeaa	151	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55c01a9ecf58f16e99a37305	151	Rustler mention	253.9652	256.0278	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5ab9a5fbcf58f196f620b199	305	Gull River Formation	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55933fbae138236ee2218347	1	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
5b6eb3c5cf58f13c68e2d5dc	53	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
57126f9fcf58f142fd277238	32	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
572cf1fccf58f13accaa0e61	291	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
550ab8aae138238460c4fe5e	253	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
55af1c5ce13823763a830fe9	143	Castile Formation	253.8	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5a0493edcf58f1b96402aae7	332	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5579c265e138231c7c52c464	57	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5682e272cf58f1479a0ab716	593	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b64a4de138231422 7d0039	318	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a850dffcf58f13f065e41c5	278	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
558eb5d6e13823109f3ee517	1257	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5c19917d1faed655488915e2	466	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
54c0cf26e1382389c54c3932	90	Norseman mention	37.71	47.8	n, Kathleen Counter and Bowen, Brenda	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
5733004ccf58f1066ffdaeaa	7	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
559c3f39e138230816dad2ff	152	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
579aae1bcf58f112b1fd775d	101	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
557bfbc7e138239225f86664	297	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
57a43018cf58f11204e17fe0	685	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55c0d379cf58f16e99a378b9	146	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
558bbed5e13823109f3ed4f8	226	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55b6269be1382314227cff85	1407	Petroleum Clay Formation				List of referees, list of contents, subject index and author index vol. 52, 1988	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90175-5
5b6f081fcf58f1539ffa6761	245	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
5682e3a8cf58f1479a0ab727	374	Salado mention	256.0278	262.2168	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55afeeece138238f9de483c5	61	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
54b4324de138239d8684aa17	94	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
565e95f0cf58f148c57ebc6b	249	Mt. Simon mention			Verba, Circe et al.	Geochemical alteration of simulated wellbores of CO2 injection sites within the Illinois and Pasco Basins	International Journal of Greenhouse Gas Control		2014	Elsevier	10.1016/j.ijggc.2014.01.015
558bbed5e13823109f3ed4f8	131	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
5509217ee138238460c4f689	366	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
558020ace13823bc80ba29e2	476	Christmas Canyon Formation	0.0117	2.58	Smith, George I. et al.	Core KM-3, a surface-to-bedrock record of late Cenozoic sedimentation in Searles Valley, California	Professional Paper		1983	United States Geological Survey	10.3133/pp1256
575705decf58f1bb124e0773	59	Salado Formation	251	260.4	Silva, Matthew K. et al.	Resolution of the Long-Term Performance Issues at the Waste Isolation Pilot Plant	Risk Analysis	19	1999	Wiley-Blackwell	10.1111/j.1539-6924.1999.tb00458.x
5c2fe60d1faed655488b6bad	166	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
55ad3126e13823763a8303a0	112	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5b6c1ecdcf58f1411e3c2fea	89	Santa Elena Limestone	65.5	145.5	Hill, Carol A. and Ewing, Rodney C.	Darapskite, Na3(NO3)(SO4).H2O, a new occurrence, in Texas	Mineralogical Magazine	41	1977	Mineralogical Society	10.1180/minmag.1977.041.320.26
579ed180cf58f1030df9c51e	303	Carroza mention	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
57a3d5e1cf58f1b6afc43ebc	71	Wilkins Peak Member	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
572e90c3cf58f10a55fa1b31	459	Salina Group	416	443.7	Enrique Casas (2) and Tim K. Lowenstei	Carnallite Mineralization in the Nonmarine, Qaidam Basin, China: Evidence for the Early Diagenetic Origin of Potash Evaporites	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a05-2b26-11d7-8648000102c1865d
55af1c5ce13823763a830fe9	745	Mlnnelusa mention			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b35463e138231cbdd6d13e	284	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
56830b14cf58f1479a0ab918	271	Colombacci Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
570fe41dcf58f114a862267f	35	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
57e65deecf58f186b6da86bd	158	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55b6d4bfe13823bd29ba7dc0	446	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b64a4de1382314227d0039	20	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b64a4de1382314227d0039	4	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b365b1e138231cbdd6d18f	1203	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
550895c3e138237a6f7391ae	189	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55986cdae1382390cc640d7c	466	ll mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
56831341cf58f1479a0ab983	456	Kirmir Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5713034ccf58f175a32a0111	388	Prairie mention	383.95	389.1	Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5682e272cf58f1479a0ab716	595	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c2a9cacf58f1a8110b8a1e	91	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
558eb5d6e13823109f3ee517	774	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
57a43018cf58f11204e17fe0	586	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57c19e14cf58f16bf61df64c	164	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5a2b750ccf58f1081042119c	61	Nam Noy Formation			Zhang, Dawen et al.	Magnetostratigraphic study of the potash-bearing strata from drilling core ZK2893 in the Sakhon Nakhon Basin, eastern Khorat Plateau	Palaeogeography, Palaeoclimatology, Palaeoecology	489	2018	Elsevier	10.1016/j.palaeo.2017.08.030
5907a1e5cf58f1a696dd7cce	65	Boulby Halite Formation	251	260.4	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
55b32d74e138231cbdd6d072	336	Battle Formation	299	318.1	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D
578fb2c8cf58f1bdcd2df236	195	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c02636cf58f16e99a37363	220	Lansing Group	302.5	306	Wojcik, Krzysztof M. et al.	History of diagenetic fluids in a distant foreland area, Middle and Upper Pennsylvanian, Cherokee basin, Kansas, USA: Fluid inclusion evidence	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90580-0
54b43281e138239d86853bfd	164	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55c02636cf58f16e99a37363	201	Lansing Group	302.5	306	Wojcik, Krzysztof M. et al.	History of diagenetic fluids in a distant foreland area, Middle and Upper Pennsylvanian, Cherokee basin, Kansas, USA: Fluid inclusion evidence	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90580-0
5c2fe60d1faed655488b6bad	241	Altash Formation			Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
54e733ace138237cc9150889	202	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
54e733ace138237cc9150889	264	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
57a43018cf58f11204e17fe0	604	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ce138239d86855a1e	468	Puente La Reina Formation			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
57e5ec41cf58f15ee37c7bf0	2249	Fe mention				Abstract	Journal of Applied Chemistry	13	1963	Wiley	10.1002/jctb.5010130809
5682e272cf58f1479a0ab716	25	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57a43018cf58f11204e17fe0	756	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55a7c745e13823757cc70251	60	Tamarisk mention	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b2b633e138231cbdd6cdf4	719	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
54b4328de138239d86855ceb	1	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54fc8912e138239936c6dc7a	161	Castile Formation	253.8	260.4	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
55a7c745e13823757cc70251	127	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55c01a9ecf58f16e99a37305	238	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5733004ccf58f1066ffdaeaa	249	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	593	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4327de138239d868530d9	39	Maha Sarakham Formation	65.5	145.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
54b4328ce138239d86855aad	173	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55bfc14ecf58f16e99a3703b	200	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
579fe160cf58f15528a4466f	238	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5597e5cee1382390cc640a7f	452	Mineral Group	65.5	251	Ehya, Farhad	Variation of mineralizing fluids and fractionation of REE during the emplacement of the vein-type fluorite deposit at Bozijan, Markazi Province, Iran	Journal of Geochemical Exploration		2012	Elsevier	10.1016/j.gexplo.2011.08.005
54e97acfe138237cc915120b	29	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
57113ad7cf58f18e7ac7c7a5	364	Genetic Computer Group			Burton, Rachel A. et al.	Starch granule initiation and growth are altered in barley mutants that lack isoamylase activity	The Plant Journal	31	2002	Wiley-Blackwell	10.1046/j.1365-313X.2002.01339.x
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
57320459cf58f19ced0f7bc5	133	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
550901a3e138238460c4f59b	217	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55af1c5ce13823763a830fe9	472	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5a2b7516cf58f108104211ac	130	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55c0a3c8cf58f16e99a37754	177	Salado Formation	251	260.4	Roedder, Edwin	Fluid inclusion evidence for immiscibility in magmatic differentiation	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90113-W
56c1effacf58f15c72c9090b	246	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
590762a7cf58f18fc090d7b2	485	Wabash Formation	419.2	427.4	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
54eba4f0e138237cc9151b1e	448	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
54b4324be138239d8684a6bc	127	Louann mention	145	174.7	Hay, William W. et al.	Evaporites and the salinity of the ocean during the Phanerozoic: Implications for climate, ocean circulation and life	Palaeogeography, Palaeoclimatology, Palaeoecology	240	2006	Elsevier	10.1016/j.palaeo.2006.03.044
58d05105cf58f13f39efd424	196	San Andres Formation	251	299	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54b4328ce138239d86855aad	334	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b32d74e138231cbdd6d072	548	Ely mention	273.01	323.2	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D
579aae1bcf58f112b1fd775d	23	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5518b748e1382394b500dcce	2	Zaragoza mention	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
575019eacf58f1696f3ea50a	41	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55b4e089e1382314227cf8c2	550	Sdom Formation	-5.5012E-05	23.03	Bentor, Yaacov K	Some geochemical aspects of the Dead Sea and the question of its age	Geochimica et Cosmochimica Acta	25	1961	Elsevier	10.1016/0016-7037(61)90061-8
55b73032e13823bd29ba8000	181	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
57c8716ccf58f1429a42896c	335	TES Group			Glotch, Timothy D. et al.	Constraints on the composition and particle size of chloride salt-bearing deposits on Mars	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004921
557ff66ee13823bc80ba2925	1339	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
577bca4acf58f1538dda98fd	23	Evaporite mention			WARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55ae2542e13823763a8309bd	457	Maha Sarakham Formation	65.5	145.5	Hite, R. J.	Progress report on the potash deposits of the Khorat Plateau, Thailand	Open-File Report		1982	United States Geological Survey	
57c91310cf58f17b7ba8638b	116	Clean Chamber Formation			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55c13e85cf58f1a8110b7ec2	208	Ore Formation				Goldschmidt Abstracts 2009 – K	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.05.009
5731ac74cf58f18e0ffaff50	94	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
55ae4f4be13823763a830ada	866	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
558eb5d6e13823109f3ee517	1254	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5b541d97cf58f120001757f5	776	Berea Sandstone	353.35	362.225	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology	399	2015	Elsevier	10.1016/j.chemgeo.2014.10.028
559877c2e1382390cc640dba	388	Monwezi Sandstone			El Desouky, Hamdy A. et al.	The sandstone-hosted stratiform copper mineralization at Mwitapile and its relation to the mineralization at Lufukwe, Lufilian foreland, Democratic Republic of Congo	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.09.004
55b2b633e138231cbdd6cdf4	664	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
578b8ab6cf58f1645f54f0c6	496	Evaporite Group			LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55ae0df7e13823763a830928	1363	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
572cf900cf58f13d86a1bdc8	240	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55c48dc6cf58f1a8110b94db	71	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5c3e6d6c1faed655488cd35a	214	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577bca4acf58f1538dda98fd	255	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5730cdcccf58f16acaf6b5aa	35	Salado mention	256.0278	262.2168	Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
557f199ce13823bc80ba25a0	778	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5c3d9a5c1faed655488cc5a0	2	Francis Group	305.425	305.7125	da Costa Mello, Simone et al.	Response of tomato to polyhalite as a multi-nutrient fertilizer in southeast Brazil	Journal of Plant Nutrition	41	2018	Informa UK Limited	10.1080/01904167.2018.1497178
54c029e6e1382389c54c35a6	347	Celestite Stronti-anite Calcite Dolomite			Möller, P. et al.	Hydrochemical processes in the lower Jordan valley and in the Dead Sea area	Chemical Geology	239	2007	Elsevier	10.1016/j.chemgeo.2006.12.004
56ac2bfdcf58f19442534c89	35	Zaragoza mention	23.03	33.9	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55b6d4bfe13823bd29ba7dc0	72	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
578fb2c8cf58f1bdcd2df236	195	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5c319a241faed655488b9bcc	148	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
574f1369cf58f10afd57189e	102	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b64a4de1382314227d0039	20	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
57a43018cf58f11204e17fe0	534	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5508d3cde138238460c4f445	155	Sdom mention	-5.5012E-05	23.03	Stiller, Mariana et al.	Cl-37 in the Dead Sea system---preliminary results	Applied Geochemistry	13	1998	Elsevier	10.1016/S0883-2927(98)00017-1
5733004ccf58f1066ffdaeaa	249	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55c2e5c8cf58f1a8110b8c08	68	Zechstein Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55a7c745e13823757cc70251	18	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55af1c5ce13823763a830fe9	872	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
559159cfe13823109f3ef54c	30	Green River Formation	33.9	55.8	Ege, John R. et al.	Site evaluation for U.S. Bureau of Mines experimental oil-shale mine, Piceance Creek basin, Rio Blanco County, Colorado	Open-File Report		1978	United States Geological Survey	10.3133/ofr78390
572cf900cf58f13d86a1bdc8	231	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
579fe160cf58f15528a4466f	3	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
558eb5d6e13823109f3ee517	1156	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
579fe160cf58f15528a4466f	79	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54b4324ae138239d8684a487	356	Fushun mention	1.806	65.5	Sun, Xiangjun and Wang, Pinxian	How old is the Asian monsoon system?—Palaeobotanical records from China	Palaeogeography, Palaeoclimatology, Palaeoecology	222	2005	Elsevier	10.1016/j.palaeo.2005.03.005
55ad3126e13823763a8303a0	112	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
551eecf7e138236e51a99d74	55	Zaragoza Fm	5.332	23.03	Pueyo Anchuela, Óscar et al.	Combination of electromagnetic, geophysical methods and sedimentological studies for the development of 3D models in alluvial sediments affected by karst (Ebro Basin, NE Spain)	Journal of Applied Geophysics		2014	Elsevier	10.1016/j.jappgeo.2014.01.002
55933fbae138236ee2218347	24	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558bbed5e13823109f3ed4f8	252	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
58b65c8fcf58f1b2fdd8b58a	50	Loeme Formation	112	125	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
56c1a95dcf58f15c72c903aa	126	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
578b8ab6cf58f1645f54f0c6	49	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
579f5bc9cf58f12a53c41a24	217	Ponda Formation			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
578fb2c8cf58f1bdcd2df236	311	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5713034ccf58f175a32a0111	95	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54fb3438e138239936c6d321	442	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b87fe7e13823bd29ba87fd	340	Maha Sarakam Formation	65.5	145.5	Omer B. and bibliography compiled by	Proceedings of the Geology and food conference, with related U.S. Geological Survey projects and a bibliography	Circular		1977	United States Geological Survey	10.3133/cir768
5682e272cf58f1479a0ab716	275	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328ae138239d86855597	22	Pak Reichenhall Fm			Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
56831341cf58f1479a0ab983	175	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
550895c3e138237a6f7391ae	364	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57ec17eccf58f1ac335ac1b3	399	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
579aae1bcf58f112b1fd775d	11	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
578aea2bcf58f13920dc7baa	142	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5509217ee138238460c4f689	388	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5b6f081fcf58f1539ffa6761	239	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
57c1a06bcf58f16cbd621551	247	Ramon/Arad Group			Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5c3e6d6c1faed655488cd35a	76	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5a850dffcf58f13f065e41c5	241	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5906d61acf58f15d66a3770b	100	Salina Group	416	443.7		Geology of New York: the Empire State	Rocks & Minerals	82	2007	Taylor and Francis	10.3200/RMIN.82.6.464-471
55b6dc28e13823bd29ba7dec	19204	See mention			Schrader, Frank Charles et al.	Useful minerals of the United States	Bulletin		1917	United States Geological Survey	10.3133/b624
55ad3126e13823763a8303a0	122	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
550901a3e138238460c4f59b	94	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54b43259e138239d8684ce14	73	Kabwe Dolomite			Greyling, L.N. et al.	The nature of early basinal fluids in the Zambian Copperbelt: A case study from the Chambishi deposit	Journal of African Earth Sciences	42	2005	Elsevier	10.1016/j.jafrearsci.2005.08.002
54b4328de138239d86855c7b	51	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
574f1369cf58f10afd57189e	208	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558eb5d6e13823109f3ee517	774	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54e733ace138237cc9150889	98	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
57c19e14cf58f16bf61df64c	257	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55ad3126e13823763a8303a0	186	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5a850dffcf58f13f065e41c5	1	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57a43018cf58f11204e17fe0	766	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
568315efcf58f1479a0ab9a9	377	Cairn Formation	359.2	385.3	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
55b87d87e13823bd29ba87eb	340	Green River Formation	33.9	55.8	Edited by Krafft, Kathleen	USGS research on mineral resources, 1985; program and abstracts	Circular		1985	United States Geological Survey	
56c44114cf58f17493f8536e	209	Dockum Group	199.6	251	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
55c2e5c8cf58f1a8110b8c08	103	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55c2e5c8cf58f1a8110b8c08	201	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55ad3126e13823763a8303a0	122	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56833ddfcf58f1479a0abbcc	339	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
56c1ca03cf58f15c72c90620	55	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b5b47ce1382314227cfdae	173	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
558bbed5e13823109f3ed4f8	131	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	188	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
56833ddfcf58f1479a0abbcc	455	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5731ac74cf58f18e0ffaff50	391	Prairie Evaporite Formation	385.3	397.5	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
5674a234cf58f12215607647	142	Volterra Formation			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
57928970cf58f1320a760f56	73	Blanca Lila Formation	0.01143	1.806	Vandervoort, Dirk S.	Stratigraphic response to saline lake-level fluctuations and the origin of cyclic nonmarine evaporite deposits: The Pleistocene Blanca Lila Formation, northwest Argentina	Geological Society of America Bulletin	109	1997	GSA	10.1130/0016-7606(1997)109<0210:srtsll>2.3.co;2
575c59dacf58f16e37942a6a	84	Rotliegend mention	251	299	Regenspurg, Simona et al.	Fluid-rock interactions in a geothermal Rotliegend/Permo-Carboniferous reservoir (North German Basin)	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2016.03.010
5a048d65cf58f1b96402a09e	168	Gull River Formation	443.7	488.3	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
579f1578cf58f1168e64ad7f	414	Dockum Group	199.6	251	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5503421ae1382326932d7e6d	328	Sijes Fm	1.806	65.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4327de138239d868530d9	222	Nippewalla Group	251	299	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
5713034ccf58f175a32a0111	202	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c35bc5cf58f1a8110b8fcc	192	Carribuddy Group	416	443.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
579f1578cf58f1168e64ad7f	339	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b43277e138239d86851f14	140	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
54cf0cc5e138236bcc92aaf6	82	Soledad Biotite Fm			Sáez, Alberto et al.	The stratigraphic record of changing hyperaridity in the Atacama desert over the last 10Ma	Earth and Planetary Science Letters		2012	Elsevier	10.1016/j.epsl.2012.08.029
55ae0df7e13823763a830928	547	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54d899b7e138238471e803b7	64	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55b64a4de1382314227d0039	356	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
54d2216be13823302d02428b	127	Northwich Halite Formation	242	247.2	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
578b8ab6cf58f1645f54f0c6	59	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56831341cf58f1479a0ab983	75	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
578fb2c8cf58f1bdcd2df236	311	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
559d4d6ee138230816dad784	88	Rustler Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
579f1578cf58f1168e64ad7f	352	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5d3f58060b45c76cafa2004f	5	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55989b6ce1382390cc640e7d	121	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
56ac24facf58f19442534c08	64	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
550901a3e138238460c4f59b	147	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5a850dffcf58f13f065e41c5	261	Me'arat Sedom Mbr			Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
58bf0a5acf58f17947438723	57	Hontomín Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
54b4324de138239d8684aa17	299	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5503421ae1382326932d7e6d	959	Castile Fm	253.8	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56aaa9f0cf58f19442532ee1	147	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
54b4328de138239d86855c7b	50	Opeche mention	273.01	283.5	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
5b6eb3c5cf58f13c68e2d5dc	53	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ce138239d86855aad	173	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55c2a9cacf58f1a8110b8a1e	86	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
559e58a2e138230816dadbe2	740	Verde mention	4.1777	8.342	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
557d3f86e138239225f86b9f	169	Carmel Formation	161.2	175.6	Liebermann, Timothy D. et al.	Characteristics and trends of streamflow and dissolved solids in the upper Colorado River Basin, Arizona, Colorado, New Mexico, Utah, and Wyoming	Water Supply Paper		1989	United States Geological Survey	10.3133/wsp2358
57a43018cf58f11204e17fe0	356	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
574f1369cf58f10afd57189e	293	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54ef9078e138237cc9152b86	137	Salt mention	251	260.4	Jackson, Christopher A.-L. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 1: Geometry and kinematics from 3D seismic reflection and well data	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.010
578b8ab6cf58f1645f54f0c6	257	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b43277e138239d86851f14	140	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
55bf8aa9e138232db707b806	104	Prairie Formation	359.2	416	Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5c3e6d6c1faed655488cd35a	294	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
574f1369cf58f10afd57189e	123	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
572cf1fccf58f13accaa0e61	132	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c319a241faed655488b9bcc	43	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55a7c745e13823757cc70251	50	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b73032e13823bd29ba8000	323	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
558eb5d6e13823109f3ee517	759	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
572cf1fccf58f13accaa0e61	24	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54e32708e138237cc914f794	240	Formosa Formation			Rao, M.N. et al.	Fluid-evaporation records preserved in salt assemblages in Meridiani rocks	Earth and Planetary Science Letters	286	2009	Elsevier	10.1016/j.epsl.2009.07.007
5b540f81cf58f11c464cbe77	45	Ouldburra Formation	488.3	542	Halas, S. et al.	Oxygen isotopes in authigenic quartz from massive salt deposits	Chemical Geology	402	2015	Elsevier	10.1016/j.chemgeo.2015.02.034
550ab33ee138238460c4fe4c	340	Oseberg mention	161.2	175.6	Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2d73ee1faed655488b42bb	215	St. Louis Limestone	318.1	359.2	Liu, Dayong et al.	Origin and evolution of oilfield waters in the Tazhong oilfield, Tarim Basin, China, and their relationship to multiple hydrocarbon charging events	Marine and Petroleum Geology	98	2018	Elsevier	10.1016/j.marpetgeo.2018.09.018
55c3a9b6cf58f1a8110b911c	91	Equilibrium Cumulative Formation			Müller, B. and Seward, T.M.	Spectrophotometric determination of the stability of tin(II) chloride complexes in aqueous solution up to 300°C	Geochimica et Cosmochimica Acta	65	2001	Elsevier	10.1016/S0016-7037(01)00690-1
5733004ccf58f1066ffdaeaa	163	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
577b5e79cf58f13907e5e76d	60	Prairie Formation	359.2	416	De MILLE, G. et al.	Collapse Structures Related to Evaporites of the Prairie Formation, Saskatchewan	Geol Soc America Bull	75	1964	Geological Society of America	10.1130/0016-7606(1964)75[307:csrteo]2.0.co;2
5734b312cf58f14dbc2c579f	536	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
557f199ce13823bc80ba25a0	1766	SollstOl'e Rustler Formation			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55ae0df7e13823763a830928	441	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5d3f58060b45c76cafa2004f	116	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55974402e1382390cc640708	121	Shahejie Formation	33.9	55.8	Li, R. and Parnell, J.	In situ microanalysis of petroleum fluid inclusions by Time of Flight-Secondary Ion Mass Spectrometry as an indicator of evolving oil chemistry: a pilot study in the Bohai Basin, China	Journal of Geochemical Exploration		2003	Elsevier	10.1016/S0375-6742(03)00025-6
5682e3a8cf58f1479a0ab727	345	Prairie Formation	359.2	416	/ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
559c3f39e138230816dad2ff	151	Salado Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5a2cf7f0cf58f19a331caf3c	35	Zechstein mention	251.902	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
5d3f58060b45c76cafa2004f	71	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
56833ddfcf58f1479a0abbcc	207	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c121fdcf58f1a8110b7ddc	29	Lisan mention	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
54e9b707e138237cc915131b	922	Navajo Sandstone	145.5	199.6	Duff, K.L. and Ford, T.D.	Field meetings to the Western USA 1981 & 1982	Proceedings of the Geologists' Association	95	1984	Elsevier	10.1016/S0016-7878(84)80001-2
54b4327fe138239d868537ad	275	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
56c1ca03cf58f15c72c90620	203	Quillagua Formation	5.332	11.608	Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
578b8ab6cf58f1645f54f0c6	239	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b30ea3e138231cbdd6cfcd	1432	Organic mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1effacf58f15c72c9090b	425	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
579fc09dcf58f14956099b08	377	Hebes mention			Jackson, M. P. A. et al.	Modeling the collapse of Hebes Chasma, Valles Marineris, Mars	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30307.1
55c03cd3cf58f16e99a37419	35	Semta Formation			Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K
55ae0df7e13823763a830928	1461	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55ad3126e13823763a8303a0	170	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5743e12ccf58f15a87556580	118	Longwangmiao Fm			Mianping, ZHENG et al.	Regional Distribution and Prospects of Potash in China	Acta Geologica Sinica - English Edition	85	2011	Wiley-Blackwell	10.1111/j.1755-6724.2011.00376.x
5682e272cf58f1479a0ab716	471	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558020ace13823bc80ba29e2	469	Christmas Canyon Formation	0.0117	2.58	Smith, George I. et al.	Core KM-3, a surface-to-bedrock record of late Cenozoic sedimentation in Searles Valley, California	Professional Paper		1983	United States Geological Survey	10.3133/pp1256
557cd3cfe138239225f869e5	1183	Castile Formation	253.8	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
579ed180cf58f1030df9c51e	69	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55088ec0e138237a6f73918a	157	Carnallite mention			Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
5732032ecf58f19cbcbc550f	13	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
550901a3e138238460c4f59b	31	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
557b4c6fe138239225f86356	114	Salt mention	251	260.4	Leith, William	Geologic and engineering constraints on the feasibility of clandestine nuclear testing by decoupling in large underground cavities	Open-File Report		2000	United States Geological Survey	10.3133/ofr0128
5590c038e13823109f3ef1c7	82	Culebra Member	251	299	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
55b2c402e138231cbdd6ce3e	201	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5749d59dcf58f1b0821791d1	90	Dead Sea Group	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
54d0272be13823b501cdbc75	176	Calcite Dolomite			Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
570fe41dcf58f114a862267f	258	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
557b1abde138239225f86255	188	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
559159cfe13823109f3ef54c	57	Green River Formation	33.9	55.8	Ege, John R. et al.	Site evaluation for U.S. Bureau of Mines experimental oil-shale mine, Piceance Creek basin, Rio Blanco County, Colorado	Open-File Report		1978	United States Geological Survey	10.3133/ofr78390
57484ab3cf58f13effae7ac5	119	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
579fe160cf58f15528a4466f	50	Near-surface Salado Formation			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5a850dffcf58f13f065e41c5	230	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55c36968cf58f1a8110b9014	124	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
56830ae3cf58f1479a0ab915	254	Whitkow mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
5502ed7de1382326932d7c2a	1642	Trenton Group	460.9	471.8	Warren, John	Dolomite: occurrence, evolution and economically important associations	Earth-Science Reviews	1-3	2000	Elsevier	10.1016/S0012-8252(00)00022-2
575d04f6cf58f198893b8def	155	Ibura Member			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
57a43018cf58f11204e17fe0	458	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
550ab8aae138238460c4fe5e	247	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
57464969cf58f165ff103f08	22	Blomidon mention	223.9475	228.7	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
559afea3e1382390cc641cc4	2	Diaspri Formation			Montomoli, Chiara et al.	Fluid source and pressure–temperature conditions of high-salinity fluids in syn-tectonic veins from the Northeastern Apuan Alps (Northern Apennines, Italy)	Physics and Chemistry of the Earth, Parts A/B/C	30	2005	Elsevier	10.1016/j.pce.2005.01.003
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b7869fe13823bd29ba8231	580	Michigan mention	342.0833	348.8334	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57e65deecf58f186b6da86bd	158	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5503421ae1382326932d7e6d	1387	Angara Fm	513	542	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5c3e6d6c1faed655488cd35a	321	Nippewalla Group	251	299	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
558e232de13823109f3ee187	70	Salado Formation	251	260.4	Rowe, Jack James et al.	The quinary reciprocal salt system Na, K, Mg, Ca/Cl, SO4; a review of the literature with new data	Professional Paper		1972	United States Geological Survey	
54b43271e138239d86850ff4	235	Bilara Group	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
55c2e5c8cf58f1a8110b8c08	100	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
57e65deecf58f186b6da86bd	175	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5509217ee138238460c4f689	334	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54ddbfdae138238a47f968be	371	Hashepela Group			Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
54fb3438e138239936c6d321	178	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
578fb2c8cf58f1bdcd2df236	264	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
578b8ab6cf58f1645f54f0c6	99	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5b6b60fdcf58f109829dc521	86	Qianjiang Formation	23.03	65.5	Li, Maowen et al.	Expelled oils and their impacts on Rock-Eval data interpretation, Eocene Qianjiang Formation in Jianghan Basin, China	International Journal of Coal Geology	191	2018	Elsevier	10.1016/j.coal.2018.03.001
579aae1bcf58f112b1fd775d	33	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54e64c66e138237cc91504d3	30	Salado Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
5730cdcccf58f16acaf6b5aa	35	Salado mention	256.0278	262.2168	Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
55b5b776e1382314227cfdc2	1242	Arbuckle Group	471.8	488.3		Geochimica et Cosmochimica Acta List of Referees, List of Contents, Subject Index, and Author Index	Geochimica et Cosmochimica Acta		1990	Elsevier	10.1016/0016-7037(90)90256-K
5733004ccf58f1066ffdaeaa	258	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5733004ccf58f1066ffdaeaa	118	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55c0d379cf58f16e99a378b9	274	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57c19e14cf58f16bf61df64c	251	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
577ef8c7cf58f1ac737005ec	88	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
55ad3126e13823763a8303a0	207	Rustler mention	253.9652	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
578b8ab6cf58f1645f54f0c6	252	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1effacf58f15c72c9090b	246	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
558cbceae13823109f3eda41	200	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c48dc6cf58f1a8110b94db	43	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55baa3b5e1382373b63b89e7	41	Dead Sea mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1ca03cf58f15c72c90620	203	Quillagua Formation	5.332	11.608	Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
558df7d7e13823109f3ee082	235	Castile mention	259	259.51	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55ae9887e13823763a830cad	120	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
58bf1154cf58f17bc0ea7bbf	1	Carlsbad Programs Group			Xiong, Yongliang et al.	Experimental determination of solubilities of di-calcium ethylenediaminetetraacetic acid hydrate [Ca2C10H12N2O8·7H2O(s)] in NaCl and MgCl2 solutions to high ionic strengths and its Pitzer model: Applications to geological disposal of nuclear waste and other low temperature environments	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.025
57d0097ccf58f145d627bfaf	31	Nongbok mention	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5732d749cf58f1be482cdc3e	539	Prairie Evaporite Formation	385.3	397.5	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
55c2a9cacf58f1a8110b8a1e	60	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
570fe41dcf58f114a862267f	43	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
577ef8c7cf58f1ac737005ec	199	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
578f2c07cf58f19aabebdf04	95	San Andres mention	150.6	154.8	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
54eba4f0e138237cc9151b1e	146	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
578b8ab6cf58f1645f54f0c6	44	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
58b6daf1cf58f11f2b0dde84	843	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
579b56dacf58f13d24f0d7ef	73	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5ab9a5fbcf58f196f620b199	226	Gull River Formation	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
579fe160cf58f15528a4466f	209	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5682e272cf58f1479a0ab716	225	Salina Formation	416	443.7	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558eb5d6e13823109f3ee517	381	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5598d566e1382390cc640f84	180	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
579f1578cf58f1168e64ad7f	142	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57602b35cf58f1b1e9b07e02	77	Retiro Formation	113	114.05	Alvarenga, R.S. et al.	Seismic characteristics and distribution of hydrothermal vent complexes in the Cretaceous offshore rift section of the Campos Basin, offshore Brazil	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.03.030
574f1369cf58f10afd57189e	199	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5ac3dd8fcf58f1bdc2a569af	135	Main Group	251	260.4	Giacalone, Alba et al.	Sequestration of organometallic compounds by natural organic matter. binding of trimethyltin(IV) by fulvic and alginic acids	Applied Organometallic Chemistry	20	2006	Wiley-Blackwell	10.1002/aoc.1128

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c3e6d6c1faed655488cd35a	407	Evaporite Group			Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55c36968cf58f1a8110b9014	262	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
57c19e14cf58f16bf61df64c	287	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55c36968cf58f1a8110b9014	66	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55b32d74e138231cbdd6d072	336	Battle Formation	299	318.1	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D
56833ddfcf58f1479a0abbcc	2	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5c2d73ee1faed655488b42bb	215	St. Louis Limestone	318.1	359.2	Liu, Dayong et al.	Origin and evolution of oilfield waters in the Tazhong oilfield, Tarim Basin, China, and their relationship to multiple hydrocarbon charging events	Marine and Petroleum Geology	98	2018	Elsevier	10.1016/j.marpetgeo.2018.09.018
579f1578cf58f1168e64ad7f	8	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55af1c5ce13823763a830fe9	472	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b5b47ce1382314227cfdae	253	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
579aae1bcf58f112b1fd775d	27	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5c3e6d6c1faed655488cd35a	81	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
558fa710e13823109f3eeaeb	511	Arapien Shale	145.5	199.6	mpiled and edited by Tooker, Edwin Wil	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
5682e272cf58f1479a0ab716	435	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4324de138239d8684aa17	93	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5a850dffcf58f13f065e41c5	269	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55ae0df7e13823763a830928	1363	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54e733ace138237cc9150889	497	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
54b4327ee138239d868532b9	322	Calcite Dolomite			Xing, Lina et al.	Groundwater hydrochemical characteristics and processes along flow paths in the North China Plain	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.03.017
55c35bc5cf58f1a8110b8fcc	185	Salina Group	416	443.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
5681b377cf58f1ba274d4854	217	Qom Formation	5.332	23.03	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069
5749d59dcf58f1b0821791d1	132	Dead Sea Group	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
58c0712ccf58f14e47a6f092	340	Serpentina Group			Oliveira, Lucilia Aparecida Ramos de et a	Nature and evolution of fluids associated with specularite-bearing Fe and Au-PGE (Jacutinga) mineralization during the Brasiliano orogeny in the eastern São Francisco Craton, Minas Gerais, Brazil	Ore Geology Reviews		2017	Elsevier	10.1016/j.oregeorev.2017.02.017
572cf1fccf58f13accaa0e61	285	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
557b1abde138239225f86255	85	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
54b4324de138239d8684aa17	296	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b4328be138239d86855814	136	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fb3438e138239936c6d321	1	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
578179c1cf58f1a7f40f7d0f	90	Parachute Creek Member	33.9	55.8	Lundell, Leslie L. and Surdam, Ronald C.	Playa-lake deposition: Green River Formation, Piceance Creek Basin, Colorado	Geol	3	1975	GSA	10.1130/0091-7613(1975)3<493:pdgrfp>2.0.co;2
5682e3a8cf58f1479a0ab727	349	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
579fe160cf58f15528a4466f	258	Salado mention	256.0278	262.2168	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b3dfb4e138231cbdd6d442	908	Pinnacle Overlook Member	324.734	327.1333	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
579fe160cf58f15528a4466f	171	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
54bffee9e1382389c54c3458	258	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
56c1effacf58f15c72c9090b	246	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
5a850dffcf58f13f065e41c5	216	Lisan mention	0.01143	0.126	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57a43018cf58f11204e17fe0	873	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5503421ae1382326932d7e6d	1786	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
550895c3e138237a6f7391ae	160	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
58c18a99cf58f1a6ba4ea54d	61	Sedom mention	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
58bf2d90cf58f1867eb10946	145	Arumbera Sandstone	511	635	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55ae4f4be13823763a830ada	354	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
557f199ce13823bc80ba25a0	934	Mogen.to Dolomite			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5a30910ccf58f1715016597b	84	Wilkins Peak Member	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
558cdbe6e13823109f3edaf4	4509	Green River Formation	33.9	55.8	compiled by Erickson, Ralph L.	Characteristics of mineral deposit occurrences	Open-File Report		1982	United States Geological Survey	10.3133/ofr82795
56c1a95dcf58f15c72c903aa	401	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
559147b8e138236ee2217b0d	131	Rock Group			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
54eba4f0e138237cc9151b1e	80	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55b365b1e138231cbdd6d18f	460	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
57c1b32acf58f1734117f215	483	Qusaiba Hot Shale			Amann-Hildenbrand, A. et al.	Effective gas permeability of Tight Gas Sandstones as a function of capillary pressure - a non-steady-state approach	Geofluids	16	2016	Wiley	10.1111/gfl.12155
5632ac7bcf58f10c477feb05	39	Green River Formation	33.9	55.8	Jagniecki, Elliot A. et al.	Experimental study of shortite ($Na_2Ca_2(CO_3)_3$) formation and application to the burial history of the Wilkins Peak Member, Green River Basin, Wyoming, USA	Geochimica et Cosmochimica Acta		2013	Elsevier	10.1016/j.gca.2013.04.005
558df7d7e13823109f3ee082	605	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5c3e6d6c1faed655488cd35a	137	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57132e62cf58f183d20b8a53	354	Colemanite mention			Helvaci, C. and Orti, F.	Sedimentology and diagenesis of Miocene colemanite-ulexite deposits (western Anatolia, Turkey)	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.1021

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558eb5d6e13823109f3ee517	759	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
57c19e14cf58f16bf61df64c	51	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5906dd0fcf58f15fea53aef7	398	Salado Limestone	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5c24b1141faed655488a5926	56	Antrim Shale	359.2	385.3	Sheets, Julie M. et al.	Assessing geochemical reactions during CO2 injection into an oil-bearing reef in the Northern Michigan basin	Applied Geochemistry	100	2019	Elsevier	10.1016/j.apgeochem.2018.12.008
57a43018cf58f11204e17fe0	14	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5a0493edcf58f1b96402aae7	128	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55f49f72cf58f16256a225dc	124	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
5682e272cf58f1479a0ab716	576	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
579aae1bcf58f112b1fd775d	4	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54dc2da6e138238a47f96228	179	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
5a850dffcf58f13f065e41c5	269	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57a43018cf58f11204e17fe0	886	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54d4bb37e138238471e7f379	2	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
557f199ce13823bc80ba25a0	418	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
557bfbc7e138239225f86664	200	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5683006acf58f1479a0ab88f	484	San Andres Formation	251	299	KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
54b4324de138239d8684aa17	167	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57a43018cf58f11204e17fe0	756	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55c2a9cacf58f1a8110b8a1e	155	Muribeca Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5c319a241faed655488b9bcc	137	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
57c19e14cf58f16bf61df64c	325	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54b4328ce138239d86855aad	660	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56c1d9bbcf58f15c72c9075f	493	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b70b93e1382373b63b7aed	690	Prairie Evaporhe Formation	385.3	397.5	Knauth, L.Paul and Beeunas, Mark A.	Isotope geochemistry of fluid inclusions in Permian halite with implications for the isotopic history of ocean water and the origin of saline formation waters	Geochimica et Cosmochimica Acta	50	1986	Elsevier	10.1016/0016-7037(86)90195-X
55c2e5c8cf58f1a8110b8c08	180	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54e97acfe138237cc915120b	29	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a850dffcf58f13f065e41c5	53	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55c2a9cacf58f1a8110b8a1e	192	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5ab92ea3cf58f16811edda29	315	Cl mention			Jones, Samantha Elsie et al.	A multi-proxy approach to understanding complex responses of salt-lake catchments to climate variability and human pressure: A Late Quaternary case study from south-eastern, Spain	Quaternary Science Reviews	184	2018	Elsevier	10.1016/j.quascirev.2017.12.015
55b7869fe13823bd29ba8231	447	Supai Formation	251	299	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578b8ab6cf58f1645f54f0c6	61	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
570fe41dcf58f114a862267f	43	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55af1c5ce13823763a830fe9	423	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b64a4de1382314227d0039	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
558bbed5e13823109f3ed4f8	184	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54c060fbe1382389c54c3757	325	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57320459cf58f19ced0f7bc5	201	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	315	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5682e272cf58f1479a0ab716	19	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55c36968cf58f1a8110b9014	124	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
56c1d9bbcf58f15c72c9075f	12	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
57126f9fcf58f142fd277238	236	Carribuddy Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55baa3b5e1382373b63b89e7	94	Halite Dolomite	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b39203e138231cbdd6d283	1275	Oil Shale	471.8	488.3	Hosteman, J.W. et al.	World nonbauxite aluminum resources excluding alunite	Professional Paper		1990	United States Geological Survey	10.3133/pp1076C
558eb5d6e13823109f3ee517	382	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54dc2da6e138238a47f96228	246	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
5733004ccf58f1066ffdaeaa	242	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
579b56dacf58f13d24f0d7ef	62	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
576050b1cf58f1bb198a32bb	372	Narssârssuk Gp			Kettanah, Yawooz et al.	Geological setting and fluid inclusion characteristics of a lead-copper-barium occurrence hosted in a Neoproterozoic mafic sill at Kiatak, Northumberland Island, Northwestern Greenland	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2016.05.027
558df7d7e13823109f3ee082	2344	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55c48dc6cf58f1a8110b94db	66	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55c0d379cf58f16e99a378b9	154	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
550901a3e138238460c4f59b	150	Cardona Fm.			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5c319a241faed655488b9bcc	12	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
572cf1fccf58f13accaa0e61	235	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c3e6d6c1faed655488cd35a	271	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57e65deecf58f186b6da86bd	198	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
54fb3438e138239936c6d321	269	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5713034ccf58f175a32a0111	79	Carnallite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
578aea2bcf58f13920dc7baa	114	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550901a3e138238460c4f59b	217	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55bfc14ecf58f16e99a3703b	237	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55b2c076e138231cbdd6ce2b	1565	Mineral Occurrence Dolomite			Jones, Blair F.	The hydrology and mineralogy of Deep Springs Lake, Inyo County, California	Professional Paper		1965	United States Geological Survey	10.3133/pp502A
55c2a9cacf58f1a8110b8a1e	48	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
578b8ab6cf58f1645f54f0c6	334	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1a95dcf58f15c72c903aa	284	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b5b47ce1382314227cfdae	183	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5682e3a8cf58f1479a0ab727	345	Prairie Formation	359.2	416	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
5733004ccf58f1066ffdaeaa	2	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5a30910ccf58f1715016597b	44	Green River mention	34.8525	58.4	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
5799dd81cf58f19aa930e09e	40	Angarskaya Formation			Brennan, Sean T. et al.	Seawater chemistry and the advent of biocalcification	Geol	32	2004	Geological Society of America	10.1130/g20251.1
572cf1fccf58f13accaa0e61	108	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c3e6d6c1faed655488cd35a	294	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57e65deecf58f186b6da86bd	158	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
550895c3e138237a6f7391ae	354	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
572cf1fccf58f13accaa0e61	7	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
56a038b2cf58f1079fd4ba21	152	Edwards Limestone	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d05f41cf58f143d83df312	127	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57c1a06bcf58f16cbd621551	299	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
575d04f6cf58f198893b8def	154	Ibura Member			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
57a43018cf58f11204e17fe0	149	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55ada974e13823763a830682	413	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
54bedb19e13823023e43d91d	132	Estedwzy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
57a43018cf58f11204e17fe0	590	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55bf96d4cf58f16e99a36eea	207	Judea Group	65.5	99.6	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
55b6d6a7e13823bd29ba7dcc	8136	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5682e3a8cf58f1479a0ab727	334	Salado Formation	251	260.4	/ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
559d4d6ee138230816dad784	60	Castile Formation	253.8	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
57a43018cf58f11204e17fe0	458	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550895c3e138237a6f7391ae	192	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55b6d4bfe13823bd29ba7dc0	1390	Argillaceous mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5733004ccf58f1066ffdaeaa	54	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5a048d65cf58f1b96402a09e	1	Rock-Water Interaction Group			Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
5682e272cf58f1479a0ab716	381	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55a0946ee1382381ff364540	144	Salado mention	256.0278	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
550895c3e138237a6f7391ae	160	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
5749d59dcf58f1b0821791d1	130	Dead Sea Group	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
56f2f98bcf58f1892b30205d	146	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ry	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
56831341cf58f1479a0ab983	382	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
56c1effacf58f15c72c9090b	88	Mudstone Anhydrite Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54be8d08e13823299564b11a	170	Mt. Sdom Formation			Vengosh, Avner et al.	Direct determination of boron and chlorine isotopic compositions in geological materials by negative thermal-ionization mass spectrometry	Chemical Geology: Isotope Geoscience section	79	1989	Elsevier	10.1016/0168-9622(89)90039-0
55b6d4bfe13823bd29ba7dc0	53	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55a3df0fe13823757cc6f032	956	Parachute Creek Member	33.9	55.8	obson, Stanley G. and Saulnier, George	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8072
57891a23cf58f160665e5629	183	Ralston Creek Formation	150.6	161.5	LOCKLEY, MARTIN G. et al.	North America's largest dinosaur trackway site: Implications for Morrison Formation paleoecology	Geol Soc America Bull	97	1986	GSA	10.1130/0016-7606(1986)97<1163:naldts>2.0.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5733004ccf58f1066ffdaeaa	167	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55af1c5ce13823763a830fe9	850	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
57a43018cf58f11204e17fe0	156	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55ad3126e13823763a8303a0	131	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5682e272cf58f1479a0ab716	103	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
550901a3e138238460c4f59b	210	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5b6e8986cf58f1306fc8ca9a	2	Guanhães Group			Gomes, Sylvio D. et al.	Oxide chemistry and fluid inclusion constraints on the formation of itabirite-hosted iron ore deposits at the eastern border of the southern Espinhaço Range, Brazil	Ore Geology Reviews	95	2018	Elsevier	10.1016/j.oregeorev.2018.03.025
579f1578cf58f1168e64ad7f	392	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b43277e138239d86851f14	527	West Point Formation	397.5	416	Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
57a43018cf58f11204e17fe0	458	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55ad3126e13823763a8303a0	163	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b2b633e138231cbdd6cdf4	708	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
558d206fe13823109f3edc62	2601	Muddy Creek Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b359cce138231cbdd6d15d	1524	Wilkins Peak Member	33.9	55.8	Bradley, W.H.	Geology of Green River Formation and associated Eocene rocks in southwestern Wyoming and adjacent parts of Colorado and Utah	Professional Paper		1964	United States Geological Survey	10.3133/pp496A
5682e272cf58f1479a0ab716	1043	Prairie Evaporite Formation	385.3	397.5	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55a0946ee1382381ff364540	257	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5a850dffcf58f13f065e41c5	275	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5732032ecf58f19cbcbc550f	8	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
550895c3e138237a6f7391ae	192	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
5c319a241faed655488b9bcc	166	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
579fe160cf58f15528a4466f	51	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55c0d379cf58f16e99a378b9	281	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5a850dffcf58f13f065e41c5	229	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
59aefb59cf58f1acd5671b26	238	Bassanite mention			Gazulla, M. F. et al.	Chemical characterisation by WD-XRF and XRD of silicon carbide-based grinding tools	X-Ray Spectrometry	39	2010	Wiley-Blackwell	10.1002/xrs.1258
550ecee0e1382369a6f93f55	78	Staûfurt Formation			Schulze, Otto et al.	Development of damage and permeability in deforming rock salt	Engineering Geology	61	2001	Elsevier	10.1016/S0013-7952(01)00051-5
56a038b2cf58f1079fd4ba21	152	Edwards Limestone	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
55b6d4bfe13823bd29ba7dc0	1210	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579f1578cf58f1168e64ad7f	414	Dockum Group	199.6	251	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b64a4de1382314227d0039	11	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5733004ccf58f1066ffdaeaa	231	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
577959b6cf58f16b6b61b62a	230	California mention			INGERSON, EARL	NONRADIOGENIC ISOTOPES IN GEOLOGY: A REVIEW	Geol Soc America Bull	64	1953	Geological Society of America	10.1130/0016-7606(1953)64[301:niigar]2.0.co;2
5c1c9dec1faed65548896fba	29	Syenite Sandstone			Geilfus, Christoph-Martin	Chloride in soil: From nutrient to soil pollutant	Environmental and Experimental Botany	157	2019	Elsevier	10.1016/j.envexpbot.2018.10.035
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55a69d57e13823757cc6fac4	108	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55c0ffbdcf58f16e99a37a1d	55	New Albany Shale	359.2	416		Goldschmidt Abstracts 2010 – L	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.04.037
57474ebdcf58f1b6f0394e11	419	Esterhazy mention			Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55bfc14ecf58f16e99a3703b	376	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
580c3373cf58f17ccc88e4aa	255	Carbonates Dolomite			Pozo-Antonio, J.S. et al.	Comparative study of deterioration forms on nearby granitic bridges from an urban setting in the NW Iberian Peninsula	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.09.009
54d899b7e138238471e803b7	105	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55afeeece138238f9de483c5	51	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
55c171fbcf58f1a8110b8064	388	Burns mention	23.03	33.9		Goldschmidt Abstracts 2008- M	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.016
56c1a95dcf58f15c72c903aa	35	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55986e49e1382390cc640d84	140	B.O.M.Z. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
54b5345de138239571b90a0d	199	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
55b32d74e138231cbdd6d072	548	Ely mention	273.01	323.2	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5907a1e5cf58f1a696dd7cce	2	Boulby Halite Formation	251	260.4	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
5682e3a8cf58f1479a0ab727	309	Salado mention	256.0278	262.2168	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
56833ddfcf58f1479a0abbcc	112	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c2e5c8cf58f1a8110b8c08	186	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
579fe160cf58f15528a4466f	85	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54bffee9e1382389c54c3458	65	Sedom Fm	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c3185b21faed655488b9982	12	Jialingjiang Formation	245	251	ZHONG, Jia'ai et al.	The Discovery of Deep Potassium and Lithium Resources in the Huangjinkou Anticline, Northeast of Sichuan	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13615
579fd7fccf58f151a1b6ac91	192	Phase Calcite Dolomite			Nield, Joanna M. et al.	Climate-surface-pore-water interactions on a salt crusted playa: implications for crust pattern and surface roughness development measured using terrestrial laser scanning	Earth Surface Processes and Landforms	41	2016	Wiley-Blackwell	10.1002/esp.3860
56831341cf58f1479a0ab983	326	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55bf96d4cf58f16e99a36eea	44	Sedom mention	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
54b4327ee138239d86853432	2	Duobaoshan Formation	460.9	471.8	Liu, Jun et al.	Re–Os sulfide (chalcopyrite, pyrite and molybdenite) systematics and fluid inclusion study of the Duobaoshan porphyry Cu (Mo) deposit, Heilongjiang Province, China	Journal of Asian Earth Sciences		2012	Elsevier	10.1016/j.jseaes.2011.10.014
57bedb9ccf58f13bf01999e9	357	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
550895c3e138237a6f7391ae	188	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
56aaa9f0cf58f19442532ee1	105	Thebes Formation			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
56aaa9f0cf58f19442532ee1	103	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
55af1c5ce13823763a830fe9	390	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b6d4bfe13823bd29ba7dc0	60	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5518b748e1382394b500dcce	59	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
55c0d379cf58f16e99a378b9	303	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
572ea708cf58f10f9db0ebad	389	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55c01a9ecf58f16e99a37305	494	Rustler Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b6d4bfe13823bd29ba7dc0	1369	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5503421ae1382326932d7e6d	782	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56a038b2cf58f1079fd4ba21	104	Salina Group	416	443.7	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
55ae4f4be13823763a830ada	691	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
578f2c07cf58f19aabebdf04	273	San Andres Formation	251	299	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b43277e138239d86851f14	141	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
55c2e5c8cf58f1a8110b8c08	455	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54b4328ce138239d86855aad	96	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56831341cf58f1479a0ab983	382	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54bbc09fe138232081278603	105	Prairie Fm	385.3	397.5	Osadetz, K.G. et al.	Thermal history of Canadian Williston basin from apatite fission-track thermochronology—implications for petroleum systems and geodynamic history	Tectonophysics	349	2002	Elsevier	10.1016/S0040-1951(02)00055-0

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579aae1bcf58f112b1fd775d	25	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5c3e6d6c1faed655488cd35a	81	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54c060fbe1382389c54c3757	333	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
574f1369cf58f10afd57189e	122	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
550eff8ce1382369a6f94026	44	Sdom Fm	-5.5012E-05	23.03	Frydman, Sam et al.	A geotechnical study of evaporitic, lacustrine sediments in the saline environment of the Dead Sea area	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.08.028
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
55b78281e13823bd29ba8218	933	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
559e58a2e138230816dadbe2	755	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54bffee9e1382389c54c3458	165	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
57a43018cf58f11204e17fe0	174	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
58a6e5d1cf58f1701991228a	3	Barluk Formation	385.3	397.5	Cao, Chong et al.	Fluid inclusions and C-H-O-S isotope systematics of early Permian porphyry Mo mineralization of the West Junggar region, NW China: the Suyunhe example	International Geology Review		2016	Taylor and Francis	10.1080/00206814.2016.1259082
550901a3e138238460c4f59b	257	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55c0d379cf58f16e99a378b9	63	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c01a9ecf58f16e99a37305	155	Rustler mention	253.9652	256.0278	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b30ea3e138231cbdd6cfcd	273	Big Snowy Group	326.15	335	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55ad3126e13823763a8303a0	122	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5a850dffcf58f13f065e41c5	74	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
572cf1fccf58f13accaa0e61	72	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
557cd3cfe138239225f869e5	1244	Rustler Formation	251	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4327be138239d86852c99	420	Zechstein mention	251.902	273.01	Cartwright, Joe et al.	Salt dissolution and salt-related deformation of the Forth Approaches Basin, UK North Sea	Marine and Petroleum Geology	18	2001	Elsevier	10.1016/S0264-8172(01)00019-8
54b4327de138239d868530d9	189	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
56c1d9bbcf58f15c72c9075f	281	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
573133c3cf58f17ae858e28c	295	Supai Formation	251	299	M. A. McCaffrey et al.	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite	SEPM Journal of Sedimentary Research	Vol. 57	1987	Society for Sedimentary Geology	10.1306/212f8cab-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	2	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b31649e138231cbdd6cff7	1589	Paradox Member	299	318.1		Geological Survey research 1967, Chapter C	Professional Paper		1967	United States Geological Survey	10.3133/pp575C
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5c3ef9f01faed655488cdf85	183	Ardkenneth mention			Cey, Bradley D et al.	Osmotic flow through a Cretaceous clay in southern Saskatchewan, Canada	Canadian Geotechnical Journal	38	2001	Canadian Science Publishing	10.1139/t01-033
574f1369cf58f10afd57189e	255	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
56c1d5f9cf58f15c72c90717	353	Prairie Evaporite Formation	385.3	397.5	SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
57e65deecf58f186b6da86bd	167	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55b78281e13823bd29ba8218	1950	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55ad3126e13823763a8303a0	170	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56c1a95dcf58f15c72c903aa	220	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
559c3f39e138230816dad2ff	506	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55b73032e13823bd29ba8000	379	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
559c3f39e138230816dad2ff	157	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55989b6ce1382390cc640e7d	275	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55bfa1b1cf58f16e99a36f42	90	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
5590c428e13823109f3ef1e1	274	Salado mention	256.0278	262.2168	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1980	Open-File Report		1982	United States Geological Survey	
57484ab3cf58f13effae7ac5	130	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
57c1b591cf58f173fefe15b4	363	West Point Formation	397.5	416	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
54e733ace138237cc9150889	124	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55c0d379cf58f16e99a378b9	261	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55088ec0e138237a6f73918a	157	Carnallite mention			Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
55ad3126e13823763a8303a0	163	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54eba4f0e138237cc9151b1e	87	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55b73032e13823bd29ba8000	323	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5599341be1382390cc641189	47	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
54d8fa70e138238471e80530	98	Main Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
5a0493edcf58f1b96402aae7	371	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5d3f58060b45c76cafa2004f	339	Paradox Formation	299	318.1	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b6ecebe1382373b63b7a4e	315	Smackover Formation	145.5	161.2	toessell, Ronald K and Carpenter, Alden	Stoichiometric saturation tests of NaCl1−xBrx and KCl1−xBrx	Geochimica et Cosmochimica Acta	50	1986	Elsevier	10.1016/0016-7037(86)90320-0
557b5bd1e138239225f863a3	560	Green River Formation	33.9	55.8	Ortiz, Roderick F.	Baseline characterization of water quality and mass loading in Piceance Creek, Rio Blanco County, Colorado, December 2000	Water-Resources Investigations Report		2002	United States Geological Survey	10.3133/wri024134
57a43018cf58f11204e17fe0	817	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b43246e138239d86849919	696	Blomidon Formation	203.6	216.5	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
579f1578cf58f1168e64ad7f	147	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55bfc14ecf58f16e99a3703b	189	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
572cf900cf58f13d86a1bdc8	209	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
550dedb5e1382369a6f93ba1	63	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
57608442cf58f10987ac4477	1228	Kiruna Greenstone Group			Martinsson, Olof et al.	Metallogeny of the Northern Norrbotten Ore Province, northern Fennoscandian Shield with emphasis on IOCG and apatite-iron ore deposits	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2016.02.011
56831341cf58f1479a0ab983	491	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
579fe160cf58f15528a4466f	176	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b6269be1382314227cff85	1403	Kimmeridge Clay Formation	65.5	145.5		List of referees, list of contents, subject index and author index vol. 52, 1988	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90175-5
558eb5d6e13823109f3ee517	389	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b2fa0ce138231cbdd6cf57	634	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Correlation, composition, areal distribution, and thickness of Eocene stratigraphic units, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1992	United States Geological Survey	
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57e65deecf58f186b6da86bd	185	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5a850dffcf58f13f065e41c5	209	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54d92322e138238471e805db	165	Adularia Quartz Dolomite			Cathelineau, Michel et al.	A major Late Jurassic fluid event at the basin/basement unconformity in western France: 40Ar/39Ar and K–Ar dating, fluid chemistry, and related geodynamic context	Chemical Geology		2012	Elsevier	10.1016/j.chemgeo.2012.06.008
55ae9887e13823763a830cad	107	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54e9b707e138237cc915131b	742	Leadville Formation	318.1	359.2	Duff, K.L. and Ford, T.D.	Field meetings to the Western USA 1981 & 1982	Proceedings of the Geologists' Association	95	1984	Elsevier	10.1016/S0016-7878(84)80001-2
54b4327fe138239d868537ad	310	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5a850dffcf58f13f065e41c5	183	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
575d04f6cf58f198893b8def	136	Maha Sarakham Formation	65.5	145.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
55c2a9cacf58f1a8110b8a1e	60	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5a850dffcf58f13f065e41c5	1	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54b4328ce138239d86855aad	230	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55baa3b5e1382373b63b89e7	347	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55a7c745e13823757cc70251	142	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54c060fbe1382389c54c3757	202	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57c2e3e0cf58f1060ddd0912	122	Salado Formation	251	260.4	Barbieri, Roberto and Stivaletta, Nunzia	Continental evaporites and the search for evidence of life on Mars	Geological Journal	46	2011	Wiley	10.1002/gj.1326
575d04f6cf58f198893b8def	145	Prairie Evaporite Formation	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579aae1bcf58f112b1fd775d	46	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5c319a241faed655488b9bcc	117	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
57c1a06bcf58f16cbd621551	156	Arad Group	145.5	199.6	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
54eba4f0e138237cc9151b1e	65	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55b77fd5e1382373b63b7cce	146	Louann Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
5c3e6d6c1faed655488cd35a	319	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b4324de138239d8684aa17	312	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b30ea3e138231cbdd6cfcd	1650	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
557bfbc7e138239225f86664	200	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54eba4f0e138237cc9151b1e	97	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55c0d379cf58f16e99a378b9	369	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5c3e6d6c1faed655488cd35a	319	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
5503421ae1382326932d7e6d	1445	Prairie Evaporite Formation	385.3	397.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
550895c3e138237a6f7391ae	176	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
56833ddfcf58f1479a0abbcc	2	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55bfc14ecf58f16e99a3703b	130	Lonann Formation			Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
557b436fe138239225f86325	2148	GEOCHEMISTRY mention			Roedder, Edwin	Composition of fluid inclusions	Professional Paper		1972	United States Geological Survey	10.3133/pp440JJ
54f96e27e138239936c6c797	194	Cardona Formation			Miralles, L et al.	3-D rock salt fabrics in a shear zone (Súria Anticline, South-Pyrenees)	Journal of Structural Geology	23	2001	Elsevier	10.1016/S0191-8141(00)00138-3
55ad3126e13823763a8303a0	108	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5c19917d1faed655488915e2	393	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
54fe25efe138239936c6e7e5	208	Calcite Dolomite			Mayo, Alan L. and Klauk, Robert H.	Contributions to the solute and isotopic groundwater geochemistry, Antelope Island, Great Salt Lake, Utah	Journal of Hydrology	1-4	1991	Elsevier	10.1016/0022-1694(91)90120-7
54b4327fe138239d868537ad	144	Souris River Formation	359.2	416	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
54b5345de138239571b90a0d	149	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
57474ebdcf58f1b6f0394e11	66	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
5734b312cf58f14dbc2c579f	47	Pozuelos Formation			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
572cf1fccf58f13accaa0e61	271	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5743c295cf58f14fe2e25b0d	26	Carnallite-halite Rock Formation			GONCHARENKO, Olga et al.	Character of Sedimentation in the Potassium-Bearing Basin of the Gremyachinskoye Field (The Volga Monocline)	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_16
5c3e6d6c1faed655488cd35a	321	Nippewalla Group	251	299	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57c19e14cf58f16bf61df64c	230	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d8a6cf58f15c72c9073f	50	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55afeeece138238f9de483c5	186	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
5682e272cf58f1479a0ab716	539	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56830ae3cf58f1479a0ab915	241	Prairie mention	383.95	389.1	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
578b8ab6cf58f1645f54f0c6	270	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5731ac74cf58f18e0ffaff50	391	Prairie Evaporite Formation	385.3	397.5	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55f2ced1cf58f16256a21973	104	Billianwala Salt Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
572cf900cf58f13d86a1bdc8	42	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
578f2c07cf58f19aabebdf04	110	San Andres Formation	251	299	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
55bf96d4cf58f16e99a36eea	241	Sedom mention	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
54b4324de138239d8684aa17	5	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
550b37f5e1382369a6f9303e	46	McMurray Formation	99.6	145.5	Jasechko, Scott et al.	Quantifying saline groundwater seepage to surface waters in the Athabasca oil sands region	Applied Geochemistry	27	2012	Elsevier	10.1016/j.apgeochem.2012.06.007
54bedb19e13823023e43d91d	16	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55bf96d4cf58f16e99a36eea	65	Sedom mention	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
55c35bc5cf58f1a8110b8fcc	185	Salina Group	416	443.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
557cd3cfe138239225f869e5	7871	Cutler Formation	199.6	251	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55c2e5c8cf58f1a8110b8c08	144	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5b526230cf58f1a50a464a8d	192	Shangyoushashan Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
55c2e5c8cf58f1a8110b8c08	98	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55ae0df7e13823763a830928	3075	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5733004ccf58f1066ffdaeaa	151	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
564da7c8cf58f141b60ca916	314	Hl Thn Gp			Battler, Melissa M. et al.	Mineralogy of saline perennial cold springs on Axel Heiberg Island, Nunavut, Canada and implications for spring deposits on Mars	Icarus	224	2013	Elsevier	10.1016/j.icarus.2012.08.031
5579c559e138231c9f688420	36	Pot Hole Pueblo Group			Bradley, Robin	Mining districts and mineral deposits of the Basin and Range Province of Oregon	Open-File Report		1982	United States Geological Survey	10.3133/ofr8258
54bedb19e13823023e43d91d	141	Esterhazy mention			Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55b35463e138231cbdd6d13e	82	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
579f5bc9cf58f12a53c41a24	90	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b64a4de1382314227d0039	371	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58c8a028cf58f18e35de1266	4	Daye Formation	245	251	Zhao, Haijie et al.	Mineral compositions and fluid evolution of the Tonglushan skarn Cu–Fe deposit, SE Hubei, east-central China	International Geology Review	54	2012	Taylor and Francis	10.1080/00206814.2011.569418
572cf900cf58f13d86a1bdc8	198	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55c00a00cf58f16e99a3727f	21	Salado mention	256.0278	262.2168	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
55b31289e138231cbdd6cfe3	692	Muddy Creek Formation	5.332	23.03	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
5b526230cf58f1a50a464a8d	197	Shizigou Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
558ecdcbe13823109f3ee5af	4921	Wyoming Bed			U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
56c1a95dcf58f15c72c903aa	220	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
577ef8c7cf58f1ac737005ec	51	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
5590c038e13823109f3ef1c7	82	Culebra Member	251	299	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
57131acecf58f17d8d881dcb	299	Salina Group	416	443.7	Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
55c36968cf58f1a8110b9014	58	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
579fe160cf58f15528a4466f	213	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
58d05f41cf58f143d83df312	68	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
558df7d7e13823109f3ee082	2606	Salina mention	419.675	429.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54c060fbe1382389c54c3757	332	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55c2e5c8cf58f1a8110b8c08	188	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
577c41d6cf58f188cebdd1fb	225	Second Red Bed			WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54b4328de138239d86855ceb	1	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54e64c66e138237cc91504d3	27	Rustler Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
55c0d379cf58f16e99a378b9	189	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55ae9887e13823763a830cad	120	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54b4328ce138239d86855aad	309	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5682e272cf58f1479a0ab716	319	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
572cf900cf58f13d86a1bdc8	35	Evaporite mention			Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55bfa1b1cf58f16e99a36f42	90	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
54b4324de138239d8684aa17	5	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55af1c5ce13823763a830fe9	858	Gatuna Formation	0.01143	1.806	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
570a5694cf58f13f88a48a02	44	Gessoso-Solfifera Fm			Scalenghe, Riccardo et al.	The role of pedogenic overprinting in the obliteration of parent material in some polygenetic landscapes of Sicily (Italy)	Geoderma Regional	7	2016	Elsevier	10.1016/j.geodrs.2016.01.003
57c19e14cf58f16bf61df64c	52	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54b43270e138239d86850db4	283	Schisto-Calcaire Subgroup			Frimmel, Hartwig E.	On the reliability of stable carbon isotopes for Neoproterozoic chemostratigraphic correlation	Precambrian Research	182	2010	Elsevier	10.1016/j.precamres.2010.01.003
5694cf35cf58f1377d5990d4	584	Ca Group			Vanko, David A.	Temperature, pressure, and composition of hydrothermal fluids, with their bearing on the magnitude of tectonic uplift at mid-ocean ridges, inferred from fluid inclusions in oceanic layer 3 rocks	Journal of Geophysical Research	93	1988	Wiley-Blackwell	10.1029/JB093iB05p04595
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55ae4f4be13823763a830ada	880	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55c0f018cf58f16e99a3799f	30	Salado Formation	251	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
55c36968cf58f1a8110b9014	196	Carribuddy Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
550895c3e138237a6f7391ae	156	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
57bee020cf58f13d88794bee	261	Windsor mention	95.2	99.5	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
5733004ccf58f1066ffdaeaa	148	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
58b6daf1cf58f11f2b0dde84	843	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
54b4328fe138239d868563a5	239	Stipinai Formation	374.5	385.3	Rychliński, Tomasz et al.	Unusually well preserved casts of halite crystals: A case from the Upper Frasnian of northern Lithuania	Sedimentary Geology		2014	Elsevier	10.1016/j.sedgeo.2014.05.005
5c6237091faed65548958f65	24	Soligorsk Formation	359.2	385.3	Plax, Dmitry P. et al.	A new genus of eurypterid (Chelicerata, Eurypterida) from the Upper Devonian salt deposits of Belarus	Journal of Paleontology	92	2018	Cambridge University Press (CUP)	10.1017/jpa.2018.11
57a43018cf58f11204e17fe0	763	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
58d05109cf58f13f39efd433	228	Porcupine Formation	251.902	273.01	McDonald, S. J. and Skilbeck, C. G.	Authigenic fluid inclusions in lithic sandstone: A case study from the Permo-Triassic Gunnedah Basin, New South Wales	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728249
55b64a4de1382314227d0039	318	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5a2b7516cf58f108104211ac	265	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
56830ae3cf58f1479a0ab915	471	Winnipegosis mention	386.45	393.3	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5b6f081fcf58f1539ffa6761	239	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
579aae1bcf58f112b1fd775d	29	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55afeeece138238f9de483c5	360	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b5b47ce1382314227cfdae	165	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54b5345de138239571b90a0d	149	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
55c48dc6cf58f1a8110b94db	171	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b5b47ce1382314227cfdae	188	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c07511cf58f16e99a375dc	1197	Monterey Formation	5.332	23.03		Annual index	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90280-V
55afeeece138238f9de483c5	189	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
572e90c3cf58f10a55fa1b31	373	Salado Formation	251	260.4	Enrique Casas (2) and Tim K. Lowenstei	Carnallite Mineralization in the Nonmarine, Qaidam Basin, China: Evidence for the Early Diagenetic Origin of Potash Evaporites	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a05-2b26-11d7-8648000102c1865d
56a038b2cf58f1079fd4ba21	59	Salina Group	416	443.7	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
57a43018cf58f11204e17fe0	582	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5b6d3f1ecf58f193bb367046	52	Magneslan Limestone			Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
57a43018cf58f11204e17fe0	880	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55c2e5c8cf58f1a8110b8c08	257	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55ae0df7e13823763a830928	1352	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54d899b7e138238471e803b7	93	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
5682e272cf58f1479a0ab716	3	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
579fe160cf58f15528a4466f	233	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5ac3dd8fcf58f1bdc2a569af	163	Main Group	251	260.4	Giacalone, Alba et al.	Sequestration of organometallic compounds by natural organic matter. binding of trimethyltin(IV) by fulvic and alginic acids	Applied Organometallic Chemistry	20	2006	Wiley-Blackwell	10.1002/aoc.1128
55c2a9cacf58f1a8110b8a1e	47	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
578b8ab6cf58f1645f54f0c6	241	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
558eb5d6e13823109f3ee517	767	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
56aaa9f0cf58f19442532ee1	103	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
54b4328de138239d86855ceb	16	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b2b633e138231cbdd6cdf4	666	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
55c36968cf58f1a8110b9014	262	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
56c1a95dcf58f15c72c903aa	338	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55ccae39cf58f190b49048c1	1	Carlsbad Program Group			Thakur, Punam et al.	An Improved Thermodynamic Model for the Complexation of Trivalent Actinides and Lanthanide with Oxalic acid valid to high ionic strength	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.07.029

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54fb3438e138239936c6d321	21	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5682e3a8cf58f1479a0ab727	406	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55c35bc5cf58f1a8110b8fcc	656	Werra mention			Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
5502c2cae1382326932d7ae8	287	Prairie Formation	359.2	416	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
5682e272cf58f1479a0ab716	3	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5590c038e13823109f3ef1c7	83	Culebra mention	251	299	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
558bbed5e13823109f3ed4f8	166	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54fb03c7e138239936c6d1e1	342	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
57474ebdcf58f1b6f0394e11	83	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54b4328ce138239d86855a1e	575	Falces mention			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
577bca4acf58f1538dda98fd	75	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
572cf1fccf58f13accaa0e61	46	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5795a509cf58f146a6350fa0	149	Salina Group	416	443.7	Ayora, C. et al.	Brine-mineral reactions in evaporite basins: Implications for the composition of ancient oceans	Geol	29	2001	GSA	10.1130/0091-7613(2001)029<0251:bmrieb>2.0.co;2
557f199ce13823bc80ba25a0	243	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
578fb2c8cf58f1bdcd2df236	268	Salado-Tansill Formation			HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
572cf1fccf58f13accaa0e61	35	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
56ac2bfdcf58f19442534c89	51	Zaragoza Formation	23.03	33.9	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456
55b7869fe13823bd29ba8231	576	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57126f9fcf58f142fd277238	188	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5682d639cf58f1479a0ab68d	352	Evaporite Group			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
574c1c0bcf58f1957a2a36f7	42	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
54d899b7e138238471e803b7	20	Angara Formation	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54dc2da6e138238a47f96228	181	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
55989b6ce1382390cc640e7d	160	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5506a9ebe1382326932d924e	54	Ze'elim Formation	-5.5012E-05	0.01143	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
558bbed5e13823109f3ed4f8	108	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	80	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b78281e13823bd29ba8218	1950	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	250	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55a82328e13823757cc7049a	960	Charles mention	332.05	346.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
57611ef6cf58f130993e9b1a	161	Ellicott Creek Breccia Member	419.2	427.4	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
579f1578cf58f1168e64ad7f	369	Yates Formation	251	299	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55baa3b5e1382373b63b89e7	6	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55f2ced1cf58f16256a21973	104	Billianwala Salt Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
56c1ca03cf58f15c72c90620	170	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54b43250e138239d8684b33f	38	Artés Formation			Pérez, Aureli Álvarez and Pérez, German Álv	Preservation of original aragonite structure in Desmophyllum castellolense (Scleractinia) from the Eocene Igualada Basin (NE Spain)	Palaeoworld	23	2014	Elsevier	10.1016/j.palwor.2014.04.001
54b43277e138239d86852025	149	Catoche Formation	471.8	488.3	Conliffe, J. et al.	Dolomitization of the lower Ordovician Catoche formation: Implications for hydrocarbon exploration in western Newfoundland	Marine and Petroleum Geology	30	2012	Elsevier	10.1016/j.marpetgeo.2011.10.007
56de7f80cf58f18eca0d2b65	229	End-Member Librarya Group			Baldridge, Alice M.	Mars remote-sensing analog studies in the Badwater Basin, Death Valley, California	Journal of Geophysical Research	109	2004	Wiley-Blackwell	10.1029/2004JE002315
57a43018cf58f11204e17fe0	458	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5c3e6d6c1faed655488cd35a	353	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5a0493edcf58f1b96402aae7	372	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5d3f58060b45c76cafa2004f	193	Rotliegend Group	251	299	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
579fe160cf58f15528a4466f	238	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55c2a9cacf58f1a8110b8a1e	134	Halite Member	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
57c19e14cf58f16bf61df64c	303	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54fc8912e138239936c6dc7a	205	Castile Formation	253.8	260.4	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
54e7c15ae138237cc9150ae2	67	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
56919abacf58f146f20a4800	141	Tanker Safety Group				Author & subject index volume 13, 1982	Marine Pollution Bulletin		1982	Elsevier	10.1016/0025-326X(82)90448-9
55c2ce13cf58f1a8110b8b48	411	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57c1a06bcf58f16cbd621551	59	Ramon Group	199.6	251	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
54b48011e138239e89d63a3c	305	Twin Creek mention	166.025	174.7	Wiltschko, David V. et al.	Conditions during syntectonic vein formation in the footwall of the Absaroka Thrust Fault, Idaho–Wyoming–Utah fold and thrust belt	Journal of Structural Geology	31	2009	Elsevier	10.1016/j.jsg.2009.03.009
54eba4f0e138237cc9151b1e	683	Evaporite Group			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
57c19e14cf58f16bf61df64c	52	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	886	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55a470efe13823757cc6f241	79	Parachute Creek Member	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
57a3d5e1cf58f1b6afc43ebc	71	Wilkins Peak Member	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
572cf900cf58f13d86a1bdc8	240	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5a0493edcf58f1b96402aae7	126	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
579f1578cf58f1168e64ad7f	323	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57ec17eccf58f1ac335ac1b3	421	Pinda Group	99.6	112	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
558bbed5e13823109f3ed4f8	166	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
5c2bea2e1faed655488b221b	118	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
55b610abe1382314227cff42	94	Lisan mention	0.01143	0.126	Katz, Amitai and Kolodny, Nancy	Hypersaline brine diagenesis and evolution in the Dead Sea-Lake Lisan system (Israel)	Geochimica et Cosmochimica Acta	53	1989	Elsevier	10.1016/0016-7037(89)90272-X
54d3e320e138238471e7efcd	392	Serra Geral Formation	121.4	137.4	Bonotto, Daniel Marcos	Hydro(radio)chemical relationships in the giant Guarani aquifer, Brazil	Journal of Hydrology	323	2006	Elsevier	10.1016/j.jhydrol.2005.09.007
57a43018cf58f11204e17fe0	174	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
579b56dacf58f13d24f0d7ef	49	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55973ab0e1382390cc6406d2	244	McKay Formation	2.58	23.03	Derome, Donatienne et al.	A detailed fluid inclusion study in silicified breccias from the Kombolgie sandstones (Northern Territory, Australia): inferences for the genesis of middle-Proterozoic unconformity-type uranium deposits	Journal of Geochemical Exploration	80	2003	Elsevier	10.1016/S0375-6742(03)00194-8
55b6d4bfe13823bd29ba7dc0	1195	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55ae4f4be13823763a830ada	542	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5a2b7516cf58f108104211ac	350	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57c1b591cf58f173fefe15b4	196	Catoche Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
55baa3b5e1382373b63b89e7	148	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54eba4f0e138237cc9151b1e	361	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55af1c5ce13823763a830fe9	147	Castile mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55c0d379cf58f16e99a378b9	242	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
576043cfcf58f1b7e5721de2	300	Athabasca mention	538.8	1600	Chu, Haixia and Chi, Guoxiang	Thermal profiles inferred from fluid inclusion and illite geothermometry from sandstones of the Athabasca basin: Implications for fluid flow and unconformity-related uranium mineralization	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2015.12.013
563e539dcf58f18954974b48	400	Dawson Bay Formation	385.3	397.5	Leitner, Christoph et al.	3D-modeling of deformed halite hopper crystals by Object Based Image Analysis	Computers & Geosciences		2014	Elsevier	10.1016/j.cageo.2014.08.010
55986cdae1382390cc640d7c	479	Tinggong mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
574f1369cf58f10afd57189e	47	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54ef9078e138237cc9152b86	137	Salt mention	251	260.4	Jackson, Christopher A.-L. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 1: Geometry and kinematics from 3D seismic reflection and well data	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.010
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
57c19e14cf58f16bf61df64c	251	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55c2a9cacf58f1a8110b8a1e	64	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5682e272cf58f1479a0ab716	1043	Prairie Evaporite Formation	385.3	397.5	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c48dc6cf58f1a8110b94db	40	Sussex Group	345.3	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5598d566e1382390cc640f84	180	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
576f2916cf58f12d806616ca	32	Prairie Evaporite Formation	385.3	397.5	Tallin, J. E. et al.	Waste management schemes of potash mines in Saskatchewan	Canadian Journal of Civil Engineering	17	1990	Canadian Science Publishing	10.1139/l90-061
5c2fe60d1faed655488b6bad	168	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
54b43250e138239d8684b46c	142	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
54b43276e138239d86851d3b	144	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
579ed180cf58f1030df9c51e	374	Carroza mention	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
5598d566e1382390cc640f84	179	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55ae9887e13823763a830cad	76	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c2e5c8cf58f1a8110b8c08	137	Hutchinson Salt mention	273.01	298.9	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b78281e13823bd29ba8218	935	Tamarisk Member	251.902	273.01	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
579f5bc9cf58f12a53c41a24	31	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
56c1ca03cf58f15c72c90620	170	Soledad mention			Pueyo, Juan Jos[illegible] et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54ef9078e138237cc9152b86	137	Salt mention	251	260.4	Jackson, Christopher A.-L. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 1: Geometry and kinematics from 3D seismic reflection and well data	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.010
55c0d379cf58f16e99a378b9	324	Salado Formation			Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c35bc5cf58f1a8110b8fcc	151	Rustler Formation	251	260.4	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55c01a9ecf58f16e99a37305	316	Culebra mention	251	299	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b5b47ce1382314227cfdae	211	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557bfbc7e138239225f86664	546	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55c48dc6cf58f1a8110b94db	171	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
579fe160cf58f15528a4466f	93	Marker Bed			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
55b2b633e138231cbdd6cdf4	67	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5d3f58060b45c76cafa2004f	263	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
574f1369cf58f10afd57189e	233	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54c0e40ae1382389c54c39a9	486	Basin mention			Baba, Alper and Sözbilir, Hasan	Source of arsenic based on geological and hydrogeochemical properties of geothermal systems in Western Turkey	Chemical Geology		2012	Elsevier	10.1016/j.chemgeo.2012.06.006
56c1effacf58f15c72c9090b	5	Carribuddy Group	416	443.7	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54fc8912e138239936c6dc7a	1	Palaeozoic Carribuddy Group			Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
572cf1fccf58f13accaa0e61	8	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
57a43018cf58f11204e17fe0	763	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5590aa05e13823109f3ef13c	11	Paradox Member	299	318.1	Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
5c31d9191faed655488ba2fb	189	Halite Calcite Dolomite			Stober, I. et al.	Deep hydrothermal fluid-rock interaction: the thermal springs of Da Qaidam, China	Geofluids	16	2016	Wiley	10.1111/gfl.12190
57c19e14cf58f16bf61df64c	52	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
57320459cf58f19ced0f7bc5	85	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55a0946ee1382381ff364540	109	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5c3f2b2b1faed655488ce2aa	114	Haselgebirge Formation	245	251	Muñoz	Structural styles in fold-and-thrust belts involving early salt structures: The Northern Calcareous Alps (Austria)	Geology	47	2018	Geological Society of America	10.1130/g45281.1
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55b5b47ce1382314227cfdae	69	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
577ef8c7cf58f1ac737005ec	199	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
55184839e1382394b500daf7	566	Zaragoza Gypsum Formation	5.332	23.03	Galve, J.P. et al.	Evaluating and comparing methods of sinkhole susceptibility mapping in the Ebro Valley evaporite karst (NE Spain)	Geomorphology	111	2009	Elsevier	10.1016/j.geomorph.2009.04.017
557f199ce13823bc80ba25a0	1157	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55989b6ce1382390cc640e7d	3	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
5590aba6e13823109f3ef147	241	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	408	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	161	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55c2e5c8cf58f1a8110b8c08	87	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54b4328de138239d86855ceb	108	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
55ae0df7e13823763a830928	1363	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
577c41d6cf58f188cebdd1fb	39	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54b4328ae138239d8685555a	47	Pythagorion mention			Stamatakis, M.G. et al.	Geochemistry and diagenesis of Miocene lacustrine siliceous sedimentary and pyroclastic rocks, Mytilinii basin, Samos Island, Greece	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90084-5
5730cdcccf58f16acaf6b5aa	250	Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
5733004ccf58f1066ffdaeaa	239	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	485	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b78281e13823bd29ba8218	2067	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1090	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5732032ecf58f19cbcbc550f	8	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
56c1a95dcf58f15c72c903aa	663	San Andres Formation	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54ddbfdae138238a47f968be	71	Mavqi'im Formation			Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
55b7869fe13823bd29ba8231	1796	Supai mention	275.2575	313.75	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54fb3438e138239936c6d321	186	Salado mention	256.0278	262.2168	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
572cf1fccf58f13accaa0e61	33	Opeche mention	273.01	283.5	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
56830b14cf58f1479a0ab918	442	Be'eri Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
58d05105cf58f13f39efd424	236	Belayim Formation	11.608	15.97	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
5686073bcf58f18e60df4a56	141	Complex mention			Gianguzza, Antonio et al.	Hydrolysis and chemical speciation of dioxouranium(VI) ion in aqueous media simulating the major ion composition of seawater	Marine Chemistry	85	2004	Elsevier	10.1016/j.marchem.2003.10.002
5509217ee138238460c4f689	321	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54b4328ae138239d86855597	148	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
55baa3b5e1382373b63b89e7	144	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c48dc6cf58f1a8110b94db	59	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
572cf1fccf58f13accaa0e61	285	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
558eb5d6e13823109f3ee517	422	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
557b6c66e138239225f863ff	575	See mention			Sanford, Samuel and Stone, Ralph Walte	Useful minerals of the United States	Bulletin		1914	United States Geological Survey	10.3133/b585

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
57464969cf58f165ff103f08	94	Blornidon Formation			Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
58bf0a5acf58f17947438723	1	Hydrogeology Group			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
55c36968cf58f1a8110b9014	30	Salina Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55b45cb4e1382314227cf4a4	298	Phosphoria Fm	251	299		Cumulative index: Volumes 21–30	Geochimica et Cosmochimica Acta		1970	Elsevier	10.1016/0016-7037(70)90001-3
54d899b7e138238471e803b7	69	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
580b91b8cf58f14ba918ac36	184	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and "Cline" shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
558ecdcbe13823109f3ee5af	5011	Wyoming mention			U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55f49f72cf58f16256a225dc	2	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5598d566e1382390cc640f84	232	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5a048d65cf58f1b96402a09e	160	Coboconk mention	455.615	455.725	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
56c1effacf58f15c72c9090b	46	Glacials Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55987595e1382390cc640dae	168	Graça mention			Moura, António	Metallogenesis at the Neves Corvo VHMS deposit (Portugal): A contribution from the study of fluid inclusions	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.04.004
5598d566e1382390cc640f84	238	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
58bf2d90cf58f1867eb10946	119	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55bfc14ecf58f16e99a3703b	365	Haynesville Formation	150.8	155.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
54b4324de138239d8684aa17	98	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5c302c581faed655488b7345	4	Fengcheng Formation	251	299	Cao, Yingchang et al.	Geochemical characteristics and origin of sodium carbonates in a closed alkaline basin: The Lower Permian Fengcheng Formation in the Mahu Sag, northwestern Junggar Basin, China	Palaeogeography, Palaeoclimatology, Palaeoecology	511	2018	Elsevier	10.1016/j.palaeo.2018.09.015
559d4d6ee138230816dad784	27	Castile Formation	253.8	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
5682e272cf58f1479a0ab716	595	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56c1d5f9cf58f15c72c90717	353	Prairie Evaporite Formation	385.3	397.5	SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
5730cdcccf58f16acaf6b5aa	250	Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
54fb3438e138239936c6d321	142	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4328de138239d86855ceb	138	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558c6b00e13823109f3ed87c	2236	Parachute Creek Member	33.9	55.8	robst, Donald Albert and Tucker, Jerry D	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803
55baa3b5e1382373b63b89e7	6	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
550fa3bbe1382369a6f942d9	53	Zaragoza Fm	5.332	23.03	Pueyo-Anchuela, Ó. et al.	Multidisciplinary approach for urban planning in alluvial karstic zones Case study from the Central Ebro Basin (Spain)	Engineering Geology	122	2011	Elsevier	10.1016/j.enggeo.2011.05.016
5a850dffcf58f13f065e41c5	278	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55baa3b5e1382373b63b89e7	40	Dead Sea mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5674a234cf58f12215607647	326	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
54d8fa70e138238471e80530	85	Main Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
557bfbc7e138239225f86664	546	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54d0272be13823b501cdbc75	136	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
565e2f6dcf58f148c57eb967	245	Lam Formation	145.5	161.2	Pham, V.T.H. et al.	On the potential of CO2–water–rock interactions for CO2 storage using a modified kinetic model	International Journal of Greenhouse Gas Control	5	2011	Elsevier	10.1016/j.ijggc.2010.12.002
54e733ace138237cc9150889	434	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
550895c3e138237a6f7391ae	144	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
578b8ab6cf58f1645f54f0c6	166	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57a43018cf58f11204e17fe0	822	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4328ce138239d86855aad	392	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55911c4ee13823109f3ef407	189	Parachute Creek Member	33.9	55.8	Robson, S. G. and Saulnier, G. J., Jr.	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Professional Paper		1981	United States Geological Survey	
55c35bc5cf58f1a8110b8fcc	185	Salina Group	416	443.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
55ae4f4be13823763a830ada	422	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55baa3b5e1382373b63b89e7	431	Plio-Pleistocene Sedom Fm			Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55d114ddcf58f1b3b25e358c	47	Lisan Formation	0.01143	0.126	Katz, Amitai and Starinsky, Abraham	No drawdown and no hyperaridity in the ancient Dead Sea (Comments to Torfstein's et al. (2015) paper, EPSL 412, 235–244)	Earth and Planetary Science Letters		2015	Elsevier	10.1016/j.epsl.2015.07.006
54be7fc1e13823299564b0b3	232	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
57c91310cf58f17b7ba8638b	5	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55b8484be13823bd29ba869d	396	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
57131885cf58f17cb0fd1f40	10	Belayin Formation			Kovalevich, V. M. et al.	Brine inclusions in halite and the origin of the Middle Devonian Prairie Evaporites of Western Canada; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.228
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a850dffcf58f13f065e41c5	219	Lisan Fm.	0.01143	0.126	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
579b56dacf58f13d24f0d7ef	62	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55a43da1e13823757cc6f19a	422	Salt Bed	251	260.4	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
57c19a92cf58f16ab04df2ec	49	Guelph Formation	416	443.7	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
568315efcf58f1479a0ab9a9	283	Arcs mention	373.25	375.7	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
57c25740cf58f19f923bf1c2	993	Marcellus Shale	385.3	397.5	Senior, Lisa A. et al.	Baseline assessment of groundwater quality in Wayne County, Pennsylvania, 2014	Scientific Investigations Report		2016	USGS	
579f1578cf58f1168e64ad7f	214	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5502c2cae1382326932d7ae8	156	Salina Formation	416	443.7	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
54c060fbe1382389c54c3757	362	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5682ea89cf58f1479a0ab77c	390	Opeche Shale	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
57a43018cf58f11204e17fe0	156	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55c0d379cf58f16e99a378b9	261	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
572cf1fccf58f13accaa0e61	244	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54bedb19e13823023e43d91d	137	Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
56833ddfcf58f1479a0abbcc	7	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55adfa4be13823763a8308b1	44	Paradox Member	299	318.1	Hite, R. J.	A potential target for potash solution mining in Cycle 13, Paradox Member, near Moab, Utah	Open-File Report		1976	United States Geological Survey	10.3133/ofr76755
55b3dfb4e138231cbdd6d442	797	Pinnacle Overlook Member	324.734	327.1333	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
57d0097ccf58f145d627bfaf	103	Tagon Formation			Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5d3f58060b45c76cafa2004f	148	Rotliegend Gp	251	299	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
56c1ca03cf58f15c72c90620	244	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5733004ccf58f1066ffdaeaa	236	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5c3e6d6c1faed655488cd35a	338	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
578aea2bcf58f13920dc7baa	208	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
579fe160cf58f15528a4466f	171	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55a6d3f3e13823757cc6fc08	363	Quartz Dolomite			Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
572cf900cf58f13d86a1bdc8	44	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
5509217ee138238460c4f689	90	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c2a9cacf58f1a8110b8a1e	159	Loeme Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559cd25ee138230816dad548	488	Verde mention	4.1777	8.342	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
5c319a241faed655488b9bcc	29	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
57c2e2adcf58f105aaed24f4	2	Asmari Formation	5.332	23.03	Mirnejad, H. et al.	Major, minor element chemistry and oxygen and hydrogen isotopic compositions of Marun oil-field brines, SW Iran: Source history and economic potential	Geological Journal	46	2011	Wiley	10.1002/gj.1226
5682e272cf58f1479a0ab716	474	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
58b6daf1cf58f11f2b0dde84	825	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
574f1369cf58f10afd57189e	123	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5508d3cde138238460c4f445	178	Sdom mention	-5.5012E-05	23.03	Stiller, Mariana et al.	Cl-37 in the Dead Sea system---preliminary results	Applied Geochemistry	13	1998	Elsevier	10.1016/S0883-2927(98)00017-1
55b89548e1382373b63b813c	51	Green River Formation	33.9	55.8	Reitsema, Robert H.	Dolomite and nahcolite formation in organic rich sediments: isotopically heavy carbonates	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90202-1
55989b6ce1382390cc640e7d	169	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55c35bc5cf58f1a8110b8fcc	95	Sedom Formation	5.332	23.03	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
57a43018cf58f11204e17fe0	534	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5ce2f9b20b45c76caf8ae21e	316	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
57c91310cf58f17b7ba8638b	149	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55ae0df7e13823763a830928	1357	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5682e272cf58f1479a0ab716	485	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
5c3e6d6c1faed655488cd35a	203	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b4328ce138239d86855aad	453	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5503421ae1382326932d7e6d	701	Piceance River Formation			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5682e272cf58f1479a0ab716	413	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5598fe2be1382390cc641068	228	Tongkuangyu mention			Jiang, Yuhang et al.	Fluid evolution of the Tongkuangyu porphyry copper deposit in the Zhongtiaoshan region: Evidence from fluid inclusions	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.05.018
550b6ce8e1382369a6f9311e	186	Cadjebut Formation	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
54dc2da6e138238a47f96228	179	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
55b7869fe13823bd29ba8231	332	Salina Group	416	443.7	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
573133c3cf58f17ae858e28c	242	Supai Formation	251	299	M. A. McCaffrey et al.	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite	SEPM Journal of Sedimentary Research	Vol. 57	1987	Society for Sedimentary Geology	10.1306/212f8cab-2b24-11d7-8648000102c1865d
589ebd9dcf58f101e1d918ac	77	Reference Huntite Calcite Dolomite			Balci, Nurgül et al.	Reproducing Authigenic Carbonate Precipitation in the Hypersaline Lake Acıgöl (Turkey) with Microbial Cultures	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099763
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
57a43018cf58f11204e17fe0	709	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b30ea3e138231cbdd6cfcd	1011	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bffee9e1382389c54c3458	29	Sedom Fm	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54dc2da6e138238a47f96228	281	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
55b6d4bfe13823bd29ba7dc0	986	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579f1578cf58f1168e64ad7f	214	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
58b8ce49cf58f12dec1f62bf	74	Na Cl Celestine Dolomite			Jensen, Gavin K.S.	Weyburn oilfield core assessment investigating cores from pre and post CO2 injection: Determining the impact of CO2 on the reservoir	International Journal of Greenhouse Gas Control	54	2016	Elsevier	10.1016/j.ijggc.2016.09.003
55b8484be13823bd29ba869d	78	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
57a43018cf58f11204e17fe0	709	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
5590aba6e13823109f3ef147	29	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
55b64a4de1382314227d0039	381	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b6d4bfe13823bd29ba7dc0	1002	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57a43018cf58f11204e17fe0	886	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5733004ccf58f1066ffdaeaa	163	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	328	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
56830ae3cf58f1479a0ab915	262	Leofnard mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
5c31bcfc1faed655488b9f63	234	Platinum Group			Calvo, Guiomar et al.	The cost of mineral depletion in Latin America: An exergoecology view	Resources Policy	59	2018	Elsevier	10.1016/j.resourpol.2018.06.007
5a0493edcf58f1b96402aae7	89	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
572cf1fccf58f13accaa0e61	222	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
578fb2c8cf58f1bdcd2df236	28	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5c319a241faed655488b9bcc	170	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
54fb3438e138239936c6d321	36	Zechstein Limestone	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
558ecdcbe13823109f3ee5af	297	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
574f1369cf58f10afd57189e	149	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55701092e138233f91911506	79	U.S. GOFS Working Group			Hargrave, B.T. et al.	Factors affecting seasonality of lithogenic and biogenic particle flux in a large estuarine ecosystem	Estuarine, Coastal and Shelf Science	73	2007	Elsevier	10.1016/j.ecss.2007.02.001
54b4324de138239d8684aa17	225	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56aac400cf58f194425330c8	1	Umm Ishrin Sandstone	488.3	542	AL-NADDAF, M.	THE EFFECT OF SALTS ON THERMAL AND HYDRIC DILATATION OF POROUS BUILDING STONE	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00407.x
55b31289e138231cbdd6cfe3	536	Supai Formation	251	299	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
54eba4f0e138237cc9151b1e	448	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	21	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54e7c15ae138237cc9150ae2	190	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
54d899b7e138238471e803b7	138	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
5d3f58060b45c76cafa2004f	5	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
57484ab3cf58f13effae7ac5	202	Cumberland Gp	299	318.1	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
5682e3a8cf58f1479a0ab727	376	Salado mention	256.0278	262.2168	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55a0946ee1382381ff364540	278	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
54b4324de138239d8684aa17	149	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
58c18a99cf58f1a6ba4ea54d	118	Sedom mention	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
55af1c5ce13823763a830fe9	467	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
579f1578cf58f1168e64ad7f	384	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
578aea2bcf58f13920dc7baa	149	Calcite Dolomite			DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
58bf2da2cf58f1867eb1098b	136	Australian Shale			Censi, P. et al.	The behaviour of zirconium, hafnium and rare earth elements during the crystallisation of halite and other salt minerals	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.02.003
558b2c2be13823109f3ed1ee	515	Sijes Fm	1.806	65.5	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
57a43018cf58f11204e17fe0	461	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54fb51c0e138239936c6d400	30	Furnace Creek Formation	1.806	5.332	García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
55c85be2cf58f1a8110ba4b2	167	KCl Limestone			Pickard, William F.	Geochemical constraints on sustainable development: Can an advanced global economy achieve long-term stability?	Global and Planetary Change	61	2008	Elsevier	10.1016/j.gloplacha.2007.10.005
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5ab92ea3cf58f16811edda29	315	Cl mention			Jones, Samantha Elsie et al.	A multi-proxy approach to understanding complex responses of salt-lake catchments to climate variability and human pressure: A Late Quaternary case study from south-eastern, Spain	Quaternary Science Reviews	184	2018	Elsevier	10.1016/j.quascirev.2017.12.015
54bffee9e1382389c54c3458	349	Sedom Fm	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55c03cd3cf58f16e99a37419	35	Semta Formation			Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K
558eb5d6e13823109f3ee517	374	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5cfd88b00b45c76caf8df4b1	2	Francis Group	305.425	305.7125	John, N. Joseph and Mahadevan, C. K.	Studies on NaCl Added ADP Single Crystals	Materials and Manufacturing Processes	23	2008	Informa UK Limited	10.1080/10426910802384573
54b4328fe138239d86856336	273	Basin mention			García-Veigas, Javier and Helvacı, Cahit	Mineralogy and sedimentology of the Miocene Göcenoluk borate deposit, Kırka district, western Anatolia, Turkey	Sedimentary Geology		2013	Elsevier	10.1016/j.sedgeo.2013.03.006
54b4325ae138239d8684ce96	187	Mamfe mention			Eseme, E. et al.	Geochemistry and genesis of brine emanations from Cretaceous strata of the Mamfe Basin, Cameroon	Journal of African Earth Sciences	35	2002	Elsevier	10.1016/S0899-5362(02)00171-9
572cf1fccf58f13accaa0e61	205	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
57320459cf58f19ced0f7bc5	255	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5d3f58060b45c76cafa2004f	28	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f49f72cf58f16256a225dc	146	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55b6d4bfe13823bd29ba7dc0	1090	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c48dc6cf58f1a8110b94db	186	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57f66ba7cf58f11e2b44f8c5	43	Sahara Formation	419.2	443.8	Kovalevych, Volodymyr M. et al.	Composition of brines in halite-hosted fluid inclusions in the Upper Ordovician, Canning Basin, Western Australia: new data on seawater chemistry	Terra Nova	18	2006	Wiley	10.1111/j.1365-3121.2006.00668.x
57c19e14cf58f16bf61df64c	297	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
578fb2c8cf58f1bdcd2df236	359	Seven Rivers Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
577bca4acf58f1538dda98fd	40	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
572cf1fccf58f13accaa0e61	226	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5a21053ecf58f18a3170d1ed	542	Nongbok Formation	65.5	99.6	Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5509217ee138238460c4f689	372	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5590d1bfe13823109f3ef23b	237	Rustler mention	253.9652	256.0278	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c0d379cf58f16e99a378b9	280	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
557f199ce13823bc80ba25a0	1879	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54b43280e138239d8685381d	232	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
58bf1154cf58f17bc0ea7bbf	1	Carlsbad Programs Group			Xiong, Yongliang et al.	Experimental determination of solubilities of di-calcium ethylenediaminetetraacetic acid hydrate [Ca2C10H12N2O8·7H2O(s)] in NaCl and MgCl2 solutions to high ionic strengths and its Pitzer model: Applications to geological disposal of nuclear waste and other low temperature environments	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.025
55afeeece138238f9de483c5	360	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
57c1a06bcf58f16cbd621551	299	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
573090ddcf58f160029e9d90	116	Salado mention	256.0278	262.2168	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
57968abbcf58f180d838d23c	200	Abu Dhabi mention	-5.5012E-05	0.01143	Wood, Warren W. et al.	Source of solutes to the coastal sabkha of Abu Dhabi	Geological Society of America Bulletin	114	2002	GSA	10.1130/0016-7606(2002)114<0259:sosttc>2.0.co;2
57bee020cf58f13d88794bee	214	Windsor Group	318.1	359.2	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
5b6f081fcf58f1539ffa6761	239	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
550895c3e138237a6f7391ae	182	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
574f1369cf58f10afd57189e	199	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5906dd0fcf58f15fea53aef7	446	Jackson mention	10.08	11.04	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55986e49e1382390cc640d84	223	R.S.C. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
54eba4f0e138237cc9151b1e	55	Bunter mention	245	251	Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
579fd7fccf58f151a1b6ac91	192	Phase Calcite Dolomite			Nield, Joanna M. et al.	Climate-surface-pore-water interactions on a salt crusted playa: implications for crust pattern and surface roughness development measured using terrestrial laser scanning	Earth Surface Processes and Landforms	41	2016	Wiley-Blackwell	10.1002/esp.3860
558c7394e13823109f3ed8a2	638	Parachute Creek Member	33.9	55.8	Glover, K.C. et al.	Geohydrology of Tertiary rocks in the upper Colorado River basin in Colorado, Utah, and Wyoming, excluding the San Juan basin	Water-Resources Investigations Report		1998	United States Geological Survey	10.3133/wri964105
57bedb9ccf58f13bf01999e9	361	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55c2e5c8cf58f1a8110b8c08	186	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5a850dffcf58f13f065e41c5	216	Lisan mention	0.01143	0.126	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
572cf1fccf58f13accaa0e61	1	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
56c1a95dcf58f15c72c903aa	433	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5a21053ecf58f18a3170d1ed	136	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5598d566e1382390cc640f84	180	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5732032ecf58f19cbcbc550f	67	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
550eff8ce1382369a6f94026	44	Sdom Fm	-5.5012E-05	23.03	Frydman, Sam et al.	A geotechnical study of evaporitic, lacustrine sediments in the saline environment of the Dead Sea area	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.08.028
57a1b61ecf58f1154eb55fb9	13	Nippewalla mention	273.01	279.7525	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
550995fee138238460c4f997	30	Salado Formation	251	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035
55af1c5ce13823763a830fe9	862	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
550ab33ee138238460c4fe4c	324	Oseberg mention	161.2	175.6	Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
56c44114cf58f17493f8536e	104	Seven Rivers Formation	251	299	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
54b43288e138239d86854eed	107	Albert Formation	318.1	359.2	Chowdhury, Ali H. and Noble, James P.A	Feldspar albitization and feldspar cementation in the Albert Formation reservoir sandstones, New Brunswick, Canada	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90083-5
579f1578cf58f1168e64ad7f	163	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328fe138239d868563a5	28	Stipinai Formation	374.5	385.3	Rychliński, Tomasz et al.	Unusually well preserved casts of halite crystals: A case from the Upper Frasnian of northern Lithuania	Sedimentary Geology		2014	Elsevier	10.1016/j.sedgeo.2014.05.005
550ab8aae138238460c4fe5e	342	Windsor Group	318.1	359.2	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
5a0493edcf58f1b96402aae7	325	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57c19e14cf58f16bf61df64c	304	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57126f9fcf58f142fd277238	254	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
54b43288e138239d86854e95	104	Fats mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54b4328be138239d8685580e	216	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
57c19e14cf58f16bf61df64c	251	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
57a1b61ecf58f1154eb55fb9	21	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
54b4324ee138239d8684ae71	129	Sciliar Fm			Stefani, Marco et al.	The changing climate framework and depositional dynamics of Triassic carbonate platforms from the Dolomites	Palaeogeography, Palaeoclimatology, Palaeoecology	290	2010	Elsevier	10.1016/j.palaeo.2010.02.018
572e90c3cf58f10a55fa1b31	377	Salado Formation	251	260.4	Enrique Casas (2) and Tim K. Lowenstei	Carnallite Mineralization in the Nonmarine, Qaidam Basin, China: Evidence for the Early Diagenetic Origin of Potash Evaporites	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a05-2b26-11d7-8648000102c1865d
558eb5d6e13823109f3ee517	774	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
56c1effacf58f15c72c9090b	54	Minjoo Salt Bongabinni Formation			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
550901a3e138238460c4f59b	242	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
57ec17eccf58f1ac335ac1b3	433	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
56833ddfcf58f1479a0abbcc	148	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
56c1ca16cf58f15c72c90624	162	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
5733004ccf58f1066ffdaeaa	239	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
557bfbc7e138239225f86664	127	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54d899b7e138238471e803b7	141	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54be90c7e13823299564b137	459	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
54fb51c0e138239936c6d400	265	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
54d899b7e138238471e803b7	69	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
558df7d7e13823109f3ee082	323	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55ad3126e13823763a8303a0	186	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55c48dc6cf58f1a8110b94db	110	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b78281e13823bd29ba8218	1950	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54eba4f0e138237cc9151b1e	97	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5d3f58060b45c76cafa2004f	280	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5733004ccf58f1066ffdaeaa	229	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c48dc6cf58f1a8110b94db	164	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57a3d5e1cf58f1b6afc43ebc	103	Green River Formation	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
572cf1fccf58f13accaa0e61	216	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5733004ccf58f1066ffdaeaa	151	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
578fb2c8cf58f1bdcd2df236	258	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5b6f081fcf58f1539ffa6761	160	Baykan-Sason Group			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
57303a24cf58f152220766cf	138	Castile Formation	253.8	260.4	David J. J. Kinsman	Evaporites: Relative Humidity Control of Primary Mineral Facies	SEPM Journal of Sedimentary Research	Vol. 46	1976	SEPM	10.1306/212f6f37-2b24-11d7-8648000102c1865d
5a048d65cf58f1b96402a09e	232	Trenton Group	460.9	471.8	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
56c1d5f9cf58f15c72c90717	4	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
579fe160cf58f15528a4466f	238	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
558eb5d6e13823109f3ee517	265	Salado mention	256.0278	262.2168	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5a850dffcf58f13f065e41c5	1	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57c19e14cf58f16bf61df64c	207	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
550b6ce8e1382369a6f9311e	185	Cadjebut mention	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
5c3e6d6c1faed655488cd35a	365	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
56a038b2cf58f1079fd4ba21	62	San Andres Formation	251	299	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5a21053ecf58f18a3170d1ed	136	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
54eba4f0e138237cc9151b1e	316	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55b31289e138231cbdd6cfe3	535	Muddy Creek Formation	5.332	23.03	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
5b6eb3c5cf58f13c68e2d5dc	53	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
572ea708cf58f10f9db0ebad	40	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b87d87e13823bd29ba87eb	340	Green River Formation	33.9	55.8	Edited by Krafft, Kathleen	USGS research on mineral resources, 1985; program and abstracts	Circular		1985	United States Geological Survey	
56c1a95dcf58f15c72c903aa	477	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
57a43018cf58f11204e17fe0	149	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	168	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55c48dc6cf58f1a8110b94db	164	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55c01a9ecf58f16e99a37305	496	Salado Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
557b1abde138239225f86255	134	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
579aae1bcf58f112b1fd775d	4	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54d4bb37e138238471e7f379	433	Salado mention	256.0278	262.2168	Lauheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
57d0097ccf58f145d627bfaf	60	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5732032ecf58f19cbcbc550f	58	Salado mention	256.0278	262.2168	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5732032ecf58f19cbcbc550f	177	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
558b2c2be13823109f3ed1ee	231	MA LMIO Sijes Fm			Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
570fe41dcf58f114a862267f	147	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
557f199ce13823bc80ba25a0	1766	SollstOl'e Rustler Formation			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
56a038b2cf58f1079fd4ba21	127	Edwards Group	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
577bca4acf58f1538dda98fd	75	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5ab9a5fbcf58f196f620b199	226	Gull River Formation	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
5a30910ccf58f1715016597b	38	Wilkins Peak Member	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
5682e272cf58f1479a0ab716	471	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57d0097ccf58f145d627bfaf	60	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
56c1d9bbcf58f15c72c9075f	12	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
557ff66ee13823bc80ba2925	1312	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
558eb5d6e13823109f3ee517	332	Tamarisk mention	251.902	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b7c404e13823bd29ba8379	329	Green River mention	34.8525	58.4	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
559c3f39e138230816dad2ff	512	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
577ef8c7cf58f1ac737005ec	133	Diluted Bed			Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
574f1369cf58f10afd57189e	160	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b6269be1382314227cff85	1403	Kimmeridge Clay Formation	65.5	145.5		List of referees, list of contents, subject index and author index vol. 52, 1988	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90175-5
56c1ca03cf58f15c72c90620	73	Soledad Formation			Pueyo, Juan Jos[illegible] et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
558eb5d6e13823109f3ee517	774	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55ae4f4be13823763a830ada	293	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
579fe160cf58f15528a4466f	128	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
568315efcf58f1479a0ab9a9	306	Grassi Lakes mention			VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
54d899b7e138238471e803b7	134	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
58bc5274cf58f11f30c5c827	225	Dongying mention	23.03	33.9	Chen, Yong et al.	UV Raman spectroscopy of hydrocarbon-bearing inclusions in rock salt from the Dongying sag, eastern China	Organic Geochemistry		2016	Elsevier	10.1016/j.orggeochem.2016.08.010
55c2e5c8cf58f1a8110b8c08	160	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
570fe41dcf58f114a862267f	2	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
56919abacf58f146f20a4800	141	Tanker Safety Group				Author & subject index volume 13, 1982	Marine Pollution Bulletin		1982	Elsevier	10.1016/0025-326X(82)90448-9
57c8716ccf58f1429a42896c	402	TES mention			Glotch, Timothy D. et al.	Constraints on the composition and particle size of chloride salt-bearing deposits on Mars	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004921
5c3e6d6c1faed655488cd35a	137	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5508c83fe138238460c4f3ef	227	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
579fe160cf58f15528a4466f	116	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5682e272cf58f1479a0ab716	548	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b5b47ce1382314227cfdae	173	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5c3d9a5c1faed655488cc5a0	2	Francis Group	305.425	305.7125	da Costa Mello, Simone et al.	Response of tomato to polyhalite as a multi-nutrient fertilizer in southeast Brazil	Journal of Plant Nutrition	41	2018	Informa UK Limited	10.1080/01904167.2018.1497178
56831341cf58f1479a0ab983	204	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4328ce138239d86855aad	392	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5a048d65cf58f1b96402a09e	231	Black River Group	443.7	488.3	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
558df7d7e13823109f3ee082	2344	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
559c3f39e138230816dad2ff	514	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
56830ae3cf58f1479a0ab915	258	Prairie mention	383.95	389.1	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
558df7d7e13823109f3ee082	345	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5509217ee138238460c4f689	96	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55088ec0e138237a6f73918a	313	Carnallite mention			Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
56833ddfcf58f1479a0abbcc	217	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5a850dffcf58f13f065e41c5	246	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b4327de138239d868530d9	313	Green River Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5683006acf58f1479a0ab88f	289	Stassfurt mention			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
56831341cf58f1479a0ab983	204	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5503421ae1382326932d7e6d	512	Albert Formation	318.1	359.2	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55ae4f4be13823763a830ada	492	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b4328ce138239d86855aad	24	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
572cf1fccf58f13accaa0e61	92	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
550ab8aae138238460c4fe5e	155	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
56831341cf58f1479a0ab983	326	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55c2e5c8cf58f1a8110b8c08	56	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
578b8ab6cf58f1645f54f0c6	265	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5733004ccf58f1066ffdaeaa	87	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54b4325ae138239d8684ce96	187	Mamfe mention			Eseme, E. et al.	Geochemistry and genesis of brine emanations from Cretaceous strata of the Mamfe Basin, Cameroon	Journal of African Earth Sciences	35	2002	Elsevier	10.1016/S0899-5362(02)00171-9
54b4324be138239d8684a6bc	94	Louann Formation	145.5	199.6	Hay, William W. et al.	Evaporites and the salinity of the ocean during the Phanerozoic: Implications for climate, ocean circulation and life	Palaeogeography, Palaeoclimatology, Palaeoecology	240	2006	Elsevier	10.1016/j.palaeo.2006.03.044
5682e272cf58f1479a0ab716	2	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
58c18a99cf58f1a6ba4ea54d	119	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5ce2f9b20b45c76caf8ae21e	61	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b6d4bfe13823bd29ba7dc0	908	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
574f1369cf58f10afd57189e	149	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55ad3126e13823763a8303a0	133	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56f2f98bcf58f1892b30205d	146	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ry	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
58b6daf1cf58f11f2b0dde84	825	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
55f49f72cf58f16256a225dc	68	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
580b91b8cf58f14ba918ac36	184	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and “Cline” shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
55b73032e13823bd29ba8000	61	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
589a4380cf58f1ab398ea2c6	157	Phase Group	65.5	251	Naderi Peikam, Elahe and Jalali, Mohser	Application of inverse geochemical modelling for predicting surface water chemistry in Ekbatan watershed, Hamedan, western Iran	Hydrological Sciences Journal	61	2016	Taylor and Francis	10.1080/02626667.2015.1016947
57126f9fcf58f142fd277238	2	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5753de61cf58f152826f3b93	31	Prairie Evaporite Formation	385.3	397.5	Gendzwill, D. J. and Stead, D.	Rock mass characterization around Saskatchewan potash mine openings using geophysical techniques: a review	Canadian Geotechnical Journal	29	1992	Canadian Science Publishing	10.1139/t92-073
5a2b7516cf58f108104211ac	350	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43280e138239d8685381d	232	ll mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
5c27936e1faed655488aac90	45	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	A hydrohalite spring deposit in the Canadian high Arctic: A potential Mars analogue	Earth and Planetary Science Letters	504	2018	Elsevier	10.1016/j.epsl.2018.10.001
55b30ea3e138231cbdd6cfcd	1013	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
578bfa0bcf58f17fc5a016a6	91	Carter Limestone	460.9	471.8	Eastoe, Christopher J. et al.	Preliminary evidence for fractionation of stable chlorine isotopes in ore-forming hydrothermal systems	Geol	17	1989	GSA	10.1130/0091-7613(1989)017<0285:peffos>2.3.co;2
56833ddfcf58f1479a0abbcc	276	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54b4328ce138239d86855aad	380	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5713034ccf58f175a32a0111	76	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56c1d9bbcf58f15c72c9075f	104	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5710ec38cf58f171ccc3e9c8	468	Barcaliente Fm.			Gasparrini, M. et al.	Characterization of Dolomitizing Fluids in the Carboniferous of the Cantabrian Zone (NW Spain): A Fluid-Inclusion Study with Cryo-Raman Spectroscopy	Journal of Sedimentary Research	76	2006	Society for Sedimentary Geology	10.2110/jsr.2006.106
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578aea2bcf58f13920dc7baa	157	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
58c0712ccf58f14e47a6f092	340	Serpentina Group			Oliveira, Lucilia Aparecida Ramos de et a	Nature and evolution of fluids associated with specularite-bearing Fe and Au-PGE (Jacutinga) mineralization during the Brasiliano orogeny in the eastern São Francisco Craton, Minas Gerais, Brazil	Ore Geology Reviews		2017	Elsevier	10.1016/j.oregeorev.2017.02.017
5a850dffcf58f13f065e41c5	1	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57c19e14cf58f16bf61df64c	61	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54d4bb37e138238471e7f379	32	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
578f2c07cf58f19aabebdf04	286	San Andres Formation	251	299	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
55b6d4bfe13823bd29ba7dc0	203	Argillaceous Shale			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55a7c745e13823757cc70251	61	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
57c19e14cf58f16bf61df64c	155	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
579f1578cf58f1168e64ad7f	414	Dockum Group	199.6	251	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b39c73e138231cbdd6d2c1	937	Paradox mention	306	319.714	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
57126f9fcf58f142fd277238	283	Salina mention	419.675	429.4	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
56c1effacf58f15c72c9090b	425	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
5732032ecf58f19cbcbc550f	202	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
572cf900cf58f13d86a1bdc8	31	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43259e138239d8684ce14	104	DRC-Copperbelt Mines Group			Greyling, L.N. et al.	The nature of early basinal fluids in the Zambian Copperbelt: A case study from the Chambishi deposit	Journal of African Earth Sciences	42	2005	Elsevier	10.1016/j.jafrearsci.2005.08.002
57a43018cf58f11204e17fe0	471	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57c1b591cf58f173fefe15b4	198	Watts Bight Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
572cf900cf58f13d86a1bdc8	65	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
579fe160cf58f15528a4466f	151	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
58c18a43cf58f1a6ba4ea493	67	Parachute Creek Member	33.9	55.8	Tänavsuu-Milkeviciene, Kati et al.	Depositional Cycles and Sequences In An Organic-Rich Lake Basin: Eocene Green River Formation, Lake Uinta, Colorado and Utah, U.S.A.	Journal of Sedimentary Research	87	2017	Society for Sedimentary Geology	10.2110/jsr.2017.11
58c8ed8ccf58f1a71217fb6b	193	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
579aae1bcf58f112b1fd775d	62	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
57c19a96cf58f16ab04df2f3	196	Athabasca mention	538.8	1600	Richard, A. et al.	Synchrotron XRF and XANES investigation of uranium speciation and element distribution in fluid inclusions from unconformity-related uranium deposits	Geofluids	13	2013	Wiley	10.1111/gfl.12009
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54e97acfe138237cc915120b	29	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
578fb2c8cf58f1bdcd2df236	258	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54b4328ce138239d86855aad	326	Salt mention	251	260.4	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54be1b30e138233c8bc4f9d7	110	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
57474ebdcf58f1b6f0394e11	11	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
572cf1fccf58f13accaa0e61	342	Nippewalla Group	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55c01a9ecf58f16e99a37305	396	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5c319a241faed655488b9bcc	158	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55baa3b5e1382373b63b89e7	96	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
57c1ac2dcf58f170d60ea565	519	Qusaiba Hot Shale			Klyukin, Yu. I. et al.	Effect of salinity on mass and energy transport by hydrothermal fluids based on the physical and thermodynamic properties of H 2 O-NaCl	Geofluids	16	2016	Wiley	10.1111/gfl.12181
5c3185b21faed655488b9982	12	Jialingjiang Formation	245	251	ZHONG, Jia'ai et al.	The Discovery of Deep Potassium and Lithium Resources in the Huangjinkou Anticline, Northeast of Sichuan	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13615
54d0272be13823b501cdbc75	49	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
5c3e6d6c1faed655488cd35a	315	Larne Halite Member			Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
578aea2bcf58f13920dc7baa	155	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
54fb3438e138239936c6d321	142	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55a6d3f3e13823757cc6fc08	211	Wilkins Peak Member	33.9	55.8	Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
559712a9e1382390cc6405c9	65	Slave Point mention	380.075	384.575	Lonnee, Jeff and Machel, Hans G.	Mixing of halite brines with meteoric water in the Clarke Lake gas field, Canada	Journal of Geochemical Exploration	89	2006	Elsevier	10.1016/j.gexplo.2005.11.055

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56833ddfcf58f1479a0abbcc	129	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55ad3126e13823763a8303a0	208	Rustler mention	253.9652	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5b199d0dcf58f13e9d9dc48e	331	Cobar mention	407.6	427.4	Seccombe, P. K. et al.	Sulfur isotope and fluid inclusion geochemistry of metamorphic Cu–Au vein deposits, central Cobar area, NSW, Australia	Australian Journal of Earth Sciences	64	2017	Informa UK Limited	10.1080/08120099.2017.1297330
56de7f80cf58f18eca0d2b65	229	End-Member Librarya Group			Baldridge, Alice M.	Mars remote-sensing analog studies in the Badwater Basin, Death Valley, California	Journal of Geophysical Research	109	2004	Wiley-Blackwell	10.1029/2004JE002315
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55ad3126e13823763a8303a0	170	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56830ae3cf58f1479a0ab915	254	Leofnard mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b31289e138231cbdd6cfe3	138	Supai Formation	251	299	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
55911c4ee13823109f3ef407	926	Parachute Creek Member	33.9	55.8	Robson, S. G. and Saulnier, G. J., Jr.	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Professional Paper		1981	United States Geological Survey	
55c0f018cf58f16e99a3799f	30	Salado Formation	251	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate ($Mg_3Cl(OH)_5{\cdot}4H_2O$, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
5731ac74cf58f18e0ffaff50	71	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
57320459cf58f19ced0f7bc5	79	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55c2f612cf58f1a8110b8c8d	344	Grammajukka Formation	488.3	542	Kendrick, M.A. et al.	Noble gas and halogen evidence for the origin of Scandinavian sandstone-hosted Pb-Zn deposits	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.05.045
55b365b1e138231cbdd6d18f	1279	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
5682e272cf58f1479a0ab716	3	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b31289e138231cbdd6cfe3	591	Verde Formation	5.332	23.03	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
558b2c2be13823109f3ed1ee	231	MA LMIO Sijes Fm			Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
574c1c0bcf58f1957a2a36f7	224	Clover Hill Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5731ac74cf58f18e0ffaff50	381	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
558cbceae13823109f3eda41	17	Kaibab Formation	270.6	299	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55af1c5ce13823763a830fe9	445	Culebra Dolomite	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55989b6ce1382390cc640e7d	275	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579aae1bcf58f112b1fd775d	19	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
57c19e14cf58f16bf61df64c	60	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5502c2cae1382326932d7ae8	278	Solfifera Formation			Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
54d4bb37e138238471e7f379	362	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56833ddfcf58f1479a0abbcc	37	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c02636cf58f16e99a37363	220	Lansing Group	302.5	306	Wojcik, Krzysztof M. et al.	History of diagenetic fluids in a distant foreland area, Middle and Upper Pennsylvanian, Cherokee basin, Kansas, USA: Fluid inclusion evidence	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90580-0
5682e3a8cf58f1479a0ab727	345	Prairie Formation	359.2	416	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
5682e272cf58f1479a0ab716	179	Salado Formation	251	260.4	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c0d379cf58f16e99a378b9	55	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
557b6c66e138239225f863ff	575	See mention			Sanford, Samuel and Stone, Ralph Walte	Useful minerals of the United States	Bulletin		1914	United States Geological Survey	10.3133/b585
5736d8aecf58f1a5bde13e12	79	Magnesite Quartz Dolomite			Jordan, P. G. et al.	Gypsum-anhydrite differentiation by SEM using the back-scattered electron-signal	Journal of Sedimentary Research	61	1991	Society for Sedimentary Geology	10.1306/d426777b-2b26-11d7-8648000102c1865d
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5631a8d9cf58f10c477fe6a8	370	Athabasca mention	538.8	1600	Richard, Antonin et al.	An evaporated seawater origin for the ore-forming brines in unconformity-related uranium deposits (Athabasca Basin, Canada): Cl/Br and δ37Cl analysis of fluid inclusions	Geochimica et Cosmochimica Acta	75	2011	Elsevier	10.1016/j.gca.2011.02.026
57a43018cf58f11204e17fe0	429	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5753f377cf58f159e9b156db	91	Prairie Evaporite Formation	385.3	397.5	Stimpson, B. and Chen, Rui	Measurement of rock elastic moduli in tension and in compression and its practical significance	Canadian Geotechnical Journal	30	1993	Canadian Science Publishing	10.1139/t93-028
54c060fbe1382389c54c3757	158	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54b4328de138239d86855c5f	314	Green River Formation	33.9	55.8	Wells, Neil A. et al.	Quantitative evaluation of color measurements II. Analysis of Munsell color values from the Colton and Green River Formations (Eocene, central Utah)	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(01)00205-6
54fb03c7e138239936c6d1e1	477	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
57d0097ccf58f145d627bfaf	61	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
559d4d6ee138230816dad784	111	Vaca Triste Sandstone	251.902	273.01	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
56c1a95dcf58f15c72c903aa	223	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558cbceae13823109f3eda41	214	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
57c1b591cf58f173fefe15b4	198	Watts Bight Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
55933fbae138236ee2218347	35	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
579f1578cf58f1168e64ad7f	147	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
58b65c8fcf58f1b2fdd8b58a	433	Salina Group	416	443.7	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
58d03bf3cf58f138516d1200	143	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d5f9cf58f15c72c90717	12	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55baa3b5e1382373b63b89e7	148	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b6d4bfe13823bd29ba7dc0	451	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57bedb9ccf58f13bf01999e9	352	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55b6d4bfe13823bd29ba7dc0	1229	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54fb3438e138239936c6d321	161	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55baa3b5e1382373b63b89e7	199	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
578fb2c8cf58f1bdcd2df236	289	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
57ec2c0ccf58f1b2e49c880d	52	Cow Ridge Member	33.9	56	UU-MILKEVICIENE, KATI and FREDERICK	Evolution of an organic-rich lake basin - stratigraphy, climate and tectonics: Piceance Creek basin, Eocene Green River Formation	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2012.01324.x
558df7d7e13823109f3ee082	1171	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
57a43018cf58f11204e17fe0	763	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
577c41d6cf58f188cebdd1fb	270	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55c36968cf58f1a8110b9014	413	Salina Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
57c19e14cf58f16bf61df64c	194	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55bfc14ecf58f16e99a3703b	365	Haynesville Formation	150.8	155.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
59f0f47fcf58f1513fedad00	81	Red Formation	23.03	33.9	airapetian, Vachik and Pelckmans, Herw	Emerging Mineral Finds from Northern Iran	Rocks & Minerals	92	2017	Informa UK Limited	10.1080/00357529.2017.1308796
55f49f72cf58f16256a225dc	128	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
56831341cf58f1479a0ab983	491	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b6d4bfe13823bd29ba7dc0	53	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1602	Paradox mention	306	319.714	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54fc8912e138239936c6dc7a	205	Castile Formation	253.8	260.4	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
55a6d3f3e13823757cc6fc08	363	Quartz Dolomite			Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	191	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55c2e5c8cf58f1a8110b8c08	49	San Andres mention	150.6	154.8	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
557bfbc7e138239225f86664	646	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f49f72cf58f16256a225dc	152	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
572ecdb4cf58f1177819e19e	3	Zechstein mention	251.902	273.01	Tadeusz Marek Peryt (1) and Federico C	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
559c3f39e138230816dad2ff	155	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55ae4f4be13823763a830ada	289	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
558de819e13823109f3ee023	1724	Green River Formation	33.9	55.8		Journal of Research of the U. S. Geological Survey, 1977, volume 5, issue 2			1977	United States Geological Survey	10.3133/70007419
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5598d566e1382390cc640f84	179	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
57c19e14cf58f16bf61df64c	216	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
574fae1acf58f142f8fdc4f8	47	Prairie Evaporite mention	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
55b30ea3e138231cbdd6cfcd	2015	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	319	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5a3dff46cf58f12be0bde56e	45	Oligocene-Miocene Zaragoza Formation			Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
54b4328ae138239d86855597	186	Alpine Haselgebirge Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
57611ef6cf58f130993e9b1a	184	Vernon Formation	422.3667	424.1	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
57a3dceccf58f1b8b5b032b5	371	San Andres Formation	251	299	Kiro, Yael et al.	Environmental implications of salt facies in the Dead Sea	Geological Society of America Bulletin	128	2015	Geological Society of America	10.1130/b31357.1
57c19e14cf58f16bf61df64c	61	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
550901a3e138238460c4f59b	106	Cardona Fm.			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
57126a16cf58f140fa5c33f2	20	Brittle Bed			Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
572cf900cf58f13d86a1bdc8	243	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
56c1d5f9cf58f15c72c90717	137	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55a470efe13823757cc6f241	34	Green River Formation	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
54b4327ee138239d86853305	103	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5508c83fe138238460c4f3ef	224	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
55b3dfb4e138231cbdd6d442	6500	Pinnacle Overlook Member	324.734	327.1333	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
54d899b7e138238471e803b7	134	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
56c1a95dcf58f15c72c903aa	798	Prairie Evaporite Formation	385.3	397.5	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55ad3126e13823763a8303a0	112	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b78281e13823bd29ba8218	1941	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
575019eacf58f1696f3ea50a	29	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55bfc14ecf58f16e99a3703b	237	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
579f1578cf58f1168e64ad7f	63	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5682e272cf58f1479a0ab716	497	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
59aefb59cf58f1acd5671b26	238	Bassanite mention			Gazulla, M. F. et al.	Chemical characterisation by WD-XRF and XRD of silicon carbide-based grinding tools	X-Ray Spectrometry	39	2010	Wiley-Blackwell	10.1002/xrs.1258
54b43277e138239d86851f14	146	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
5713034ccf58f175a32a0111	333	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5732032ecf58f19cbcbc550f	283	Salado mention	256.0278	262.2168	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4327be138239d86852c99	433	Zechstein mention	251.902	273.01	Cartwright, Joe et al.	Salt dissolution and salt-related deformation of the Forth Approaches Basin, UK North Sea	Marine and Petroleum Geology	18	2001	Elsevier	10.1016/S0264-8172(01)00019-8
55b6218fe1382314227cff72	232	Prairie Evaporite Formation	385.3	397.5	Moretto, Robert	Observations on the incorporation of trace elements in halite of Oligocene salt beds, Bourg-en-Bresse Basin, France	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90148-2
57303a24cf58f152220766cf	143	Castile Formation	253.8	260.4	David J. J. Kinsman	Evaporites: Relative Humidity Control of Primary Mineral Facies	SEPM Journal of Sedimentary Research	Vol. 46	1976	SEPM	10.1306/212f6f37-2b24-11d7-8648000102c1865d
55b64a4de1382314227d0039	318	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b77fd5e1382373b63b7cce	195	Louann mention	145	174.7	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
55c0d379cf58f16e99a378b9	267	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55a82328e13823757cc7049a	1717	Dakota mention	98.85	119.3	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
54b4328ce138239d86855aad	74	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56c1a95dcf58f15c72c903aa	389	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5a850dffcf58f13f065e41c5	230	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b35463e138231cbdd6d13e	1197	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
57a43018cf58f11204e17fe0	279	LAKE MEAD REGION Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
574ee6e1cf58f1ba70939d9f	46	Windsor Group	318.1	359.2	Roberts, Wyn and Williams, Paul F.	Evidence for early Mesozoic extensional faulting in Carboniferous rocks, southern New Brunswick, Canada	Canadian Journal of Earth Sciences	30	1993	Canadian Science Publishing	10.1139/e93-113
572cf900cf58f13d86a1bdc8	237	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
550901a3e138238460c4f59b	241	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55c2e5c8cf58f1a8110b8c08	87	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55adfa4be13823763a8308b1	44	Paradox Member	299	318.1	Hite, R. J.	A potential target for potash solution mining in Cycle 13, Paradox Member, near Moab, Utah	Open-File Report		1976	United States Geological Survey	10.3133/ofr76755

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
556ad495e1382382d70d0139	60	US GOFS Working Group			Hargrave, B.T et al.	Seasonal and spatial patterns in mass and organic matter sedimentation in the North Water	Deep Sea Research Part II: Topical Studies in Oceanography	49	2002	Elsevier	10.1016/S0967-0645(02)00187-X
57a43018cf58f11204e17fe0	586	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b70b93e1382373b63b7aed	138	Salado Fm.	251	260.4	Knauth, L.Paul and Beeunas, Mark A.	Isotope geochemistry of fluid inclusions in Permian halite with implications for the isotopic history of ocean water and the origin of saline formation waters	Geochimica et Cosmochimica Acta	50	1986	Elsevier	10.1016/0016-7037(86)90195-X
55b3d511e138231cbdd6d40e	228	Weber Sandstone	270.6	299	Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
57c1a06bcf58f16cbd621551	275	Sdom mention	-5.5012E-05	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
574f1369cf58f10afd57189e	199	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
574f1369cf58f10afd57189e	199	Prairie Evaporite Formation	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55ae0df7e13823763a830928	1357	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
557b8fc7e138239225f86492	516	Harmony Formation	488.3	501	Gostyayeva, N. M. et al.	Implications of the fluid-inclusion motions in the Elder Creek porphyry copper system, Battle Mountain Mining District, Nevada	Open-File Report		1996	United States Geological Survey	
55b64a4de1382314227d0039	20	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55c0d379cf58f16e99a378b9	105	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c0d379cf58f16e99a378b9	90	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5c3e6d6c1faed655488cd35a	149	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
54be7fc1e13823299564b0b3	224	Salado Formation	251	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
5733004ccf58f1066ffdaeaa	155	Halite Group	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5731ac74cf58f18e0ffaff50	70	Salado mention	256.0278	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
55ad3126e13823763a8303a0	133	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55baa3b5e1382373b63b89e7	99	Dead Sea mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c48dc6cf58f1a8110b94db	98	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
55c35bc5cf58f1a8110b8fcc	147	Salado Formation	251	260.4	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
579f1578cf58f1168e64ad7f	214	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
5682e272cf58f1479a0ab716	19	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c01a9ecf58f16e99a37305	577	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
58bfe48bcf58f113393dbc03	253	Calcite Dolomite			Gil-Márquez, J.M. et al.	Hydrological and geochemical processes constraining groundwater salinity in wetland areas related to evaporitic (karst) systems. A case study from Southern Spain	Journal of Hydrology		2017	Elsevier	10.1016/j.jhydrol.2016.11.062

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
570fe41dcf58f114a862267f	173	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b2b633e138231cbdd6cdf4	68	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
57611ef6cf58f130993e9b1a	184	Vernon Formation	422.3667	424.1	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
5713034ccf58f175a32a0111	313	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57320459cf58f19ced0f7bc5	292	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
579fe160cf58f15528a4466f	363	Prairie Evaporite Formation	385.3	397.5	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
557cd3cfe138239225f869e5	3293	Dakota mention	98.85	119.3	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
579aae1bcf58f112b1fd775d	103	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54b4324de138239d8684aa17	284	Serrata Fm			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55c01a9ecf58f16e99a37305	397	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55c2e5c8cf58f1a8110b8c08	100	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
590762a7cf58f18fc090d7b2	145	Wabash Formation	419.2	427.4	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b4327de138239d868530d9	66	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
577c41d6cf58f188cebdd1fb	229	Second Red Bed			WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55b365b1e138231cbdd6d18f	791	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
579aae1bcf58f112b1fd775d	2	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55ccaaf9cf58f190b49048ab	238	Cobourg Formation	449.75	451.4025	Al, Tom A. et al.	Geochemical evolution and residence time of porewater in low-permeability rocks of the Michigan Basin, Southwest Ontario	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.03.005
55b64a4de1382314227d0039	352	SaJado Formation			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55c01a9ecf58f16e99a37305	388	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54d899b7e138238471e803b7	141	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54e733ace138237cc9150889	483	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
57126f9fcf58f142fd277238	181	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
54b4324de138239d8684aa17	91	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5a2b7516cf58f108104211ac	134	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
56c1e5e7cf58f15c72c90847	20	Brunswick Formation	0.0117	0.129	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
5c3e6d6c1faed655488cd35a	321	Nippewalla Group	251	299	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
579aae1bcf58f112b1fd775d	29	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55b8484be13823bd29ba869d	330	Honaker Trail Formation	299	318.1	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	588	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5733004ccf58f1066ffdaeaa	387	Evaporite Group			C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
572cf900cf58f13d86a1bdc8	224	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
56831341cf58f1479a0ab983	204	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b67d1ae1382373b63b7852	1235	Petroleum Clay Formation				List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
56831341cf58f1479a0ab983	175	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
579ed180cf58f1030df9c51e	238	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
54d899b7e138238471e803b7	20	Angara Formation	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54be1b30e138233c8bc4f9d7	71	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
557c738ee138239225f8685b	201	Castile Formation	253.8	260.4	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
55ae4f4be13823763a830ada	279	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
579fe160cf58f15528a4466f	18	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55c35bc5cf58f1a8110b8fcc	459	Salina Group	416	443.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
54b4328de138239d86855c7b	113	Salado Formation	251	260.4	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
5713034ccf58f175a32a0111	211	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54b4328de138239d86855ceb	90	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5ab90b76cf58f15ad7d7cedf	501	Saint-Ouen Limestone			Lettéron, Alexandre et al.	Reconstruction of a saline, lacustrine carbonate system (Priabonian, St-Chaptes Basin, SE France): Depositional models, paleogeographic and paleoclimatic implications	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2017.12.023
55c48dc6cf58f1a8110b94db	157	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
56e353e7cf58f16de8a2e1bf	387	Minas Viejas mention			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
5674a234cf58f12215607647	142	Volterra Formation			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
578aea2bcf58f13920dc7baa	15	Andres mention			DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5682e272cf58f1479a0ab716	351	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
574f1369cf58f10afd57189e	390	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5682e272cf58f1479a0ab716	25	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.902	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
56a46596cf58f1944252b800	322	Burns Formation	23.03	33.9	Glotch, Timothy D. et al.	Mineralogy of the light-toned outcrop at Meridiani Planum as seen by the Miniature Thermal Emission Spectrometer and implications for its formation	Journal of Geophysical Research	111	2006	Wiley-Blackwell	10.1029/2005JE002672

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
56c1d8a6cf58f15c72c9073f	50	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b43247e138239d86849b52	186	Cayara Fm	45.6	53.95	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54b4324de138239d8684aa17	241	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
550895c3e138237a6f7391ae	172	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
57126f9fcf58f142fd277238	188	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5c3f2b2b1faed655488ce2aa	114	Haselgebirge Formation	245	251	Muñoz	Structural styles in fold-and-thrust belts involving early salt structures: The Northern Calcareous Alps (Austria)	Geology	47	2018	Geological Society of America	10.1130/g45281.1
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56833ddfcf58f1479a0abbcc	34	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
58d05f41cf58f143d83df312	365	Observatory Hill Formation	511	538.8	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
550895c3e138237a6f7391ae	304	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54bffee9e1382389c54c3458	349	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
5c95cba74e85ba2e7cc05ac9	360	Berea mention	358.9	372.2	Farooq, Umer et al.	Surface Characterization of Model, Outcrop, and Reservoir Samples in Low Salinity Aqueous Solutions	Journal of Dispersion Science and Technology	32		Informa UK Limited	10.1080/01932691003756936
55c01a9ecf58f16e99a37305	501	Tamarisk mention	251.902	273.01	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
56c1d9bbcf58f15c72c9075f	269	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
57a43018cf58f11204e17fe0	534	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57611ef6cf58f130993e9b1a	99	Williamsville Formation	419.2	427.4	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
56c1d5f9cf58f15c72c90717	2	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
54bffee9e1382389c54c3458	6	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
56a09737cf58f1079fd4c143	256	Red Bed	100.5	145	DAVIS, J. L. and ANNAN, A. P.	GROUND-PENETRATING RADAR FOR HIGH-RESOLUTION MAPPING OF SOIL AND ROCK STRATIGRAPHY1	Geophysical Prospecting	37	1989	Wiley-Blackwell	10.1111/j.1365-2478.1989.tb02221.x
56830b14cf58f1479a0ab918	559	Sorbas mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5683006acf58f1479a0ab88f	65	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
57c91310cf58f17b7ba8638b	116	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
54f96e27e138239936c6c797	49	Cardona Formation			Miralles, L et al.	3-D rock salt fabrics in a shear zone (Súria Anticline, South-Pyrenees)	Journal of Structural Geology	23	2001	Elsevier	10.1016/S0191-8141(00)00138-3
558b2c2be13823109f3ed1ee	452	Horse Spring Fm	5.332	23.03	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
572cf900cf58f13d86a1bdc8	1	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2fd7d01faed655488b6a6c	7	Beitashan Formation	385.3	397.5	Chen, Huayong et al.	Mineralization and ore genesis of the Qiaoxiahala Fe-Cu-(Au) deposit in the northern margin of East Junggar terrane, Central Asian Orogenic Belt: Constraints from fluid inclusions and stable isotopes	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.03.014
54b4328de138239d86855de1	84	Tikorangi Formation	23.03	33.9	Hood, Steven D. et al.	Burial dolomitisation in a non-tropical carbonate petroleum reservoir: the Oligocene Tikorangi Formation, Taranaki Basin, New Zealand	Sedimentary Geology	172	2004	Elsevier	10.1016/j.sedgeo.2004.08.005
56c1ca03cf58f15c72c90620	253	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55f49f72cf58f16256a225dc	124	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
559712a9e1382390cc6405c9	2	Slave Point Formation	385.3	397.5	Lonnee, Jeff and Machel, Hans G.	Mixing of halite brines with meteoric water in the Clarke Lake gas field, Canada	Journal of Geochemical Exploration	89	2006	Elsevier	10.1016/j.gexplo.2005.11.055
55c0d379cf58f16e99a378b9	188	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c01a9ecf58f16e99a37305	434	Culebra Dolomite	251	299	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b43246e138239d86849721	198	Culpeper mention	184.2	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
5c19917d1faed655488915e2	393	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1a95dcf58f15c72c903aa	226	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5a21053ecf58f18a3170d1ed	231	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
550dedb5e1382369a6f93ba1	58	Calatayud Gypsum Formation			Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
574f1369cf58f10afd57189e	283	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b2fbc8e138231cbdd6cf62	2226	Battleground Formation	538.8	1000	Gair, J. E.	Mineral resources of the Charlotte 1 degree by 2 degrees Quadrangle, North Carolina and South Carolina	Professional Paper		1989	United States Geological Survey	10.3133/pp1462
57177ecdcf58f1637fb099ed	191	Midco mention			Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
5a2f778acf58f10a775a37f3	84	Longares Formation			Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
572cdcd7cf58f132e707a2d9	222	Azougui Formation			Taylor, Cliff D. and Giles, Stuart A.	Mineral potential for sediment-hosted copper deposits in the Islamic Republic of Mauritania (phase V, deliverable 75): Chapter K in Second projet de renforcement institutionnel du secteur minier de la République Islamique de Mauritanie (PRISM-II)	Open-File Report		2015	USGS	
579fe160cf58f15528a4466f	288	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b7869fe13823bd29ba8231	1288	Salado Formation	251	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a6899fe13823757cc6fa50	809	Coal mention	251	260.4	Finkelman, Robert B.	Modes of occurrence of trace elements in coal	Open-File Report		1981	United States Geological Survey	10.3133/ofr8199
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55c36968cf58f1a8110b9014	58	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55c48dc6cf58f1a8110b94db	63	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5682e3a8cf58f1479a0ab727	180	Prairie mention	383.95	389.1	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558eb5d6e13823109f3ee517	422	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54d899b7e138238471e803b7	141	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54fae770e138239936c6d10b	203	Castile Formation	253.8	260.4	Raab, M. and Spiro, B.	Sulfur isotopic variations during seawater evaporation with fractional crystallization	Chemical Geology: Isotope Geoscience section	86	1991	Elsevier	10.1016/0168-9622(91)90014-N
55c35bc5cf58f1a8110b8fcc	164	Salado mention	256.0278	262.2168	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
5508d3cde138238460c4f445	11	Sdom mention	-5.5012E-05	23.03	Stiller, Mariana et al.	Cl-37 in the Dead Sea system---preliminary results	Applied Geochemistry	13	1998	Elsevier	10.1016/S0883-2927(98)00017-1
58c18a99cf58f1a6ba4ea54d	61	Sedom mention	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5a0493edcf58f1b96402aae7	325	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c0d379cf58f16e99a378b9	136	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54e733ace138237cc9150889	514	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
574c1c0bcf58f1957a2a36f7	241	Windsor Group	318.1	359.2	Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5683006acf58f1479a0ab88f	65	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
579f1578cf58f1168e64ad7f	63	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57a43018cf58f11204e17fe0	685	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4327de138239d868530d9	66	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
550b6ce8e1382369a6f9311e	185	Cadjebut mention	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55b3dfb4e138231cbdd6d442	907	Pinnacle Overlook Member	324.734	327.1333	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
57a43018cf58f11204e17fe0	769	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55a7c745e13823757cc70251	139	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
56c1ca03cf58f15c72c90620	170	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b75831e13823bd29ba8108	3685	Harmony Formation	488.3	501	Edited by Scott, Richard W., Jr. et al.	Advances related to United States and international mineral resources; developing frameworks and exploration technologies	Bulletin		1993	United States Geological Survey	
54e733ace138237cc9150889	394	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5674a234cf58f12215607647	345	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
55c0d379cf58f16e99a378b9	496	Salina Group	416	443.7	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5674a234cf58f12215607647	326	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
54c060fbe1382389c54c3757	334	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5c1d9b0c1faed65548898c42	659	Glaxo Group				Communications	British Journal of Pharmacology	91	1987	Wiley-Blackwell	10.1111/j.1476-5381.1987.tb16271.x
54fb3438e138239936c6d321	178	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5598a5fce1382390cc640eb8	293	Cobar mention	407.6	427.4	Giles, Alan D and Marshall, Brian	Genetic significance of fluid inclusions in the CSA Cu–Pb–Zn deposit, Cobar, Australia	Ore Geology Reviews	24	2004	Elsevier	10.1016/j.oregeorev.2003.05.003
55ad3126e13823763a8303a0	163	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54bffee9e1382389c54c3458	252	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b7869fe13823bd29ba8231	1277	Salado Formation	251	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558eb5d6e13823109f3ee517	259	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b6dc28e13823bd29ba7dec	868	See mention			Schrader, Frank Charles et al.	Useful minerals of the United States	Bulletin		1917	United States Geological Survey	10.3133/b624
55c2a9cacf58f1a8110b8a1e	77	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54fb03c7e138239936c6d1e1	231	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
5a0493edcf58f1b96402aae7	361	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
570fe41dcf58f114a862267f	230	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b78281e13823bd29ba8218	1941	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
558eb5d6e13823109f3ee517	188	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
579f5bc9cf58f12a53c41a24	217	Ponda Formation			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55c01a9ecf58f16e99a37305	353	Culebra mention	251	299	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
572cdf45cf58f133c4f9d591	739	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
5506a9ebe1382326932d924e	330	Samra Fm			Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
54b43247e138239d86849b52	331	El Molino Fm	61.6	70.1938	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55986e49e1382390cc640d84	186	Kamoto mention			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
55c2e5c8cf58f1a8110b8c08	171	Zechstein Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
579fe160cf58f15528a4466f	176	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5682e3a8cf58f1479a0ab727	345	Prairie Formation	359.2	416	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
57126a16cf58f140fa5c33f2	153	Permo-Scythian Haselgebirge Formation			Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55989b6ce1382390cc640e7d	3	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c6237091faed65548958f65	35	Soligorsk Formation	359.2	385.3	Plax, Dmitry P. et al.	A new genus of eurypterid (Chelicerata, Eurypterida) from the Upper Devonian salt deposits of Belarus	Journal of Paleontology	92	2018	Cambridge University Press (CUP)	10.1017/jpa.2018.11
55c0d379cf58f16e99a378b9	154	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5787e5f1cf58f1ba1190c99a	135	Lucas Formation	385.3	397.5	RICKARD, LAWRENCE V.	Correlation of the subsurface Lower and Middle Devonian of the Lake Erie region	Geol Soc America Bull	95	1984	GSA	10.1130/0016-7606(1984)95<814:cotsla>2.0.co;2
5508c83fe138238460c4f3ef	194	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
57c19a8fcf58f16ab04df2e5	592	Qusaiba Hot Shale			Karmanocky, F. J. and Benison, K. C.	A fluid inclusion record of magmatic/hydrothermal pulses in acid Salar Ignorado gypsum, northern Chile	Geofluids	16	2016	Wiley	10.1111/gfl.12171
5713034ccf58f175a32a0111	179	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56f2f98bcf58f1892b30205d	199	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ry	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
56c1a95dcf58f15c72c903aa	223	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558cbceae13823109f3eda41	214	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
5d3f58060b45c76cafa2004f	204	Rotliegend mention	251	299	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
578fb2c8cf58f1bdcd2df236	359	Seven Rivers Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
57a43018cf58f11204e17fe0	759	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
572cf900cf58f13d86a1bdc8	43	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54c060fbe1382389c54c3757	343	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57126f9fcf58f142fd277238	25	Salina Formation	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5c27936e1faed655488aac90	45	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	A hydrohalite spring deposit in the Canadian high Arctic: A potential Mars analogue	Earth and Planetary Science Letters	504	2018	Elsevier	10.1016/j.epsl.2018.10.001
54fb51c0e138239936c6d400	265	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
550dedb5e1382369a6f93ba1	3	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
55990036e1382390cc641074	157	Uragen mention			Xue, Chunji et al.	Geology, geochemistry and genesis of the Cretaceous and Paleocene sandstone- and conglomerate-hosted Uragen Zn–Pb deposit, Xinjiang, China: A review	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.06.005
55b67d1ae1382373b63b7852	1233	Salado Formation	251	260.4		List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1a95dcf58f15c72c903aa	465	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
579fe160cf58f15528a4466f	18	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
578b8ab6cf58f1645f54f0c6	50	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55f49f72cf58f16256a225dc	124	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
5713034ccf58f175a32a0111	123	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56c1a95dcf58f15c72c903aa	437	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55c03cd3cf58f16e99a37419	60	LUtite Sandstone			Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K
54fb3438e138239936c6d321	33	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5733004ccf58f1066ffdaeaa	163	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55c0d379cf58f16e99a378b9	258	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b43281e138239d86853bfd	163	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
570fe41dcf58f114a862267f	35	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55c0d379cf58f16e99a378b9	41	Castile Formation	253.8	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1202	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c01a9ecf58f16e99a37305	353	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b35463e138231cbdd6d13e	130	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
557bfbc7e138239225f86664	270	Halite Anhydrite Calcite Dolomite			Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
558eb5d6e13823109f3ee517	312	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b4328ae138239d8685555a	94	Pythagorion Formation			Stamatakis, M.G. et al.	Geochemistry and diagenesis of Miocene lacustrine siliceous sedimentary and pyroclastic rocks, Mytilinii basin, Samos Island, Greece	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90084-5
57a3d5e1cf58f1b6afc43ebc	2	Green River Formation	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
55986cdae1382390cc640d7c	569	II mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
56c03a7dcf58f15c72c8e84f	186	Furnace Creek Formation	1.806	5.332	Crowley, James K. and Hook, Simon J.	Mapping playa evaporite minerals and associated sediments in Death Valley, California, with multispectral thermal infrared images	Journal of Geophysical Research: Solid Earth	101	1996	Wiley-Blackwell	10.1029/95JB02813
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
56833ddfcf58f1479a0abbcc	87	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
56833ddfcf58f1479a0abbcc	278	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
577bca4acf58f1538dda98fd	187	Prairie Evaporitc Formation			WARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5c319a241faed655488b9bcc	129	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
56b99311cf58f14c238d4bdc	302	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
55986cdae1382390cc640d7c	481	II mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c19e14cf58f16bf61df64c	229	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55c0d379cf58f16e99a378b9	146	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5a850dffcf58f13f065e41c5	275	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55b35463e138231cbdd6d13e	1062	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
54e733ace138237cc9150889	124	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55b78281e13823bd29ba8218	1944	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54fb3438e138239936c6d321	93	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55986e49e1382390cc640d84	170	S.D.B. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
55c0d379cf58f16e99a378b9	281	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
56831341cf58f1479a0ab983	251	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
578b8ab6cf58f1645f54f0c6	270	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
579fe160cf58f15528a4466f	209	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55986e49e1382390cc640d84	132	Kamoto mention			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
5598d566e1382390cc640f84	170	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5503421ae1382326932d7e6d	1452	Prairie mention	383.95	389.1	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5c3185b21faed655488b9982	12	Jialingjiang Formation	245	251	ZHONG, Jia'ai et al.	The Discovery of Deep Potassium and Lithium Resources in the Huangjinkou Anticline, Northeast of Sichuan	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13615
54e733ace138237cc9150889	324	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5713034ccf58f175a32a0111	260	Potash Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
573090ddcf58f160029e9d90	126	Salado Formation	251	260.4	ennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
57320459cf58f19ced0f7bc5	79	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55c0d379cf58f16e99a378b9	345	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5733004ccf58f1066ffdaeaa	148	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b54e9de1382314227cfc23	107	Sahna Group				List of referees, list of contents, subject index and author index volume 54, 1990	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90315-C
55b39203e138231cbdd6d283	1219	Green River Formation	33.9	55.8	Hosteman, J.W. et al.	World nonbauxite aluminum resources excluding alunite	Professional Paper		1990	United States Geological Survey	10.3133/pp1076C
574f1369cf58f10afd57189e	199	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
56c1a95dcf58f15c72c903aa	420	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
550901a3e138238460c4f59b	130	Guendulain Fm.	199.6	251	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
579f1578cf58f1168e64ad7f	163	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57c19e14cf58f16bf61df64c	229	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55b5b776e1382314227cfdc2	702	Arbuckle Group	471.8	488.3		Geochimica et Cosmochimica Acta List of Referees, List of Contents, Subject Index, and Author Index	Geochimica et Cosmochimica Acta		1990	Elsevier	10.1016/0016-7037(90)90256-K
550895c3e138237a6f7391ae	191	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
550889f7e138237a6f739166	142	Alum Shale	488.3	501		Contents of Volume 3, 1988	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90100-X

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55c2e5c8cf58f1a8110b8c08	150	Salado mention	256.0278	262.2168	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
559c3f39e138230816dad2ff	508	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
557b436fe138239225f86325	2148	GEOCHEMISTRY mention			Roedder, Edwin	Composition of fluid inclusions	Professional Paper		1972	United States Geological Survey	10.3133/pp440JJ
57a1b61ecf58f1154eb55fb9	67	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
57126f9fcf58f142fd277238	299	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5b6d936dcf58f1a92c2d33b5	129	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
578fb2c8cf58f1bdcd2df236	276	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
579aae1bcf58f112b1fd775d	89	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5a850dffcf58f13f065e41c5	81	Lot Mbr	538.8	4000	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
56a03836cf58f1079fd4ba0b	116	Sphalerite Dolomite			GLEESON, S. A. and TURNER, W. A.	Fluid inclusion constraints on the origin of the brines responsible for Pb?Zn mineralization at Pine Point and coarse non-saddle and saddle dolomite formation in southern Northwest Territories	Geofluids	7	2007	Wiley-Blackwell	10.1111/j.1468-8123.2006.00160.x
55b82002e1382373b63b7f4f	61	Detroit River Group	359.2	416	Graf, Donald L.	Chemical osmosis, reverse chemical osmosis, and the origin of subsurface brines	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90277-0
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	:Kee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55a6d3f3e13823757cc6fc08	211	Wilkins Peak Member	33.9	55.8	Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
5a850dffcf58f13f065e41c5	209	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
579fe160cf58f15528a4466f	76	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56f2f98bcf58f1892b30205d	199	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ry	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
57a43018cf58f11204e17fe0	156	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55a7c745e13823757cc70251	40	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4324de138239d8684aa17	158	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56c1effacf58f15c72c9090b	655	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54e733ace138237cc9150889	2	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5b6d22edcf58f18ba5e73c75	6	Middle Evaporite Bed			Stewart, F. H.	Replacements involving early carnallite in the potassium-bearing evaporites of Yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	31	1956	Mineralogical Society	10.1180/minmag.1956.031.233.02
55928493e138236ee2218034	285	Battle Formation	299	318.1	Theodore, Ted G. et al.	Geochemical and fluid zonation in the skarn environment at the tomboy—minnie gold deposits, Lander County, Nevada	Journal of Geochemical Exploration	25	1986	Elsevier	10.1016/0375-6742(86)90009-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57474ebdcf58f1b6f0394e11	260	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54e7c15ae138237cc9150ae2	157	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5682e272cf58f1479a0ab716	226	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b7869fe13823bd29ba8231	3052	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf1fccf58f13accaa0e61	35	Opeche mention	273.01	283.5	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55989b6ce1382390cc640e7d	169	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
57c19e14cf58f16bf61df64c	165	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54e733ace138237cc9150889	414	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
57484ab3cf58f13effae7ac5	173	Halite Clover Hill Fm			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
557f61d1e13823bc80ba26ae	463	Leadville mention	343.5	357.05	Lovering, T.S. et al.	Ore deposits of the Gilman District, Eagle County, Colorado	Professional Paper		1978	United States Geological Survey	10.3133/pp1017
54fb3438e138239936c6d321	40	Platy Dolomite			García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55baa3b5e1382373b63b89e7	153	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
57a1b61ecf58f1154eb55fb9	4	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
57c8716ccf58f1429a42896c	335	TES Group			Glotch, Timothy D. et al.	Constraints on the composition and particle size of chloride salt-bearing deposits on Mars	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004921
54d8fa70e138238471e80530	444	Castile Formation	253.8	260.4	Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
5598d566e1382390cc640f84	139	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5732032ecf58f19cbcbc550f	177	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
558ec3e3e13823109f3ee570	114	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
55f49f72cf58f16256a225dc	384	Salina Group	416	443.7	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55088909e138237a6f73915f	255	East mention			Knauth, L. Paul	Origin and mixing history of brines, Palo Duro Basin, Texas, U.S.A.	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90019-4
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
57bedb9ccf58f13bf01999e9	2	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
5713034ccf58f175a32a0111	208	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c35bc5cf58f1a8110b8fcc	95	Sedom Formation	5.332	23.03	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
54b4328fe138239d868563a5	239	Stipinai Formation	374.5	385.3	Rychliński, Tomasz et al.	Unusually well preserved casts of halite crystals: A case from the Upper Frasnian of northern Lithuania	Sedimentary Geology		2014	Elsevier	10.1016/j.sedgeo.2014.05.005
558cdbe6e13823109f3edaf4	4488	Green River Formation	33.9	55.8	compiled by Erickson, Ralph L.	Characteristics of mineral deposit occurrences	Open-File Report		1982	United States Geological Survey	10.3133/ofr82795
5749d59dcf58f1b0821791d1	96	Windsor Group	318.1	359.2	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
572cf1fccf58f13accaa0e61	298	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b5b47ce1382314227cfdae	381	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fb03c7e138239936c6d1e1	381	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
54c04e8fe1382389c54c36c6	55	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
557bfbc7e138239225f86664	543	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
56c1a95dcf58f15c72c903aa	445	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558bbed5e13823109f3ed4f8	10	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
5d3f58060b45c76cafa2004f	328	Paradox Formation	299	318.1	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b35463e138231cbdd6d13e	2343	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
55f49f72cf58f16256a225dc	68	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55c2e5c8cf58f1a8110b8c08	251	San Andres mention	150.6	154.8	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
56c1d9bbcf58f15c72c9075f	80	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4328ce138239d86855b7a	212	Paradox mention	306	319.714	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
573090ddcf58f160029e9d90	126	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
5a2d0619cf58f19f7117d37a	101	CdB mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
56c1a95dcf58f15c72c903aa	220	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
557f199ce13823bc80ba25a0	503	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
578fb2c8cf58f1bdcd2df236	258	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5a850dffcf58f13f065e41c5	261	Me'arat Sedom Mbr			Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
579fe160cf58f15528a4466f	363	Prairie Evaporite Formation	385.3	397.5	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
558df7d7e13823109f3ee082	269	Anhydrite Limestone			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
577c41d6cf58f188cebdd1fb	60	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55b78281e13823bd29ba8218	1937	Salado Formation	251	260.4	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5682e272cf58f1479a0ab716	319	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
579fe160cf58f15528a4466f	122	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
54b4324de138239d8684aa17	225	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56833ddfcf58f1479a0abbcc	129	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5a0493edcf58f1b96402aae7	349	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5ce2f9b20b45c76caf8ae21e	191	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55c48dc6cf58f1a8110b94db	328	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57370e95cf58f1ae8dd4e635	59	Red Bed	100.5	145	Hubert, J. F. and Reed, A. A.	Red-bed diagenesis in the East Berlin Formation, Newark Group, Connecticut Valley	Journal of Sedimentary Research	48	1978	Society for Sedimentary Geology	10.1306/212f7423-2b24-11d7-8648000102c1865d
557ff66ee13823bc80ba2925	468	Kootenai mention	113	145	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
5682f95fcf58f1479a0ab839	5	Zaragoza Gypsum Formation	5.332	23.03		Contents	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2007.volcontents_1.x
55af1c5ce13823763a830fe9	880	Culebra mention	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54b43280e138239d86853889	214	Qom Formation	5.332	23.03	ahimpour-Bonab, H. and Kalantarzadeh,	Origin of secondary potash deposits; a case from Miocene evaporites of NW Central Iran	Journal of Asian Earth Sciences	25	2005	Elsevier	10.1016/j.jseaes.2004.02.004
5509217ee138238460c4f689	313	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
578fb2c8cf58f1bdcd2df236	195	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c0d379cf58f16e99a378b9	283	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
579fe160cf58f15528a4466f	8	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54b4327de138239d868530d9	39	Maha Sarakham Formation	65.5	145.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
57e65deecf58f186b6da86bd	198	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5a850dffcf58f13f065e41c5	230	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55ae9887e13823763a830cad	99	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54beddace13823023e43d931	209	Furnace Creek Formation	1.806	5.332	Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
56830ae3cf58f1479a0ab915	253	Leofnard mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55c0d379cf58f16e99a378b9	63	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
558ec3e3e13823109f3ee570	48	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
56833ddfcf58f1479a0abbcc	65	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
56c1a95dcf58f15c72c903aa	453	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
578aea2bcf58f13920dc7baa	174	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55ccaaf9cf58f190b49048ab	280	Cobourg Formation	449.75	451.4025	Al, Tom A. et al.	Geochemical evolution and residence time of porewater in low-permeability rocks of the Michigan Basin, Southwest Ontario	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.03.005
579f1578cf58f1168e64ad7f	339	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57a43018cf58f11204e17fe0	586	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
58d03bf3cf58f138516d1200	143	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54beddace13823023e43d931	209	Furnace Creek Formation	1.806	5.332	Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
55b77fd5e1382373b63b7cce	239	Smackover mention	150.6	158.8535	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
54b4328ae138239d86855586	209	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
5b6e8987cf58f1306fc8ca9b	351	Hetaoping mention	488.3	542	Chen, Fuchuan et al.	The source and evolution of ore fluids in the Heiniuwa gold deposit, Baoshan block, Sanjiang region: Constraints from sulfide trace element, fluid inclusion and stable isotope studies	Ore Geology Reviews	95	2018	Elsevier	10.1016/j.oregeorev.2018.03.013
5d3f58060b45c76cafa2004f	339	Paradox Formation	299	318.1	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
57126f9fcf58f142fd277238	18	Salina Formation	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5682e272cf58f1479a0ab716	216	Salado Formation	251	260.4	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b43248e138239d86849e30	327	Zaragoza mention	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
56833ddfcf58f1479a0abbcc	7	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54b4324be138239d8684a6bc	94	Louann Formation	145.5	199.6	Hay, William W. et al.	Evaporites and the salinity of the ocean during the Phanerozoic: Implications for climate, ocean circulation and life	Palaeogeography, Palaeoclimatology, Palaeoecology	240	2006	Elsevier	10.1016/j.palaeo.2006.03.044
558ec3e3e13823109f3ee570	110	Salado mention	256.0278	262.2168	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
5732032ecf58f19cbcbc550f	197	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5683006acf58f1479a0ab88f	675	Prairie Evaporite Formation	385.3	397.5	KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
54d0272be13823b501cdbc75	242	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
58b65c8fcf58f1b2fdd8b58a	128	Leome Formation			Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
55b6d4bfe13823bd29ba7dc0	1060	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579fe160cf58f15528a4466f	11	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5579c265e138231c7c52c464	349	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
579aae1bcf58f112b1fd775d	86	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5508d3cde138238460c4f445	178	Sdom mention	-5.5012E-05	23.03	Stiller, Mariana et al.	Cl-37 in the Dead Sea system---preliminary results	Applied Geochemistry	13	1998	Elsevier	10.1016/S0883-2927(98)00017-1
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55c01a9ecf58f16e99a37305	316	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57c1a06bcf58f16cbd621551	281	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
58bf2d90cf58f1867eb10946	151	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
57bedb9ccf58f13bf01999e9	356	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
5cdef7190b45c76caf8a2766	61	Fixed Ionogenic Group			Thakkar, Rakesh and Chudasama, Uma V	Synthesis and Characterization of Zirconium Titanium Hydroxy Ethylidene Diphosphonate and Its Application in Separation of Metal Ions	Separation Science and Technology	44	2009	Informa UK Limited	10.1080/01496390903014516

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a82328e13823757cc7049a	965	Charles Formation	318.1	359.2	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
550ab8aae138238460c4fe5e	247	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
57a43018cf58f11204e17fe0	145	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
54b43246e138239d86849919	85	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
550901a3e138238460c4f59b	130	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
557f199ce13823bc80ba25a0	498	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54b43280e138239d8685381d	232	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
5d3f58060b45c76cafa2004f	263	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b64a4de1382314227d0039	14	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5d3f58060b45c76cafa2004f	116	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b8b7f4e13823bd29ba8982	286	Salado Formation	251	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
558eb5d6e13823109f3ee517	770	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
557b436fe138239225f86325	6897	GEOCHEMISTRY Formation			Roedder, Edwin	Composition of fluid inclusions	Professional Paper		1972	United States Geological Survey	10.3133/pp440JJ
56c1effacf58f15c72c9090b	88	Mudstone Anhydrite Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55b73032e13823bd29ba8000	458	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
58ac40fdcf58f1946fb5ce65	127	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
578b8ab6cf58f1645f54f0c6	53	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57bedb9ccf58f13bf01999e9	365	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
558ecdcbe13823109f3ee5af	346	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
56c1a95dcf58f15c72c903aa	152	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
577bca4acf58f1538dda98fd	263	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54fb3438e138239936c6d321	486	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e733ace138237cc9150889	439	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
56c1a95dcf58f15c72c903aa	220	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55c01a9ecf58f16e99a37305	1043	Rustler Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5682e272cf58f1479a0ab716	41	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5a850dffcf58f13f065e41c5	236	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57a43018cf58f11204e17fe0	12	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
598bc577cf58f12aa26601d6	90	Green River Formation	33.9	55.8	Shteyngol'ts, V. L. et al.	THE ASSOCIATION OF SODA DEPOSITS WITH ORGANIC-RICH SEDIMENTS	International Geology Review	34	1992	Taylor and Francis	10.1080/00206819209465620
578d2f6bcf58f10dd389f132	34	Parachute Creek Member	33.9	55.8	EN, WALLACE R. and DICKINSON, WILLI	Paleogeographic and paleotectonic setting of Laramide sedimentary basins in the central Rocky Mountain region: Alternative interpretation and reply	Geological Society of America Bulletin	102	1990	GSA	10.1130/0016-7606(1990)102<0280:papsol>2.3.co;2
5b526230cf58f1a50a464a8d	204	Qigequan Fm.	-5.5012E-05	1.806	Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
570fe41dcf58f114a862267f	2	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55a7c745e13823757cc70251	144	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
579fe160cf58f15528a4466f	213	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
56831341cf58f1479a0ab983	134	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54be1b30e138233c8bc4f9d7	125	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
5631c28dcf58f10c477fe72c	316	Nippewalla Group	251	299	Rigaudier, Thomas et al.	The record of temperature, wind velocity and air humidity in the δD and δ18O of water inclusions in synthetic and Messinian halites	Geochimica et Cosmochimica Acta	75	2011	Elsevier	10.1016/j.gca.2011.05.034
54fb03c7e138239936c6d1e1	231	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
55765b42e138234790a011e4	4	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
550ab8aae138238460c4fe5e	155	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
54b4328de138239d86855ceb	108	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54d899b7e138238471e803b7	64	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54b4327de138239d868530d9	39	Maha Sarakham Formation	65.5	145.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
55af1c5ce13823763a830fe9	516	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54d899b7e138238471e803b7	134	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
5508c83fe138238460c4f3ef	224	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
55b7c404e13823bd29ba8379	599	Green River Formation	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2fd7d01faed655488b6a6c	7	Beitashan Formation	385.3	397.5	Chen, Huayong et al.	Mineralization and ore genesis of the Qiaoxiahala Fe-Cu-(Au) deposit in the northern margin of East Junggar terrane, Central Asian Orogenic Belt: Constraints from fluid inclusions and stable isotopes	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.03.014
55c2e5c8cf58f1a8110b8c08	100	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
579fe160cf58f15528a4466f	171	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54b4327fe138239d868537ad	237	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
54b4324de138239d8684aa17	149	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54e97acfe138237cc915120b	29	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
54b4324ee138239d8684ae71	331	Burano Formation	237	251	Stefani, Marco et al.	The changing climate framework and depositional dynamics of Triassic carbonate platforms from the Dolomites	Palaeogeography, Palaeoclimatology, Palaeoecology	290	2010	Elsevier	10.1016/j.palaeo.2010.02.018
5733004ccf58f1066ffdaeaa	151	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
56b99311cf58f14c238d4bdc	266	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
558fda65e13823109f3eec30	1098	Paradox Member	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
5c3f402f1faed655488ce402	26	Soledad mention			Amundson	Rare calcium chloride–rich soil and implications for the existence of liquid water in a hyperarid environment	Geology		2019	Geological Society of America	10.1130/g45642.1
5799dd81cf58f19aa930e09e	51	Angarskaya Formation			Brennan, Sean T. et al.	Seawater chemistry and the advent of biocalcification	Geol	32	2004	Geological Society of America	10.1130/g20251.1
57a43018cf58f11204e17fe0	458	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54fb03c7e138239936c6d1e1	231	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
5509217ee138238460c4f689	728	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5b6b8434cf58f1142ec9e95b	149	Aragonite Calcite Dolomite			Masoud, Alaa A. et al.	Assessment of groundwater and soil quality degradation using multivariate and geostatistical analyses, Dakhla Oasis, Egypt	Journal of African Earth Sciences	142	2018	Elsevier	10.1016/j.jafrearsci.2018.03.009
55c0d379cf58f16e99a378b9	345	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55a470efe13823757cc6f241	93	Parachute Creek Member	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
558b0e4ce13823109f3ed15f	529	nan mention			Hodges, C. A. et al.	U.S. Geological Survey-INGEOMINAS mineral resource assessment of Colombia	Open-File Report		1984	United States Geological Survey	
58b65c8fcf58f1b2fdd8b58a	69	Loeme Formation	112	125	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
578aea2bcf58f13920dc7baa	19	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
574f1369cf58f10afd57189e	123	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55c07511cf58f16e99a375dc	1282	Balder Formation	1.806	65.5		Annual index	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90280-V
5b526230cf58f1a50a464a8d	192	Shangyoushashan Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
5682e3a8cf58f1479a0ab727	18	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
54e7c15ae138237cc9150ae2	157	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5713034ccf58f175a32a0111	200	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
58b6daf1cf58f11f2b0dde84	399	Dawson Bay Formation	385.3	397.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
572cf900cf58f13d86a1bdc8	246	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5681b377cf58f1ba274d4854	54	Qom Formation	5.332	23.03	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069
558df7d7e13823109f3ee082	2344	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bb864acf58f18a73ed4b28	81	Ariri Formation	109.5278	115.1	Alves, Tiago M. et al.	An incomplete correlation between pre-salt topography, top reservoir erosion, and salt deformation in deep-water Santos Basin (SE Brazil)	Marine and Petroleum Geology		2017	Elsevier	10.1016/j.marpetgeo.2016.10.015
57c19e14cf58f16bf61df64c	304	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55933fbae138236ee2218347	35	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
55c0d379cf58f16e99a378b9	44	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
579f1578cf58f1168e64ad7f	322	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5c3e6d6c1faed655488cd35a	312	Larne Halite Member			Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b43281e138239d86853bfd	3	Khok Kruat Formation	65.5	251	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b64a4de1382314227d0039	318	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5743c295cf58f14fe2e25b0d	26	Carnallite-halite Rock Formation			GONCHARENKO, Olga et al.	Character of Sedimentation in the Potassium-Bearing Basin of the Gremyachinskoye Field (The Volga Monocline)	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_16
57611ef6cf58f130993e9b1a	88	Bertie Group	419.2	427.4	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
570fe41dcf58f114a862267f	2	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
578fb2c8cf58f1bdcd2df236	308	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5c319a241faed655488b9bcc	9	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55986cdae1382390cc640d7c	466	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
579fe160cf58f15528a4466f	79	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54b4328ae138239d86855586	114	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
57320459cf58f19ced0f7bc5	416	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
56dda6dacf58f122ee2f5035	38	Parachute Creek Member	33.9	55.8	Furlong, Dale A. et al.	Selection, preparation, and disposal of sodium compounds for dry SOx scrubbers	Environment International	6	1981	Elsevier	10.1016/0160-4120(81)90015-5
57c19e14cf58f16bf61df64c	57	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
55af1c5ce13823763a830fe9	848	Dockum Group	199.6	251	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5682e272cf58f1479a0ab716	130	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54c060fbe1382389c54c3757	334	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5682e272cf58f1479a0ab716	471	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328ae138239d86855597	219	Alpine Haselgebirge Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
5683006acf58f1479a0ab88f	114	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
55c48dc6cf58f1a8110b94db	34	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5590aba6e13823109f3ef147	9	Honaker Trail Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	30	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
57c1b591cf58f173fefe15b4	116	Catoche Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
5503421ae1382326932d7e6d	269	Red Formation	23.03	33.9	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
558d206fe13823109f3edc62	2283	Verde Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55c0d379cf58f16e99a378b9	154	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b4328ae138239d8685555a	94	Pythagorion Formation			Stamatakis, M.G. et al.	Geochemistry and diagenesis of Miocene lacustrine siliceous sedimentary and pyroclastic rocks, Mytilinii basin, Samos Island, Greece	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90084-5
5c2c0d801faed655488b25e1	51	Gachsaran mention	5.332	23.03	Rabiei, Minou et al.	A methodology for wellbore stability analysis of drilling into presalt formations: A case study from southern Iran	Journal of Petroleum Science and Engineering	167	2018	Elsevier	10.1016/j.petrol.2017.11.023
55b64a4de1382314227d0039	25	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5752d460cf58f1afbc8bcfeb	183	Ardkenneth mention			Cey, Bradley D et al.	Osmotic flow through a Cretaceous clay in southern Saskatchewan, Canada	Canadian Geotechnical Journal	38	2001	Canadian Science Publishing	10.1139/t01-033
55b82002e1382373b63b7f4f	61	Detroit River Group	359.2	416	Graf, Donald L.	Chemical osmosis, reverse chemical osmosis, and the origin of subsurface brines	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90277-0
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55997d5ee1382390cc641332	27	Surface Dolomite			Gac, J.Y. et al.	Chemical model for origin and distribution of elements in salts and brines during evaporation of waters. Application to some saline lakes of Tibesti, Chad	Physics and Chemistry of the Earth		1979	Elsevier	10.1016/0079-1946(79)90018-1
557ff66ee13823bc80ba2925	468	Kootenai mention	113	145	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
550895c3e138237a6f7391ae	135	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
578fb2c8cf58f1bdcd2df236	289	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
572cf900cf58f13d86a1bdc8	291	Evaporite Group			Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5a850dffcf58f13f065e41c5	246	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54e9f64ee138237cc9151412	380	Great Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
55cbfc16cf58f1b01e42470e	49	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
57a43018cf58f11204e17fe0	483	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
559d0264e138230816dad63a	684	Sheep Creek Member	323.2	358.9	Nokleberg, W.J. et al.	Metallogeny and major mineral deposits of Alaska	Open-File Report		1988	United States Geological Survey	10.3133/ofr8873
55928493e138236ee2218034	338	Harmony Formation	488.3	501	Theodore, Ted G. et al.	Geochemical and fluid zonation in the skarn environment at the tomboy—minnie gold deposits, Lander County, Nevada	Journal of Geochemical Exploration	25	1986	Elsevier	10.1016/0375-6742(86)90009-9
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
579f1578cf58f1168e64ad7f	384	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55c0d379cf58f16e99a378b9	82	Hutchinson Salt Member	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c35bc5cf58f1a8110b8fcc	141	Boulby mention			Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
5a0493edcf58f1b96402aae7	361	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559877c2e1382390cc640dba	378	Sonta Sandstone			El Desouky, Hamdy A. et al.	The sandstone-hosted stratiform copper mineralization at Mwitapile and its relation to the mineralization at Lufukwe, Lufilian foreland, Democratic Republic of Congo	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.09.004
5c31fc361faed655488ba53a	251	Red Head Rapids Formation	444.15	448.05	Castagner, Ariane et al.	High-temperature alteration and porosity generation in Upper Ordovician microbial reefs, Hudson Bay intracratonic Basin, Arctic Canada	Sedimentary Geology	374	2018	Elsevier	10.1016/j.sedgeo.2018.07.001
5b6eb3c6cf58f13c68e2d5dd	49	Magnesian Limestone	251	299	Stewart, F. H.	The petrology of the evaporites of the Eskdale no. 2 boring, east Yorkshire Part II. The middle evaporite bed (With Plates IX and X)	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.212.01
56c1d9bbcf58f15c72c9075f	108	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4325ce138239d8684d4cc	207	Trubi Formation	1.806	5.332	Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
557b1abde138239225f86255	134	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57474ebdcf58f1b6f0394e11	80	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
55c35bc5cf58f1a8110b8fcc	193	Carribuddy mention	419.2	458.4	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
572cf1fccf58f13accaa0e61	285	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
56c1ca03cf58f15c72c90620	150	Soledad Formation			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b2fa0ce138231cbdd6cf57	763	Green River Formation	33.9	55.8	Roehler, H. W.	Correlation, composition, areal distribution, and thickness of Eocene stratigraphic units, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1992	United States Geological Survey	
5c31af5a1faed655488b9e89	35	Jialingjiang Formation	245	251	XU, Zhengqi et al.	Geological and geochemical evolution of forming of kalium-rich brine in Sichuan Basin	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13226
56c1a95dcf58f15c72c903aa	47	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56830b14cf58f1479a0ab918	512	Tripoli Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
578fb2c8cf58f1bdcd2df236	349	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55ad1049e13823763a8302c4	428	Green River Formation	33.9	55.8	Smith, Marjorie C.	Bibliography of the geology of the Green River Formation, Colorado, Utah, and Wyoming, to July 1, 1986	Open-File Report		1986	United States Geological Survey	
578aea2bcf58f13920dc7baa	83	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
54b5345de138239571b90a0d	328	Haynesville mention	147.52	155.939	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
55933be0e138236ee2218336	88	Bunter Sandstone	245	251	Wolfgramm, M and Schmidt Mumm, A	Spatial correlation of fluid inclusion generations: reconstructing fluid flow during basin evolution	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00033-9
572cf900cf58f13d86a1bdc8	240	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
579fe160cf58f15528a4466f	318	San Andres Formation	251	299	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
558ec3e3e13823109f3ee570	114	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
5683006acf58f1479a0ab88f	289	Stassfurt mention			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43247e138239d86849b52	242	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
557b436fe138239225f86325	6897	GEOCHEMISTRY Formation			Roedder, Edwin	Composition of fluid inclusions	Professional Paper		1972	United States Geological Survey	10.3133/pp440JJ
54b4324de138239d8684aa17	293	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56830ae3cf58f1479a0ab915	460	Salina Group	416	443.7	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57a43018cf58f11204e17fe0	471	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b2c402e138231cbdd6ce3e	666	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
54b43259e138239d8684ce14	117	Ore Shale			Greyling, L.N. et al.	The nature of early basinal fluids in the Zambian Copperbelt: A case study from the Chambishi deposit	Journal of African Earth Sciences	42	2005	Elsevier	10.1016/j.jafrearsci.2005.08.002
55ccaaf9cf58f190b49048ab	298	Salina Formation	416	443.7	Al, Tom A. et al.	Geochemical evolution and residence time of porewater in low-permeability rocks of the Michigan Basin, Southwest Ontario	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.03.005
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5683006acf58f1479a0ab88f	44	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
578fb2c8cf58f1bdcd2df236	276	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5590aa05e13823109f3ef13c	134	Description mention			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
54c060fbe1382389c54c3757	351	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54b43288e138239d86854e95	104	Fats mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
55b6d4bfe13823bd29ba7dc0	965	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b5b47ce1382314227cfdae	165	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
578b8ab6cf58f1645f54f0c6	239	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57126f9fcf58f142fd277238	35	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
584a9819cf58f19999526ff5	229	Range Group			Desouky, Hamdy El et al.	Novel applications of fluid inclusions and isotope geochemistry in unravelling the genesis of fossil travertine systems	Sedimentology	62	2015	Wiley	10.1111/sed.12137
577bca4acf58f1538dda98fd	144	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5a2d0619cf58f19f7117d37a	44	Base mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
55ae9887e13823763a830cad	120	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
55b5b47ce1382314227cfdae	202	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57611ef6cf58f130993e9b1a	8	Ellicott Creek Breccia mention	419.2	427.4	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
55ae4f4be13823763a830ada	68	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55bfc14ecf58f16e99a3703b	130	Lonann Formation			Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5c319a241faed655488b9bcc	2	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5579c265e138231c7c52c464	346	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5598d566e1382390cc640f84	179	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5b6b8434cf58f1142ec9e95b	148	Aragonite Calcite Dolomite			Masoud, Alaa A. et al.	Assessment of groundwater and soil quality degradation using multivariate and geostatistical analyses, Dakhla Oasis, Egypt	Journal of African Earth Sciences	142	2018	Elsevier	10.1016/j.jafrearsci.2018.03.009
577ef8c7cf58f1ac737005ec	88	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
54d899b7e138238471e803b7	172	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55baa3b5e1382373b63b89e7	338	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
558df7d7e13823109f3ee082	1242	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5598d566e1382390cc640f84	177	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
56c44114cf58f17493f8536e	217	Salado Formation	251	260.4	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
558df7d7e13823109f3ee082	2332	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
58bf2d90cf58f1867eb10946	184	Tempe Formation	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5518b748e1382394b500dcce	2	Zaragoza mention	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
5682ea89cf58f1479a0ab77c	300	Nippewalla Group	251	299	IIECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
57a43018cf58f11204e17fe0	809	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
57a43018cf58f11204e17fe0	377	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5c319a241faed655488b9bcc	81	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55bf96d4cf58f16e99a36eea	244	Sedom Formation	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
55f4877fcf58f16256a22522	8	Sulphur Limestone			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56ac24facf58f19442534c08	621	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
57126f9fcf58f142fd277238	2	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55ae0df7e13823763a830928	1363	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
574c1c0bcf58f1957a2a36f7	241	Windsor Group	318.1	359.2	Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55baa3b5e1382373b63b89e7	401	Louann Fm.	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1a95dcf58f15c72c903aa	47	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d6a7e13823bd29ba7dcc	8133	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5683349ccf58f1479a0abb4e	91	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
58c18a99cf58f1a6ba4ea54d	119	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
54b43288e138239d86854e95	95	Fats Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
55b64a4de1382314227d0039	371	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
572cf1fccf58f13accaa0e61	35	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
58bf2da2cf58f1867eb1098b	136	Australian Shale			Censi, P. et al.	The behaviour of zirconium, hafnium and rare earth elements during the crystallisation of halite and other salt minerals	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.02.003
55c2a9cacf58f1a8110b8a1e	102	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55989b6ce1382390cc640e7d	3	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
56831341cf58f1479a0ab983	326	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55c01a9ecf58f16e99a37305	313	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b39203e138231cbdd6d283	1219	Green River Formation	33.9	55.8	Hosteman, J.W. et al.	World nonbauxite aluminum resources excluding alunite	Professional Paper		1990	United States Geological Survey	10.3133/pp1076C
54b4328be138239d8685567e	337	Dammam Formation			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
5682e272cf58f1479a0ab716	226	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
55a470efe13823757cc6f241	79	Parachute Creek Member	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
56833ddfcf58f1479a0abbcc	326	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5682e272cf58f1479a0ab716	501	Queen-Grayburg Formation			HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56c1d9bbcf58f15c72c9075f	370	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55c2a9cacf58f1a8110b8a1e	86	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5713034ccf58f175a32a0111	365	Salina Group	416	443.7	Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a2b7516cf58f108104211ac	138	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
578fb2c8cf58f1bdcd2df236	193	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
56c1effacf58f15c72c9090b	5	Carribuddy Group	416	443.7	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55b35463e138231cbdd6d13e	1062	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
55b6d4bfe13823bd29ba7dc0	891	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55f49f72cf58f16256a225dc	120	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
579aae1bcf58f112b1fd775d	86	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54d899b7e138238471e803b7	130	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
5713034ccf58f175a32a0111	134	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57e65deecf58f186b6da86bd	3	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
557f199ce13823bc80ba25a0	840	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54fb3438e138239936c6d321	13	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55989b6ce1382390cc640e7d	169	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
56833ddfcf58f1479a0abbcc	35	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
56c1d5f9cf58f15c72c90717	23	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
578aea2bcf58f13920dc7baa	219	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55986e49e1382390cc640d84	334	R.S.C. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
559c3f39e138230816dad2ff	508	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55c2e5c8cf58f1a8110b8c08	137	Hutchinson Salt mention	273.01	298.9	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
578fb2c8cf58f1bdcd2df236	47	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5509217ee138238460c4f689	331	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
57437547cf58f1350bacb6cd	18	Brine Formation			CUI, Xiangmei et al.	Simulated Dynamic Evaporation of Yiliping Salt Lake Brine	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12279_6
55ae0df7e13823763a830928	1363	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54b48011e138239e89d63a3c	305	Twin Creek mention	166.025	174.7	Wiltschko, David V. et al.	Conditions during syntectonic vein formation in the footwall of the Absaroka Thrust Fault, Idaho–Wyoming–Utah fold and thrust belt	Journal of Structural Geology	31	2009	Elsevier	10.1016/j.jsg.2009.03.009
5c319a241faed655488b9bcc	124	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55c01a9ecf58f16e99a37305	313	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
56c03a7dcf58f15c72c8e84f	186	Furnace Creek mention	5.333	6.7678	Crowley, James K. and Hook, Simon J.	Mapping playa evaporite minerals and associated sediments in Death Valley, California, with multispectral thermal infrared images	Journal of Geophysical Research: Solid Earth	101	1996	Wiley-Blackwell	10.1029/95JB02813
584aa62ccf58f19d6a5f583e	533	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
572cf1fccf58f13accaa0e61	193	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5733004ccf58f1066ffdaeaa	211	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	413	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57320459cf58f19ced0f7bc5	83	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55c0f018cf58f16e99a3799f	7	Salado Formation	251	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
55b78281e13823bd29ba8218	2070	Yeso mention	275.2575	286.225	rtsch-Winkler, Susan B. and Donatich,	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5682e272cf58f1479a0ab716	351	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b39203e138231cbdd6d283	1248	Creek mention			Hosteman, J.W. et al.	World nonbauxite aluminum resources excluding alunite	Professional Paper		1990	United States Geological Survey	10.3133/pp1076C
57a43018cf58f11204e17fe0	582	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57a3dceccf58f1b8b5b032b5	417	Evaporite Group			Kiro, Yael et al.	Environmental implications of salt facies in the Dead Sea	Geological Society of America Bulletin	128	2015	Geological Society of America	10.1130/b31357.1
5c3e6d6c1faed655488cd35a	328	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
579fe160cf58f15528a4466f	170	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55afeeece138238f9de483c5	67	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	103	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
579fe160cf58f15528a4466f	213	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
559c3f39e138230816dad2ff	159	Salado mention	256.0278	262.2168	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55c2e5c8cf58f1a8110b8c08	362	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5795a509cf58f146a6350fa0	161	Prairie mention	383.95	389.1	Ayora, C. et al.	Brine-mineral reactions in evaporite basins: Implications for the composition of ancient oceans	Geol	29	2001	GSA	10.1130/0091-7613(2001)029<0251:bmrieb>2.0.co;2
5b6d936dcf58f1a92c2d33b5	118	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
57126f9fcf58f142fd277238	236	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55b7c404e13823bd29ba8379	133	Wilkins Peak Member	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
559c3f39e138230816dad2ff	152	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
579fe160cf58f15528a4466f	59	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
572cf900cf58f13d86a1bdc8	240	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
557cd3cfe138239225f869e5	1234	Castile Formation	253.8	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
550895c3e138237a6f7391ae	138	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
55ae4f4be13823763a830ada	247	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
57ab0cc9cf58f19c57ed9df4	2445	Keuper mention	266.9	242	Dill, Harald G.	Kaolin: Soil, rock and ore from the mineral to the magmatic, sedimentary, and metamorphic environments	Earth-Science Reviews		2016	Elsevier	10.1016/j.earscirev.2016.07.003
54b4324de138239d8684aa17	132	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e7c15ae138237cc9150ae2	33	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55baa3b5e1382373b63b89e7	508	Dead Sea mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
579b56dacf58f13d24f0d7ef	14	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
568315efcf58f1479a0ab9a9	1	Cairn Formation	359.2	385.3	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
56c1ca03cf58f15c72c90620	169	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55c48dc6cf58f1a8110b94db	164	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
558eb5d6e13823109f3ee517	170	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
57a43018cf58f11204e17fe0	927	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54d899b7e138238471e803b7	105	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54e733ace138237cc9150889	437	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
572e90c3cf58f10a55fa1b31	484	Evaporite Group			Enrique Casas (2) and Tim K. Lowenstei	Carnallite Mineralization in the Nonmarine, Qaidam Basin, China: Evidence for the Early Diagenetic Origin of Potash Evaporites	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a05-2b26-11d7-8648000102c1865d
5590aba6e13823109f3ef147	13	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	8133	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5a850dffcf58f13f065e41c5	208	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54b5345de138239571b90a0d	328	Haynesville mention	147.52	155.939	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
55b35463e138231cbdd6d13e	2425	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
5682e3a8cf58f1479a0ab727	309	Salado mention	256.0278	262.2168	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55ae0df7e13823763a830928	1374	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
559d0264e138230816dad63a	684	Sheep Creek Member	323.2	358.9	Nokleberg, W.J. et al.	Metallogeny and major mineral deposits of Alaska	Open-File Report		1988	United States Geological Survey	10.3133/ofr8873
56833ddfcf58f1479a0abbcc	345	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
550901a3e138238460c4f59b	150	Cardona Fm.			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5682e272cf58f1479a0ab716	103	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c2e5c8cf58f1a8110b8c08	211	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55af1c5ce13823763a830fe9	516	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5598d566e1382390cc640f84	191	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5c319a241faed655488b9bcc	43	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55986cdae1382390cc640d7c	481	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
550895c3e138237a6f7391ae	364	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55a82328e13823757cc7049a	1110	Dakota mention	98.85	119.3	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
54b4325ce138239d8684d4cc	178	Gypsum mention			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
558eb5d6e13823109f3ee517	382	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
56831341cf58f1479a0ab983	283	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5713034ccf58f175a32a0111	149	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5682e272cf58f1479a0ab716	408	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328ae138239d86855597	148	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
55b365b1e138231cbdd6d18f	1217	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
579aae1bcf58f112b1fd775d	25	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5598d566e1382390cc640f84	195	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
57e65deecf58f186b6da86bd	81	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
550aa1a2e138238460c4fdf5	103	Gypsum mention			Hidalgo, M.Carmen and Cruz-Sanjulián, Jav	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
577ef8c7cf58f1ac737005ec	88	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
55c2e5c8cf58f1a8110b8c08	133	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
57484ab3cf58f13effae7ac5	183	Halite Mabou Gp			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
54b4328ce138239d86855aad	275	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
58b65c8fcf58f1b2fdd8b58a	210	Loeme Formation	112	125	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
55b6d4bfe13823bd29ba7dc0	1140	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5682e272cf58f1479a0ab716	3	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55baa3b5e1382373b63b89e7	413	Louann Formation	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b8b7f4e13823bd29ba8982	450	Rustler Formation	251	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55c0d379cf58f16e99a378b9	170	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5731ac74cf58f18e0ffaff50	187	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a82328e13823757cc7049a	1145	Spearfish Formation	251	299	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
5590aba6e13823109f3ef147	272	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
5c19917d1faed655488915e2	393	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
55c0d379cf58f16e99a378b9	91	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55ae4f4be13823763a830ada	746	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5c302c581faed655488b7345	508	Fengcheng Formation	251	299	Cao, Yingchang et al.	Geochemical characteristics and origin of sodium carbonates in a closed alkaline basin: The Lower Permian Fengcheng Formation in the Mahu Sag, northwestern Junggar Basin, China	Palaeogeography, Palaeoclimatology, Palaeoecology	511	2018	Elsevier	10.1016/j.palaeo.2018.09.015
5733004ccf58f1066ffdaeaa	395	Prairie Evaporite Formation	385.3	397.5	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5b6d936dcf58f1a92c2d33b5	129	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
55c2e5c8cf58f1a8110b8c08	180	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5a850dffcf58f13f065e41c5	61	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55b3055ce138231cbdd6cf97	3564	Marada mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b73032e13823bd29ba8000	205	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
56c1a95dcf58f15c72c903aa	192	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54b4328be138239d8685580e	216	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
55b64a4de1382314227d0039	310	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55adfa4be13823763a8308b1	21	Paradox Member	299	318.1	Hite, R. J.	A potential target for potash solution mining in Cycle 13, Paradox Member, near Moab, Utah	Open-File Report		1976	United States Geological Survey	10.3133/ofr76755
55b6d4bfe13823bd29ba7dc0	40	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558bbd56e13823109f3ed4ef	350	Rustler mention	253.9652	256.0278	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
57a43018cf58f11204e17fe0	168	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56c1effacf58f15c72c9090b	544	Carribuddy Formation	251	542	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
550ab8aae138238460c4fe5e	213	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
575019eacf58f1696f3ea50a	33	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
572cf900cf58f13d86a1bdc8	177	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
578fb2c8cf58f1bdcd2df236	435	Evaporite Group			HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5c319a241faed655488b9bcc	5	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55a69d57e13823757cc6fac4	100	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd410e138239225f869e6	358	Kuna Formation	299	359.2	Nokleberg, Warren J. et al.	Significant metalliferous lode deposits and placer districts of Alaska	Bulletin		1987	United States Geological Survey	10.3133/b1786
579fe160cf58f15528a4466f	1	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
56c1effacf58f15c72c9090b	429	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54b4324de138239d8684aa17	132	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
58d05f09cf58f143d83df2a0	190	Halite Calcite Dolomite			Acworth, R. I. and Timms, W. A.	Evidence for connected water processes through smectite-dominated clays at Breeza, New South Wales	Australian Journal of Earth Sciences	56	2009	Taylor and Francis	10.1080/08120090802541952
579b56dacf58f13d24f0d7ef	76	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5590aba6e13823109f3ef147	189	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
55af1c5ce13823763a830fe9	224	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
572cf1fccf58f13accaa0e61	244	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55989b6ce1382390cc640e7d	160	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
54b4327de138239d868530d9	189	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
5a850dffcf58f13f065e41c5	238	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54fb3438e138239936c6d321	486	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55ae4f4be13823763a830ada	258	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5694cf35cf58f1377d5990d4	584	Ca Group			Vanko, David A.	Temperature, pressure, and composition of hydrothermal fluids, with their bearing on the magnitude of tectonic uplift at mid-ocean ridges, inferred from fluid inclusions in oceanic layer 3 rocks	Journal of Geophysical Research	93	1988	Wiley-Blackwell	10.1029/JB093iB05p04595
55b64a4de1382314227d0039	20	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
580c3373cf58f17ccc88e4aa	255	Carbonates Dolomite			Pozo-Antonio, J.S. et al.	Comparative study of deterioration forms on nearby granitic bridges from an urban setting in the NW Iberian Peninsula	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.09.009
5713034ccf58f175a32a0111	95	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56c1a95dcf58f15c72c903aa	453	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
559733d0e1382390cc6406ac	173	Chromite Diaspore Dolomite			Piché, Mathieu and Jébrak, Michel	Normative minerals and alteration indices developed for mineral exploration	Journal of Geochemical Exploration	82	2004	Elsevier	10.1016/j.gexplo.2003.10.001
56831341cf58f1479a0ab983	491	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
57c19e14cf58f16bf61df64c	251	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328ce138239d86855aad	442	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
572cf900cf58f13d86a1bdc8	22	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
578fb2c8cf58f1bdcd2df236	349	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55765d21e138234790a011ee	8	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a0946ee1382381ff364540	99	Castile mention	259	259.51	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
56833ddfcf58f1479a0abbcc	207	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
57a43018cf58f11204e17fe0	119	Bouse Formation	1.806	5.332	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b78281e13823bd29ba8218	1950	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
56c1effacf58f15c72c9090b	246	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
57c19e2ccf58f16bf61df668	314	CCS Fm			Gabellone, T. et al.	Fluid channeling along thrust zones: the Lagonegro case history, southern Apennines, Italy	Geofluids	13	2013	Wiley	10.1111/gfl.12020
55adfa4be13823763a8308b1	21	Paradox mention	306	319.714	Hite, R. J.	A potential target for potash solution mining in Cycle 13, Paradox Member, near Moab, Utah	Open-File Report		1976	United States Geological Survey	10.3133/ofr76755
572cf1fccf58f13accaa0e61	72	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b4328de138239d86855ceb	131	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
557bfbc7e138239225f86664	646	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
5682e272cf58f1479a0ab716	475	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54e7c15ae138237cc9150ae2	51	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54fb3438e138239936c6d321	142	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55a7c745e13823757cc70251	61	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55c01a9ecf58f16e99a37305	490	Culebra mention	251	299	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5590aba6e13823109f3ef147	279	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
5713034ccf58f175a32a0111	333	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
576043cfcf58f1b7e5721de2	269	Athabasca mention	538.8	1600	Chu, Haixia and Chi, Guoxiang	Thermal profiles inferred from fluid inclusion and illite geothermometry from sandstones of the Athabasca basin: Implications for fluid flow and unconformity-related uranium mineralization	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2015.12.013
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5682e272cf58f1479a0ab716	471	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558df7d7e13823109f3ee082	323	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54fc8912e138239936c6dc7a	106	Salado Formation	251	260.4	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
54e733ace138237cc9150889	58	Prairie Formation	359.2	416	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
54d4bb37e138238471e7f379	30	Salado Formation	251	260.4	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
56a038b2cf58f1079fd4ba21	98	Edwards Group	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
574f1369cf58f10afd57189e	199	Prairie Evaporite Formation	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b6d4bfe13823bd29ba7dc0	965	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55adfa4be13823763a8308b1	44	Paradox Member	299	318.1	Hite, R. J.	A potential target for potash solution mining in Cycle 13, Paradox Member, near Moab, Utah	Open-File Report		1976	United States Geological Survey	10.3133/ofr76755
58c18a99cf58f1a6ba4ea54d	119	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5b6f081fcf58f1539ffa6761	316	Euphrates Fm	5.332	23.03	Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
5b526230cf58f1a50a464a8d	204	Qigequan Fm.	-5.5012E-05	1.806	Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
550ab8aae138238460c4fe5e	155	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
578fb2c8cf58f1bdcd2df236	276	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b64a4de1382314227d0039	18	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55ae4f4be13823763a830ada	260	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
558eb5d6e13823109f3ee517	434	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
56833ddfcf58f1479a0abbcc	72	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54b43280e138239d8685381d	337	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
578b8ab6cf58f1645f54f0c6	49	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5509217ee138238460c4f689	246	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5c3185b21faed655488b9982	12	Jialingjiang Formation	245	251	ZHONG, Jia'ai et al.	The Discovery of Deep Potassium and Lithium Resources in the Huangjinkou Anticline, Northeast of Sichuan	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13615
559c3f39e138230816dad2ff	193	Tamarisk mention	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
59aefb59cf58f1acd5671b26	163	Bassanite Dolomite			Gazulla, M. F. et al.	Chemical characterisation by WD-XRF and XRD of silicon carbide-based grinding tools	X-Ray Spectrometry	39	2010	Wiley-Blackwell	10.1002/xrs.1258
54b4327ee138239d868532b9	322	Calcite Dolomite			Xing, Lina et al.	Groundwater hydrochemical characteristics and processes along flow paths in the North China Plain	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.03.017
5c3e6d6c1faed655488cd35a	315	Larne Halite Member			Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b64a4de1382314227d0039	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b6d4bfe13823bd29ba7dc0	475	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54d92539e138238471e805e2	52	Bunter Sandstone	245	251	Stadler, S. et al.	Isotopic and geochemical indicators for groundwater flow and multi-component mixing near disturbed salt anticlines	Chemical Geology		2012	Elsevier	10.1016/j.chemgeo.2011.12.006
58d05105cf58f13f39efd424	196	San Andres Formation	251	299	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
579aae1bcf58f112b1fd775d	62	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
57e65deecf58f186b6da86bd	185	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
578fb2c8cf58f1bdcd2df236	51	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54fb3438e138239936c6d321	184	Salado Formation	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
56ac24facf58f19442534c08	64	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
55a7c745e13823757cc70251	40	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5cdf2f660b45c76caf8a3175	3	Middle-Phase Microemulsion Formation			Yanatatsaneejit, Ummarawadee et al.	Ethylbenzene Removal by Froth Flotation Under Conditions of Middle-Phase Microemulsion Formation I: Interfacial Tension, Foamability, and Foam Stability	Separation Science and Technology	40	2005	Informa UK Limited	10.1081/SS-200055995
572cf900cf58f13d86a1bdc8	187	Castile Formation	253.8	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
557f199ce13823bc80ba25a0	854	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5506a9ebe1382326932d924e	266	Lisan mention	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
54dc2da6e138238a47f96228	235	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
579f1578cf58f1168e64ad7f	284	Tamarisk mention	251.902	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4324be138239d8684a6bc	127	Louann mention	145	174.7	Hay, William W. et al.	Evaporites and the salinity of the ocean during the Phanerozoic: Implications for climate, ocean circulation and life	Palaeogeography, Palaeoclimatology, Palaeoecology	240	2006	Elsevier	10.1016/j.palaeo.2006.03.044
54c5d43de1382389c54c4e38	1	Nolichucky Shale	488.3	501	oreman, J.Lincoln and Dunne, William M	Conditions of vein formation in the southern Appalachian foreland: constraints from vein geometries and fluid inclusions	Journal of Structural Geology	13	1991	Elsevier	10.1016/0191-8141(91)90076-U
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55a4caf6e13823757cc6f32d	1255	Pinnacles Formation	5.333	23.03	Diggles, Michael F.	Mineral summaries; U.S. Bureau of Land Management Wilderness Study Areas in California outside the California Desert	Open-File Report		1990	United States Geological Survey	10.3133/ofr9096
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54f96e27e138239936c6c797	270	Cardona Formation			Miralles, L et al.	3-D rock salt fabrics in a shear zone (Súria Anticline, South-Pyrenees)	Journal of Structural Geology	23	2001	Elsevier	10.1016/S0191-8141(00)00138-3
54eba4f0e138237cc9151b1e	448	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
572cf900cf58f13d86a1bdc8	236	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
558e3094e13823109f3ee1d7	52	Paradox mention	306	319.714	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
550901a3e138238460c4f59b	132	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
577c41d6cf58f188cebdd1fb	270	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
578b8ab6cf58f1645f54f0c6	16	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57d0097ccf58f145d627bfaf	118	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
558e672ce13823109f3ee322	324	Rustler mention	253.9652	256.0278	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	891	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c0d379cf58f16e99a378b9	154	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55ae4f4be13823763a830ada	673	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5733004ccf58f1066ffdaeaa	177	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55a7c745e13823757cc70251	141	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a7c745e13823757cc70251	17	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
558e3094e13823109f3ee1d7	98	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
577bca4acf58f1538dda98fd	275	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
578b8ab6cf58f1645f54f0c6	256	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5682e272cf58f1479a0ab716	549	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5c24b1141faed655488a5926	217	Antrim Shale	359.2	385.3	Sheets, Julie M. et al.	Assessing geochemical reactions during CO2 injection into an oil-bearing reef in the Northern Michigan basin	Applied Geochemistry	100	2019	Elsevier	10.1016/j.apgeochem.2018.12.008
57ec1ab3cf58f1acfab96941	182	Zaragoza Gypsum Formation	5.332	23.03	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
5907a1e5cf58f1a696dd7cce	64	Boulby Halite Formation	251	260.4	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
5c31c4821faed655488ba064	52	Nong Bok Formation	65.5	99.6	REN, Qianhui et al.	A Multi-fluid Constrain for the Forming of Potash Deposits in the Savannakhet Basin: Geochemical Evidence from Halite	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13552
54b4328be138239d86855814	136	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A
55989b6ce1382390cc640e7d	233	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55b8b7f4e13823bd29ba8982	450	Rustler mention	253.9652	256.0278	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
5682e3a8cf58f1479a0ab727	345	Prairie Formation	359.2	416	YENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
577ef8c7cf58f1ac737005ec	96	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
55b6d4bfe13823bd29ba7dc0	1191	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b3dfb4e138231cbdd6d442	902	Pinnacle Overlook mention	324.734	327.1333	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
54b4324de138239d8684aa17	94	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5b526230cf58f1a50a464a8d	359	SYS Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
579fe160cf58f15528a4466f	176	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
578fb2c8cf58f1bdcd2df236	189	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c85be2cf58f1a8110ba4b2	167	KCl Limestone			Pickard, William F.	Geochemical constraints on sustainable development: Can an advanced global economy achieve long-term stability?	Global and Planetary Change	61	2008	Elsevier	10.1016/j.gloplacha.2007.10.005
54d899b7e138238471e803b7	141	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
558eb5d6e13823109f3ee517	1416	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b4327fe138239d868537ad	286	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5c2a91b51faed655488b0172	1	MANAGEM Group			Essarraj, Samira et al.	The Koudia El Hamra Ag–Pb–Zn deposit, Jebilet, Morocco: Mineralogy and ore fluid characterization	Journal of African Earth Sciences	145	2018	Elsevier	10.1016/j.jafrearsci.2018.04.019
572cf1fccf58f13accaa0e61	216	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
578653e1cf58f10c846f939b	19	Parachute Creek Member	33.9	55.8	Dyni, John R. and Hawkins, James E.	Lacustrine turbidites in the Green River Formation, northwestern Colorado	Geol	9	1981	GSA	10.1130/0091-7613(1981)9<235:ltitgr>2.0.co;2
578fb2c8cf58f1bdcd2df236	54	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b6d4bfe13823bd29ba7dc0	335	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54ddbfdae138238a47f968be	289	Sdom Formation	-5.5012E-05	23.03	Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
578fb2c8cf58f1bdcd2df236	33	San Andres Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
550895c3e138237a6f7391ae	156	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
57484ab3cf58f13effae7ac5	205	Basal Halite Macumber Fm			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
558eb5d6e13823109f3ee517	759	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
56b99311cf58f14c238d4bdc	239	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
5ab91987cf58f16020dc43c8	164	Average Group			Guseva, N.V. et al.	Formation of the chemical composition of brackish and brine groundwater in the Tuva depression and surrounding areas	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.01.011
55b73032e13823bd29ba8000	268	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
572cf1fccf58f13accaa0e61	291	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
574f1369cf58f10afd57189e	4	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
57474ebdcf58f1b6f0394e11	80	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
57c19e14cf58f16bf61df64c	58	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b70b93e1382373b63b7aed	138	Salado Fm.	251	260.4	Knauth, L.Paul and Beeunas, Mark A.	Isotope geochemistry of fluid inclusions in Permian halite with implications for the isotopic history of ocean water and the origin of saline formation waters	Geochimica et Cosmochimica Acta	50	1986	Elsevier	10.1016/0016-7037(86)90195-X
56833ddfcf58f1479a0abbcc	217	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
558cbceae13823109f3eda41	199	Verde mention	4.1777	8.342	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
557cd3cfe138239225f869e5	3305	Saude Formation	145	251.902	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55088ec0e138237a6f73918a	34	Zechstein mention	251.902	273.01	Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54b5345de138239571b90a0d	428	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
559712a9e1382390cc6405c9	68	Slave Point mention	380.075	384.575	Lonnee, Jeff and Machel, Hans G.	Mixing of halite brines with meteoric water in the Clarke Lake gas field, Canada	Journal of Geochemical Exploration	89	2006	Elsevier	10.1016/j.gexplo.2005.11.055
56fecd78cf58f1575a00f57d	16	Caen Limestone			Jerwood, L. C. et al.	Experimental frost and salt weathering of chalk—I	Earth Surface Processes and Landforms	15	1990	Wiley-Blackwell	10.1002/esp.3290150704
5799dd81cf58f19aa930e09e	40	Angarskaya Formation			Brennan, Sean T. et al.	Seawater chemistry and the advent of biocalcification	Geol	32	2004	Geological Society of America	10.1130/g20251.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c0252ecf58f16e99a3735b	3	Fluid ProcessesResearch Group			Wilkinson, J.J et al.	Laser ablation-ICP-AES for the determination of metals in fluid inclusions: An application to the study of magmatic ore fluids	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90577-0
57a1b61ecf58f1154eb55fb9	21	Nippewalla mention	273.01	279.7525	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
5a2b7516cf58f108104211ac	134	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
5ab9a5fbcf58f196f620b199	226	Gull River Formation	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
5a850dffcf58f13f065e41c5	55	Sedom Formation	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
56c1a95dcf58f15c72c903aa	395	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d4bfe13823bd29ba7dc0	908	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
584aa62ccf58f19d6a5f583e	533	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5a850dffcf58f13f065e41c5	275	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
550dedb5e1382369a6f93ba1	493	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
572cf900cf58f13d86a1bdc8	214	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57a43018cf58f11204e17fe0	604	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56c1d5f9cf58f15c72c90717	23	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55bfa1b1cf58f16e99a36f42	242	Salina Group	416	443.7	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
54b43245e138239d8684952a	249	Salina Formation	416	443.7	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
55c01a9ecf58f16e99a37305	496	Salado Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57a43018cf58f11204e17fe0	527	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b5b47ce1382314227cfdae	180	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55765c01e138234790a011e8	45	Salt IV mention			Canals, A. et al.	Microanalysis of primary fluid inclusions in halite: constraints for an evaporitic sedimentation modeling. Application to the Mulhouse Basin (France)	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90005-V
55917250e13823109f3ef5b1	1614	Maha Sarakam Formation	65.5	145.5	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
5674a234cf58f12215607647	345	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
5799dd81cf58f19aa930e09e	51	Angarskaya Formation			Brennan, Sean T. et al.	Seawater chemistry and the advent of biocalcification	Geol	32	2004	Geological Society of America	10.1130/g20251.1
5c319a241faed655488b9bcc	5	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
56c1fcefcf58f15c72c90a17	514	Maha Sarakham Formation	65.5	145.5	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
54b4328fe138239d868563a5	43	Stipinai Formation	374.5	385.3	Rychliński, Tomasz et al.	Unusually well preserved casts of halite crystals: A case from the Upper Frasnian of northern Lithuania	Sedimentary Geology		2014	Elsevier	10.1016/j.sedgeo.2014.05.005
5b199d0dcf58f13e9d9dc48e	268	Cobar mention	407.6	427.4	Seccombe, P. K. et al.	Sulfur isotope and fluid inclusion geochemistry of metamorphic Cu–Au vein deposits, central Cobar area, NSW, Australia	Australian Journal of Earth Sciences	64	2017	Informa UK Limited	10.1080/08120099.2017.1297330

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6df25e13823bd29ba7dfe	226	Gypsum Limestone			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55f2ced1cf58f16256a21973	79	Billianwala Salt Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
56c1d8a6cf58f15c72c9073f	65	Platy Dolomite			PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
550aa1a2e138238460c4fdf5	91	Step Calcite Gypsum Dolomite			Hidalgo, M.Carmen and Cruz-Sanjulián, Jav	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
55739462e13823980c49121c	44	Zeolite Formation				Contents	Procedia Earth and Planetary Science		2013	Elsevier	10.1016/S1878-5220(13)00316-0
57e65deecf58f186b6da86bd	210	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
59aefb59cf58f1acd5671b26	163	Bassanite Dolomite			Gazulla, M. F. et al.	Chemical characterisation by WD-XRF and XRD of silicon carbide-based grinding tools	X-Ray Spectrometry	39	2010	Wiley-Blackwell	10.1002/xrs.1258
578fb2c8cf58f1bdcd2df236	356	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5590c401e13823109f3ef1e0	636	Green River Formation	33.9	55.8	Taylor, O. J.	Hydrologic-information needs for oil-shale development, northwestern Colorado	Water-Resources Investigations Report		1982	United States Geological Survey	10.3133/wri824076
55c2a9cacf58f1a8110b8a1e	94	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5682e272cf58f1479a0ab716	3	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
572cf900cf58f13d86a1bdc8	32	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
580b91b8cf58f14ba918ac36	198	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and "Cline" shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
56833ddfcf58f1479a0abbcc	112	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5674a234cf58f12215607647	4	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
5733004ccf58f1066ffdaeaa	395	Prairie Evaporite Formation	385.3	397.5	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	322	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55a3df0fe13823757cc6f032	177	Parachute Creek Member	33.9	55.8	obson, Stanley G. and Saulnier, George	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8072
579f1578cf58f1168e64ad7f	313	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5579c559e138231c9f688420	36	Pot Hole Pueblo Group			Bradley, Robin	Mining districts and mineral deposits of the Basin and Range Province of Oregon	Open-File Report		1982	United States Geological Survey	10.3133/ofr8258
5682e272cf58f1479a0ab716	471	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5ac3dd8fcf58f1bdc2a569af	75	Main Group	251	260.4	Giacalone, Alba et al.	Sequestration of organometallic compounds by natural organic matter. binding of trimethyltin(IV) by fulvic and alginic acids	Applied Organometallic Chemistry	20	2006	Wiley-Blackwell	10.1002/aoc.1128
55b78281e13823bd29ba8218	2066	Salado Formation	251	260.4	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
579aae1bcf58f112b1fd775d	62	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54c060fbe1382389c54c3757	155	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54dc2da6e138238a47f96228	204	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
5732032ecf58f19cbcbc550f	197	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5713034ccf58f175a32a0111	79	Carnallite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b5b47ce1382314227cfdae	253	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682e3a8cf58f1479a0ab727	411	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
56c1a95dcf58f15c72c903aa	488	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d4bfe13823bd29ba7dc0	5	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5503421ae1382326932d7e6d	105	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
579fe160cf58f15528a4466f	38	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
58b7df47cf58f18af629a04c	88	Serrat mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
5733004ccf58f1066ffdaeaa	229	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
55b7c404e13823bd29ba8379	1944	Wilkins Peak Member	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
54b4328ee138239d86856168	108	Base mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55c2ce13cf58f1a8110b8b48	411	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55c171fbcf58f1a8110b8064	388	Burns mention	23.03	33.9		Goldschmidt Abstracts 2008- M	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.016
578fb2c8cf58f1bdcd2df236	46	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55baa3b5e1382373b63b89e7	340	Sedom Fm.	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54e733ace138237cc9150889	99	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
563bc6dacf58f13ba85ac0d9	290	Strontianite Sylvite Dolomite			Kazemi Nia Korrani, Aboulghasem et al.	Coupling IPhreeqc with UTCHEM to model reactive flow and transport	Computers & Geosciences		2015	Elsevier	10.1016/j.cageo.2015.06.004
572cf1fccf58f13accaa0e61	59	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
559d4d6ee138230816dad784	61	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
57131885cf58f17cb0fd1f40	59	Salina Group	416	443.7	Kovalevich, V. M. et al.	Brine inclusions in halite and the origin of the Middle Devonian Prairie Evaporites of Western Canada; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.228
54be90c7e13823299564b137	459	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
55a751cee13823757cc6ff3c	554	Castile mention	259	259.51	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54b4328de138239d86855c7b	155	Opeche Shale	251	299	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
55bfbd79cf58f16e99a3701c	575	Prairie Evaporite Formation	385.3	397.5	oberts, Sheila M. and Spencer, Ronald J.	Paleotemperatures preserved in fluid inclusions in halite	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00253-V
550895c3e138237a6f7391ae	182	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54d855ffe138238471e80284	427	Castile Formation	253.8	260.4	Schijf, Johan	Alkali elements (Na, K, Rb) and alkaline earth elements (Mg, Ca, Sr, Ba) in the anoxic brine of Orca Basin, northern Gulf of Mexico	Chemical Geology	243	2007	Elsevier	10.1016/j.chemgeo.2007.06.011
579fe160cf58f15528a4466f	59	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5509217ee138238460c4f689	96	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54b43247e138239d86849b52	331	El Molino Fm	61.6	70.1938	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54b4324de138239d8684aa17	153	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b4324ee138239d8684ae71	129	Sciliar Fm			Stefani, Marco et al.	The changing climate framework and depositional dynamics of Triassic carbonate platforms from the Dolomites	Palaeogeography, Palaeoclimatology, Palaeoecology	290	2010	Elsevier	10.1016/j.palaeo.2010.02.018
572cf900cf58f13d86a1bdc8	177	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
550b2b52e1382369a6f92fe2	221	Anhydrite Aragonite Calcite Dolomite			Ma, Jinzhu et al.	Groundwater recharge and evolution in the Dunhuang Basin, northwestern China	Applied Geochemistry		2013	Elsevier	10.1016/j.apgeochem.2012.10.007
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5b52e830cf58f189cf4f1128	104	Map Group	5.333	23.03	Walter, Benjamin F. et al.	Exploration of hydrothermal carbonate magnesium isotope signatures as tracers for continental fluid aquifers, Schwarzwald mining district, SW Germany	Chemical Geology	400	2015	Elsevier	10.1016/j.chemgeo.2015.02.009
5c319a241faed655488b9bcc	86	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5a21053ecf58f18a3170d1ed	122	Anhydrite Dolomite			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5a850dffcf58f13f065e41c5	183	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
558e3094e13823109f3ee1d7	104	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
55b78281e13823bd29ba8218	1937	Salado Formation	251	260.4	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b64a4de1382314227d0039	336	Salado Formation			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
57a43018cf58f11204e17fe0	802	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4328ae138239d86855597	136	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
550901a3e138238460c4f59b	90	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
572cf1fccf58f13accaa0e61	88	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55989b6ce1382390cc640e7d	3	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
54b43280e138239d8685381d	232	II mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
5c319a241faed655488b9bcc	2	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5c3d9a5c1faed655488cc5a0	2	Francis Group	305.425	305.7125	da Costa Mello, Simone et al.	Response of tomato to polyhalite as a multi-nutrient fertilizer in southeast Brazil	Journal of Plant Nutrition	41	2018	Informa UK Limited	10.1080/01904167.2018.1497178
56831341cf58f1479a0ab983	456	Kirmir Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c0d379cf58f16e99a378b9	58	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5733004ccf58f1066ffdaeaa	242	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54c0c25fe1382389c54c390a	98	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55c35bc5cf58f1a8110b8fcc	185	Salina Group	416	443.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
558eb5d6e13823109f3ee517	404	Salado mention	256.0278	262.2168	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54e7c15ae138237cc9150ae2	155	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b64a4de1382314227d0039	340	SaJado mention			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
579f1578cf58f1168e64ad7f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b4328ae138239d86855586	41	Patience Lake Member			Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
54b4327ee138239d86853337	57	Middle Member			Zhang, Xiying et al.	Origin of the late Cretaceous potash-bearing evaporites in the Vientiane Basin of Laos: δ11B evidence from borates	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2012.11.036
5590aba6e13823109f3ef147	29	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	191	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54d3e320e138238471e7efcd	392	Serra Geral Formation	121.4	137.4	Bonotto, Daniel Marcos	Hydro(radio)chemical relationships in the giant Guarani aquifer, Brazil	Journal of Hydrology	323	2006	Elsevier	10.1016/j.jhydrol.2005.09.007
55ae4f4be13823763a830ada	646	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
579fe160cf58f15528a4466f	16	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55bf8aa9e138232db707b806	107	Prairie Formation	359.2	416	Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
55ae4f4be13823763a830ada	492	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5a850dffcf58f13f065e41c5	229	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
557f199ce13823bc80ba25a0	237	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b7c404e13823bd29ba8379	815	Parachute Creek Member	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1202	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579f5bc9cf58f12a53c41a24	42	Tripoli Fm	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5682e272cf58f1479a0ab716	1	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
579fe160cf58f15528a4466f	16	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54fb3438e138239936c6d321	186	Salado mention	256.0278	262.2168	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5733004ccf58f1066ffdaeaa	211	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b67d1ae1382373b63b7852	1235	Petroleum Clay Formation				List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a850dffcf58f13f065e41c5	83	Lot Member	538.8	4000	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54b4328ce138239d86855aad	374	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
558eb5d6e13823109f3ee517	1511	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
572cf1fccf58f13accaa0e61	46	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5733004ccf58f1066ffdaeaa	183	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b73032e13823bd29ba8000	379	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
54eba4f0e138237cc9151b1e	57	Boulby Shale			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5c3e6d6c1faed655488cd35a	319	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54be1b30e138233c8bc4f9d7	58	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5c2aed6b1faed655488b0bd4	445	Working Group			Bi, Xianwu et al.	Nature and evolution of fluid inclusions in the Cenozoic Beiya gold deposit, SW China	Journal of Asian Earth Sciences	161	2018	Elsevier	10.1016/j.jseaes.2018.04.034
56c1ca03cf58f15c72c90620	216	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
574f1369cf58f10afd57189e	208	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
57a43018cf58f11204e17fe0	428	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
578aea2bcf58f13920dc7baa	174	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55b73032e13823bd29ba8000	458	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55f48ec1cf58f16256a22559	548	Röt Formation			Lugli, Stefano et al.	The deep record of the Messinian salinity crisis: Evidence of a non-desiccated Mediterranean Sea	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.05.017
54bffee9e1382389c54c3458	349	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
558ecdcbe13823109f3ee5af	5012	Wilkins Peak Member	33.9	55.8	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
5c3e6d6c1faed655488cd35a	149	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
58c18a99cf58f1a6ba4ea54d	119	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55c36968cf58f1a8110b9014	58	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
54d899b7e138238471e803b7	69	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
5683006acf58f1479a0ab88f	114	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
55b64a4de1382314227d0039	340	SaJado mention			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
58b9e08fcf58f19cb0d5b6e0	215	Finally Group			Redwan, Mostafa and Rammlmair, Diete	Flood hazard assessment and heavy metal distributions around Um Gheig mine area, Eastern Desert, Egypt	Journal of Geochemical Exploration		2017	Elsevier	10.1016/j.gexplo.2016.11.012
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5731ac74cf58f18e0ffaff50	317	San Andres Formation	251	299	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
54b4324de138239d8684aa17	190	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55ad3126e13823763a8303a0	112	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57928970cf58f1320a760f56	68	Blanca Lila Formation	0.01143	1.806	Vandervoort, Dirk S.	Stratigraphic response to saline lake-level fluctuations and the origin of cyclic nonmarine evaporite deposits: The Pleistocene Blanca Lila Formation, northwest Argentina	Geological Society of America Bulletin	109	1997	GSA	10.1130/0016-7606(1997)109<0210:srtsll>2.3.co;2
550901a3e138238460c4f59b	136	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54b4328ae138239d86855597	136	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
5749d59dcf58f1b0821791d1	250	Prairie Evaporite Formation	385.3	397.5	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
57c19e14cf58f16bf61df64c	229	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55989b6ce1382390cc640e7d	3	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
558ecdcbe13823109f3ee5af	297	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
5730cdcccf58f16acaf6b5aa	59	Potash mention			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
559c3f39e138230816dad2ff	193	Tamarisk mention	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54e7c15ae138237cc9150ae2	78	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b5b776e1382314227cfdc2	130	Salina Group	416	443.7		Geochimica et Cosmochimica Acta List of Referees, List of Contents, Subject Index, and Author Index	Geochimica et Cosmochimica Acta		1990	Elsevier	10.1016/0016-7037(90)90256-K
578b8ab6cf58f1645f54f0c6	412	San Andres Formation	251	299	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5732032ecf58f19cbcbc550f	177	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4328ce138239d86855aad	439	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b4324de138239d8684aa17	293	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5713034ccf58f175a32a0111	339	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c35bc5cf58f1a8110b8fcc	193	Carribuddy mention	419.2	458.4	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
56c1d5f9cf58f15c72c90717	25	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1effacf58f15c72c9090b	88	Mudstone Anhydrite Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54e733ace138237cc9150889	32	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
56c1ca03cf58f15c72c90620	299	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54b4327fe138239d868537ad	237	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
5682e3a8cf58f1479a0ab727	378	Salado Formation	251	260.4	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
56830ae3cf58f1479a0ab915	62	Leofnard Member			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
57a43018cf58f11204e17fe0	53	Red mention	324.4643	324.8857	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
550895c3e138237a6f7391ae	135	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4327ee138239d86853305	78	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
5c3539e11faed655488c10ed	212	Prairie Evaporite mention	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
5a3dff46cf58f12be0bde56e	47	Zaragoza Formation	23.03	33.9	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
55ad3126e13823763a8303a0	186	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
558df7d7e13823109f3ee082	605	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
57a43018cf58f11204e17fe0	539	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57d0097ccf58f145d627bfaf	91	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
578b8ab6cf58f1645f54f0c6	53	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
571772d1cf58f1605db2c98b	373	Evaporite Group			Wang, J. et al.	Pliocene-Pleistocene Climate Change At the NE Tibetan Plateau Deduced From Lithofacies Variation In the Drill Core SG-1, Western Qaidam Basin, China	Journal of Sedimentary Research	82	2012	Society for Sedimentary Geology	10.2110/jsr.2012.76
57a43018cf58f11204e17fe0	158	Supai Formation	251	299	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5682e3a8cf58f1479a0ab727	334	Salado Formation	251	260.4	YENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
56833ddfcf58f1479a0abbcc	329	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
57a43018cf58f11204e17fe0	174	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56b4fb9ecf58f14c238d30ea	212	Hydrohalite Dolomite			Ayllon, F. et al.	Re-equilibration of fluid inclusions in diagenetic-anchizonal rocks of the Cinera-Matallana coal basin (NW Spain)	Geofluids	3	2003	Wiley-Blackwell	10.1046/j.1468-8123.2003.00048.x
55989b6ce1382390cc640e7d	294	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55a7c745e13823757cc70251	40	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
57320459cf58f19ced0f7bc5	199	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5682ea89cf58f1479a0ab77c	381	Opeche Shale	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
5730cdcccf58f16acaf6b5aa	8	McNutt Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
56831341cf58f1479a0ab983	477	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
57484ab3cf58f13effae7ac5	183	Halite Mabou Gp			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
57a43018cf58f11204e17fe0	582	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5682e272cf58f1479a0ab716	698	Green River Formation	33.9	55.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
58ccdb01cf58f193ab4b19a8	56	Albert Formation	318.1	359.2	Pickerill, Ron K.	Carboniferous nonmarine invertebrate ichnocoenoses from southern New Brunswick, eastern Canada	Ichnos	2	1992	Taylor and Francis	10.1080/10420949209380072
57a43018cf58f11204e17fe0	16	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b77fd5e1382373b63b7cce	146	Louann Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577ef8c7cf58f1ac737005ec	51	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
5682ea89cf58f1479a0ab77c	527	Salina Formation	416	443.7	IIECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
578b8ab6cf58f1645f54f0c6	265	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55a7c745e13823757cc70251	145	Culebra Dolomite	251	299	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
56831341cf58f1479a0ab983	204	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
558eb5d6e13823109f3ee517	1216	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54d3bc73e13823811a06902d	132	DISSOLVE Siderite Dolomite			Eckstein, Yoram and Hau, Joseph A.	Modeling the neutralizing processes of acid precipitation in soils and glacial sediments of northern Ohio	Journal of Hydrology	131	1992	Elsevier	10.1016/0022-1694(92)90226-L
5d3f58060b45c76cafa2004f	29	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
5732032ecf58f19cbcbc550f	67	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5503421ae1382326932d7e6d	533	Baucarit Group	1.806	65.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55bfc14ecf58f16e99a3703b	375	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5682e272cf58f1479a0ab716	501	Queen-Grayburg Formation			HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55a7c745e13823757cc70251	142	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56c1d5f9cf58f15c72c90717	25	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
5733004ccf58f1066ffdaeaa	8	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
579f1578cf58f1168e64ad7f	275	Forty-niner Member			Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
579aae1bcf58f112b1fd775d	29	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54e672c7e138237cc9150573	144	Salado Formation	251	260.4	Brookins, D.G.	Natural analogues for radwaste disposal: Elemental migration in igneous contact zones	Chemical Geology	55	1986	Elsevier	10.1016/0009-2541(86)90034-3
579f5bc9cf58f12a53c41a24	83	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5a850dffcf58f13f065e41c5	55	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
578fb2c8cf58f1bdcd2df236	51	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5a850dffcf58f13f065e41c5	183	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5c319a241faed655488b9bcc	170	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5682e272cf58f1479a0ab716	1	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4327ce138239d86852e9c	111	Monterey Formation	5.332	23.03	Munz, I.a et al.	The fluid regime during fracturing of the Embla field, Central Trough, North Sea	Marine and Petroleum Geology	15	1998	Elsevier	10.1016/S0264-8172(98)00062-2
5508c83fe138238460c4f3ef	227	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579fe160cf58f15528a4466f	128	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
56ac24facf58f19442534c08	64	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
579f1578cf58f1168e64ad7f	277	Fortyniner Member	251.902	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b4328ce138239d86855aad	309	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57a43018cf58f11204e17fe0	693	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4324de138239d8684aa17	153	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5682ea89cf58f1479a0ab77c	300	Nippewalla Group	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
5590aba6e13823109f3ef147	9	Honaker Trail Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
5b6d22edcf58f18ba5e73c75	20	Middle Evaporite Bed			Stewart, F. H.	Replacements involving early carnallite in the potassium-bearing evaporites of Yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	31	1956	Mineralogical Society	10.1180/minmag.1956.031.233.02
54b4328ce138239d86855b7a	108	Salina Group	416	443.7	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
5a048d65cf58f1b96402a09e	361	Black River Group	443.7	488.3	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
5713034ccf58f175a32a0111	95	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5c2fe60d1faed655488b6bad	198	Kumugelimu Formation			Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5a048d65cf58f1b96402a09e	160	Coboconk mention	455.615	455.725	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
54fb3438e138239936c6d321	269	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55ae4f4be13823763a830ada	260	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
559c3f39e138230816dad2ff	158	Salado mention	256.0278	262.2168	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
57c4b51dcf58f18ca41d0d6f	233	Calcite Aragonite Dolomite			Sun, Ziyong et al.	Hydrogeological and hydrogeochemical control of groundwater salinity in an arid inland basin: Dunhuang Basin, northwestern China	Hydrological Processes	30	2016	Wiley	10.1002/hyp.10760
557bfbc7e138239225f86664	270	Halite Anhydrite Calcite Dolomite			Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
5682e272cf58f1479a0ab716	911	Salado Formation	251	260.4	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5683006acf58f1479a0ab88f	24	Stassfurt mention			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
5a850dffcf58f13f065e41c5	261	Me'arat Sedom Mbr			Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55b6d4bfe13823bd29ba7dc0	192	Anhydrite Carbonate Shale			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
578b8ab6cf58f1645f54f0c6	161	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5682ea89cf58f1479a0ab77c	389	Opeche Shale	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c1b591cf58f173fefe15b4	196	Catoche Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
55c01a9ecf58f16e99a37305	298	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57a1b61ecf58f1154eb55fb9	108	Salina Group	416	443.7	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
579aae1bcf58f112b1fd775d	33	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
56b4fb9ecf58f14c238d30ea	212	Hydrohalite Dolomite			Ayllon, F. et al.	Re-equilibration of fluid inclusions in diagenetic-anchizonal rocks of the Cinera-Matallana coal basin (NW Spain)	Geofluids	3	2003	Wiley-Blackwell	10.1046/j.1468-8123.2003.00048.x
55765d21e138234790a011ee	149	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
5682e272cf58f1479a0ab716	592	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328ce138239d86855aff	597	Evaporite Group			Mees, F	Textural features of Holocene perennial saline lake deposits of the Taoudenni–Agorgott basin, northern Mali	Sedimentary Geology	127	1999	Elsevier	10.1016/S0037-0738(99)00014-7
55986cdae1382390cc640d7c	466	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
558e672ce13823109f3ee322	324	Rustler mention	253.9652	256.0278	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
55b7869fe13823bd29ba8231	576	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4324de138239d8684aa17	284	Serrata Fm			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5682e272cf58f1479a0ab716	319	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5682e272cf58f1479a0ab716	546	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55ad1049e13823763a8302c4	369	Wilkins Peak Member	33.9	55.8	Smith, Marjorie C.	Bibliography of the geology of the Green River Formation, Colorado, Utah, and Wyoming, to July 1, 1986	Open-File Report		1986	United States Geological Survey	
5a048d65cf58f1b96402a09e	368	Shadow Lake mention	451.595	461.228	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
54fe25efe138239936c6e7e5	129	Calcite Dolomite			Mayo, Alan L. and Klauk, Robert H.	Contributions to the solute and isotopic groundwater geochemistry, Antelope Island, Great Salt Lake, Utah	Journal of Hydrology	1-4	1991	Elsevier	10.1016/0022-1694(91)90120-7
578b8ab6cf58f1645f54f0c6	161	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
572cf900cf58f13d86a1bdc8	126	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
579f1578cf58f1168e64ad7f	351	Yates Formation	251	299	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
579fe160cf58f15528a4466f	128	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57d0097ccf58f145d627bfaf	5	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
577c41d6cf58f188cebdd1fb	225	Second Red Bed			WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
572cf1fccf58f13accaa0e61	54	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57a43018cf58f11204e17fe0	873	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b7c5a4e13823bd29ba8382	324	Salado Formation	251	260.4	Harrington, James Foster et al.	Sources of fertilizer minerals in South America; a preliminary study	Bulletin		1966	United States Geological Survey	10.3133/b1240
55af1c5ce13823763a830fe9	852	Salado mention	256.0278	262.2168	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5590aba6e13823109f3ef147	272	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	270	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55c48dc6cf58f1a8110b94db	171	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55af1c5ce13823763a830fe9	515	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
56830ae3cf58f1479a0ab915	286	Winnipegosis mention	386.45	393.3	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55933fbae138236ee2218347	35	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
54e00699e138238a47f97251	245	Phase Dolomite	65.5	251	Ledesma-Ruiz, Rogelio et al.	Investigation of the geochemical evolution of groundwater under agricultural land: A case study in northeastern Mexico	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2014.12.026
5a0493edcf58f1b96402aae7	262	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b30ea3e138231cbdd6cfcd	2125	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
574f1369cf58f10afd57189e	160	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5683006acf58f1479a0ab88f	44	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
5713034ccf58f175a32a0111	182	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54b4324de138239d8684aa17	177	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b4327fe138239d868537ad	94	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5509217ee138238460c4f689	294	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5713034ccf58f175a32a0111	235	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55f4877fcf58f16256a22522	77	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
575d04f6cf58f198893b8def	154	Ibura Member			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
577bca4acf58f1538dda98fd	187	Prairie Evaporitc Formation			WARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55b5b47ce1382314227cfdae	253	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
578b8ab6cf58f1645f54f0c6	436	San Andres Formation	251	299	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
574f1369cf58f10afd57189e	214	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
558eb5d6e13823109f3ee517	759	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
54bedb19e13823023e43d91d	137	Esterhazy Member			Baadsgaard, H.	Rb-Sr and K-Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
54b4324be138239d8684a6bc	94	Louann Formation	145.5	199.6	Hay, William W. et al.	Evaporites and the salinity of the ocean during the Phanerozoic: Implications for climate, ocean circulation and life	Palaeogeography, Palaeoclimatology, Palaeoecology	240	2006	Elsevier	10.1016/j.palaeo.2006.03.044
558eb5d6e13823109f3ee517	1247	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55c35bc5cf58f1a8110b8fcc	162	Wellington Formation	251	299	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
5713034ccf58f175a32a0111	149	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54fe25efe138239936c6e7e5	197	Calcite Dolomite			Mayo, Alan L. and Klauk, Robert H.	Contributions to the solute and isotopic groundwater geochemistry, Antelope Island, Great Salt Lake, Utah	Journal of Hydrology	1-4	1991	Elsevier	10.1016/0022-1694(91)90120-7
5590d1bfe13823109f3ef23b	192	Salado Formation	251	260.4	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
55c01a9ecf58f16e99a37305	316	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57172752cf58f14e1813b215	27	Salt mention	251	260.4	Lugli, S. et al.	Giant polygons in the Realmonte Mine (Agrigento, Sicily); evidence for the desiccation of a Messinian halite basin	Journal of Sedimentary Research	69	1999	Society for Sedimentary Geology	10.2110/jsr.69.764
5a30910ccf58f1715016597b	38	Wilkins Peak Member	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
5c19917d1faed655488915d3	300	Gessoso-Solfifera Formation	Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Ki			Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
56c1a95dcf58f15c72c903aa	508	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b76f2ae1382373b63b7c6a	851	Ghareb Formation	65.5	70.6		List of contents, author index, subject index and list of referees vol. 48, 1984	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90327-2
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
55b6d4bfe13823bd29ba7dc0	1191	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55afeeece138238f9de483c5	61	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
557cd3cfe138239225f869e5	3293	Dakota mention	98.85	119.3	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
557cd3cfe138239225f869e5	3166	Opeche mention	273.01	283.5	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
58d05f41cf58f143d83df312	127	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
54b43245e138239d86849681	65	Juruh Mirim Formation			Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
56830ae3cf58f1479a0ab915	244	Prairie Evaporite mention	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55c01a9ecf58f16e99a37305	144	Rustler mention	253.9652	256.0278	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
572cf900cf58f13d86a1bdc8	237	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55ae4f4be13823763a830ada	289	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
58bc5274cf58f11f30c5c827	151	Dongying Formation	23.03	33.9	Chen, Yong et al.	UV Raman spectroscopy of hydrocarbon-bearing inclusions in rock salt from the Dongying sag, eastern China	Organic Geochemistry		2016	Elsevier	10.1016/j.orggeochem.2016.08.010
54bffee9e1382389c54c3458	59	Sedom Fm	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
5733004ccf58f1066ffdaeaa	8	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55ad3126e13823763a8303a0	186	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bf2d90cf58f1867eb10946	244	Goyder Formation	485.4	501	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5c3e6d6c1faed655488cd35a	391	Mercia Mudstone mention	201.4	251.902	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5682e272cf58f1479a0ab716	244	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
573090ddcf58f160029e9d90	5	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
572ecdb4cf58f1177819e19e	100	Zechstein mention	251.902	273.01	Tadeusz Marek Peryt (1) and Federico C	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
55b35463e138231cbdd6d13e	1597	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
589a4380cf58f1ab398ea2c6	157	Phase Group	65.5	251	Naderi Peikam, Elahe and Jalali, Mohser	Application of inverse geochemical modelling for predicting surface water chemistry in Ekbatan watershed, Hamedan, western Iran	Hydrological Sciences Journal	61	2016	Taylor and Francis	10.1080/02626667.2015.1016947
57a43018cf58f11204e17fe0	377	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
579f1578cf58f1168e64ad7f	245	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57126f9fcf58f142fd277238	25	Salina Formation	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
579f1578cf58f1168e64ad7f	89	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55a7c745e13823757cc70251	53	Culebra Dolomite	251	299	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55c48dc6cf58f1a8110b94db	78	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5a2b7516cf58f108104211ac	131	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55a6d3f3e13823757cc6fc08	374	Quartz mention			Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
54b4327ee138239d86853305	45	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
55c2e5c8cf58f1a8110b8c08	186	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54b4328ae138239d86855597	148	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
5682e3a8cf58f1479a0ab727	344	Prairie Formation	359.2	416	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55a7c745e13823757cc70251	114	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55f36cb9cf58f16256a21d8b	175	Zaragoza Fm	5.332	23.03	Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
573090ddcf58f160029e9d90	126	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
57126f9fcf58f142fd277238	43	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
579f1578cf58f1168e64ad7f	275	Forty-niner Member			Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57c1b591cf58f173fefe15b4	196	Catoche Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fb3438e138239936c6d321	269	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55ae9887e13823763a830cad	91	Rustler Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54ddbfdae138238a47f968be	388	Hashepela mention			Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
5d3f58060b45c76cafa2004f	29	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
558cdbe6e13823109f3edaf4	4488	Green River Formation	33.9	55.8	compiled by Erickson, Ralph L.	Characteristics of mineral deposit occurrences	Open-File Report		1982	United States Geological Survey	10.3133/ofr82795
5d3f58060b45c76cafa2004f	30	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
55c01a9ecf58f16e99a37305	155	Rustler mention	253.9652	256.0278	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
572ee8a5cf58f11bb5bc1a43	273	Yates Formation	251	299	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
572cf1fccf58f13accaa0e61	8	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55a7c745e13823757cc70251	40	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	272	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54e7c15ae138237cc9150ae2	67	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
54be90c7e13823299564b137	463	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
5590aa05e13823109f3ef13c	161	Halite Lithologies Anhydrite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55bfc14ecf58f16e99a3703b	122	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55c48dc6cf58f1a8110b94db	171	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57126f9fcf58f142fd277238	25	Salina mention	419.675	429.4	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5682e272cf58f1479a0ab716	351	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5590aba6e13823109f3ef147	178	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
558e3094e13823109f3ee1d7	230	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
55bfc14ecf58f16e99a3703b	130	Lonann Formation			Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55a6d3f3e13823757cc6fc08	191	Wilkins Peak Member	33.9	55.8	Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
55baa3b5e1382373b63b89e7	317	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54b4328de138239d86855ceb	282	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5682e272cf58f1479a0ab716	575	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5a30910ccf58f1715016597b	155	Green River Formation	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
5c2bea2e1faed655488b221b	118	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	191	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
558ec3e3e13823109f3ee570	114	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
54b4324de138239d8684aa17	225	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54e7c7dae138237cc9150b09	816	Berea Sandstone	353.35	362.225	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2014.10.028
579ed180cf58f1030df9c51e	289	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
572cf1fccf58f13accaa0e61	222	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54e733ace138237cc9150889	235	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
577bca4acf58f1538dda98fd	129	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
558eb5d6e13823109f3ee517	31	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
550ab8aae138238460c4fe5e	5	Windsor Group	318.1	359.2	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
54d899b7e138238471e803b7	105	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
579fe160cf58f15528a4466f	93	Marker Bed			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b6d4bfe13823bd29ba7dc0	293	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
58b6daf1cf58f11f2b0dde84	283	Salado mention	256.0278	262.2168	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
5a048d65cf58f1b96402a09e	368	Shadow Lake mention	451.595	461.228	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55c0d379cf58f16e99a378b9	63	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b4328ee138239d86856168	62	Tripoli Formation	5.332	7.246	Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
55c2a9cacf58f1a8110b8a1e	155	Muribeca Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
56830b14cf58f1479a0ab918	419	Base mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55c01a9ecf58f16e99a37305	389	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
550895c3e138237a6f7391ae	233	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55c2a9cacf58f1a8110b8a1e	195	Maha Sarakham mention	33.9	100.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682d639cf58f1479a0ab68d	3	Evaporite mention			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
54b4327de138239d868530d9	189	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
577ef8c7cf58f1ac737005ec	163	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
56c1d9bbcf58f15c72c9075f	80	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55c01a9ecf58f16e99a37305	156	Tamarisk Member	251.902	273.01	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54d2216be13823302d02428b	22	Northwich Halite Formation	242	247.2	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
55088909e138237a6f73915f	323	East mention			Knauth, L. Paul	Origin and mixing history of brines, Palo Duro Basin, Texas, U.S.A.	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90019-4
579fe160cf58f15528a4466f	209	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
559c3f39e138230816dad2ff	193	Tamarisk mention	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54b4324de138239d8684aa17	149	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
572cf1fccf58f13accaa0e61	7	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
56c1d9bbcf58f15c72c9075f	80	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
550901a3e138238460c4f59b	300	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55c01a9ecf58f16e99a37305	8	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.902	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57e65deecf58f186b6da86bd	3	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
57320459cf58f19ced0f7bc5	255	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55765b42e138234790a011e4	303	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
57a43018cf58f11204e17fe0	756	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55997d5ee1382390cc641332	27	Surface Dolomite			Gac, J.Y. et al.	Chemical model for origin and distribution of elements in salts and brines during evaporation of waters. Application to some saline lakes of Tibesti, Chad	Physics and Chemistry of the Earth		1979	Elsevier	10.1016/0079-1946(79)90018-1
550895c3e138237a6f7391ae	178	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
579f1578cf58f1168e64ad7f	286	Tamarisk mention	251.902	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
559e58a2e138230816dadbe2	740	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
5732032ecf58f19cbcbc550f	82	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
550895c3e138237a6f7391ae	207	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
5d35e56c0b45c76caf93f034	468	Kootenai mention	113	145	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
54b4328ee138239d86855ef7	115	Jindong Formation	65.5	99.6	Paik, I.S. and Kim, H.J.	Playa lake and sheetflood deposits of the Upper Cretaceous Jindong Formation, Korea: Occurrences and palaeoenvironments	Sedimentary Geology	187	2006	Elsevier	10.1016/j.sedgeo.2005.12.006

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b3dfb4e138231cbdd6d442	907	Pinnacle Overlook Member	324.734	327.1333	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
5674a234cf58f12215607647	4	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
5c19917c1faed65548891586	772	Clay mention	175.6	199.6	The Shipboard Scientific Party	Site 374: Messina Abyssal Plain	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.105.1978
5590aa05e13823109f3ef13c	162	Halite Anhydrite Calcite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
5508c83fe138238460c4f3ef	224	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
55baa3b5e1382373b63b89e7	148	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
572cf1fccf58f13accaa0e61	328	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
579f5bc9cf58f12a53c41a24	265	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5502c2cae1382326932d7ae8	793	Prairie mention	383.95	389.1	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
57a43018cf58f11204e17fe0	873	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
579f1578cf58f1168e64ad7f	440	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
550895c3e138237a6f7391ae	192	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55989b6ce1382390cc640e7d	3	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
5731ac74cf58f18e0ffaff50	94	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5a0493edcf58f1b96402aae7	361	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5503421ae1382326932d7e6d	1351	Windsor Group	318.1	359.2	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55c0d379cf58f16e99a378b9	189	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5b6d3f1ecf58f193bb367046	65	Magnesian Limestone	251	299	Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
5ce2f9b20b45c76caf8ae21e	506	Grzybowo Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4324de138239d8684aa17	167	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55bfc14ecf58f16e99a3703b	37	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5503421ae1382326932d7e6d	701	Piceance River Formation			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56a038b2cf58f1079fd4ba21	152	Edwards Limestone	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
54ef9042e138237cc9152b85	200	Ariri mention	109.5278	115.1	Dooley, Tim P. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 2: Mechanical explanation from physical modeling	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.009
55a7c745e13823757cc70251	50	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
579fe160cf58f15528a4466f	209	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
550895c3e138237a6f7391ae	152	Prairie mention	383.95	389.1	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b4328de138239d86855ceb	54	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54b43287e138239d86854dad	65	LITHOLOGY Dolomite			Amiri-Garroussi, K. and Taylor, J.C.M.	Displaced carbonates in the Zechstein of the UK North Sea	Marine and Petroleum Geology	9	1992	Elsevier	10.1016/0264-8172(92)90090-2
572cf1fccf58f13accaa0e61	235	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
572cf900cf58f13d86a1bdc8	235	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
557bfbc7e138239225f86664	543	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
579fe160cf58f15528a4466f	197	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5598d566e1382390cc640f84	180	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5573b2b9e13823980c4912af	54	Khuff mention	199.6	251	Birkle, P. et al.	Origin of Formation Water from the Unayzah and Khuff Petroleum Reservoirs, Saudi Arabia	Procedia Earth and Planetary Science		2013	Elsevier	10.1016/j.proeps.2013.03.214
570fe41dcf58f114a862267f	21	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55baa3b5e1382373b63b89e7	359	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
578b8ab6cf58f1645f54f0c6	117	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54d25bffe138235369fe011c	93	Aragonite Bloedite Calcite Dolomite			Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
55bfc14ecf58f16e99a3703b	449	Haynesville Formation			Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55c2a9cacf58f1a8110b8a1e	189	Halite Member	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55c01a9ecf58f16e99a37305	397	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
577c41d6cf58f188cebdd1fb	270	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55c0d379cf58f16e99a378b9	44	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b7c404e13823bd29ba8379	735	Green River Formation	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	97	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57c19a92cf58f16ab04df2ec	505	Trenton Group	460.9	471.8	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
54b4327fe138239d868537ad	237	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
54b4327de138239d868530d9	42	Maha Sarakham mention	33.9	100.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558bbed5e13823109f3ed4f8	137	Paradox mention	306	319.714	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55b31289e138231cbdd6cfe3	164	Muddy Creek Formation	5.332	23.03	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
577bca4acf58f1538dda98fd	263	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
58d05f04cf58f143d83df298	745	Zechstein mention	251.902	273.01	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55b6d4bfe13823bd29ba7dc0	334	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328ce138239d86855aad	173	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
579b9c02cf58f14e3ae11a33	261	Paradox Formation	299	318.1	Montgomery, David R. et al.	Continental-scale salt tectonics on Mars and the origin of Valles Marineris and associated outflow channels	Geol Soc America Bull	preprint	2006	Geological Society of America	10.1130/b26307.1
55986cdae1382390cc640d7c	418	II mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
5d04f3390b45c76caf8eb189	3	Francis Group	305.425	305.7125	Abu-Hamatteh, Z. S. H. and Al-Amr, A. M	CARNALLITE FROTH FLOTATION OPTIMIZATION AND CELL EFFICIENCY IN THE ARAB POTASH COMPANY, DEAD SEA, JORDAN	Mineral Processing and Extractive Metallurgy Review	29	2008	Informa UK Limited	10.1080/08827500801997894
574f1369cf58f10afd57189e	4	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b6d4bfe13823bd29ba7dc0	891	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56c1effacf58f15c72c9090b	425	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
5682e272cf58f1479a0ab716	34	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
56c1e5e7cf58f15c72c90847	24	Lockatong mention	213.125	227	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
574c1c0bcf58f1957a2a36f7	1	Windsor Group	318.1	359.2	Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
578b8ab6cf58f1645f54f0c6	257	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55ae4f4be13823763a830ada	68	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b43277e138239d86851f14	142	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
5ce2f9b20b45c76caf8ae21e	417	Lyne Formation	323.2	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
578b8ab6cf58f1645f54f0c6	166	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5682e3a8cf58f1479a0ab727	375	Salado mention	256.0278	262.2168	WENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
54b43250e138239d8684b46c	168	Maha Sarakham Formation	65.5	145.5	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55088ec0e138237a6f73918a	34	Zechstein mention	251.902	273.01	Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56a1ac99cf58f19442528389	1984	Aragonite Monohydrocalcite Dolomite			Gibson, Everett K. et al.	Chemical weathering and diagenesis of a cold desert soil from Wright Valley, Antarctica: An analog of Martian weathering processes	Journal of Geophysical Research	88	1983	Wiley-Blackwell	10.1029/JB088iS02p0A912
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
578aea2bcf58f13920dc7baa	129	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
550895c3e138237a6f7391ae	364	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b4324de138239d8684aa17	5	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
558cbceae13823109f3eda41	201	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
550895c3e138237a6f7391ae	156	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55c2e5c8cf58f1a8110b8c08	93	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55f4877fcf58f16256a22522	305	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b6d4bfe13823bd29ba7dc0	975	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5713034ccf58f175a32a0111	182	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
558e3094e13823109f3ee1d7	68	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
54b4324de138239d8684aa17	225	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57320459cf58f19ced0f7bc5	133	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5682e3a8cf58f1479a0ab727	309	Salado mention	256.0278	262.2168	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
57320459cf58f19ced0f7bc5	83	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
57c8716ccf58f1429a42896c	335	TES Group			Glotch, Timothy D. et al.	Constraints on the composition and particle size of chloride salt-bearing deposits on Mars	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004921
55c2a9cacf58f1a8110b8a1e	164	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
56833ddfcf58f1479a0abbcc	65	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5a2b7516cf58f108104211ac	713	Zaragoza Gypsum Formation	5.332	23.03	Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
5683006acf58f1479a0ab88f	289	Stassfurt mention			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
571772d1cf58f1605db2c98b	366	Rustler Formation	251	260.4	Wang, J. et al.	Pliocene-Pleistocene Climate Change At the NE Tibetan Plateau Deduced From Lithofacies Variation In the Drill Core SG-1, Western Qaidam Basin, China	Journal of Sedimentary Research	82	2012	Society for Sedimentary Geology	10.2110/jsr.2012.76
55ae9887e13823763a830cad	120	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
5713034ccf58f175a32a0111	182	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682e272cf58f1479a0ab716	475	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
550fa3bbe1382369a6f942d9	53	Zaragoza Fm	5.332	23.03	Pueyo-Anchuela, Ó. et al.	Multidisciplinary approach for urban planning in alluvial karstic zones Case study from the Central Ebro Basin (Spain)	Engineering Geology	122	2011	Elsevier	10.1016/j.enggeo.2011.05.016
5503421ae1382326932d7e6d	2242	Zaragoza Gypsum Formation	5.332	23.03	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
5c27bdc61faed655488ab0f4	1884	Himalayan mention			Hakhoo, N. et al.	Petroleum systems and hydrocarbon potential of the North-West Himalaya of India and Pakistan	Earth-Science Reviews	187	2018	Elsevier	10.1016/j.earscirev.2018.09.012
578aea2bcf58f13920dc7baa	126	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
557cd3cfe138239225f869e5	1282	Salado Formation	251	260.4	:Kee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54bffee9e1382389c54c3458	6	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54d8fa70e138238471e80530	79	Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
55ae4f4be13823763a830ada	300	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5a850dffcf58f13f065e41c5	61	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
57a43018cf58f11204e17fe0	151	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57611ef6cf58f130993e9b1a	8	Ellicott Creek Breccia mention	419.2	427.4	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
56c1a95dcf58f15c72c903aa	539	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
58b65c8fcf58f1b2fdd8b58a	231	Nippewalla Group	251	299	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
578fb2c8cf58f1bdcd2df236	327	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
559c3f39e138230816dad2ff	152	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5a0493edcf58f1b96402aae7	144	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55a7c745e13823757cc70251	61	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4328ce138239d86855aad	384	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
579aae1bcf58f112b1fd775d	86	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
54b4328fe138239d86856237	43	Zaragoza Gypsum Formation	5.332	23.03	Mees, Florias et al.	Bloedite sedimentation in a seasonally dry saline lake (Salada Mediana, Spain)	Sedimentary Geology	238	2011	Elsevier	10.1016/j.sedgeo.2011.04.006
55b35463e138231cbdd6d13e	1197	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
558df7d7e13823109f3ee082	1144	Evaporite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4324de138239d8684aa17	296	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57484ab3cf58f13effae7ac5	173	Halite Clover Hill Fm			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
57126f9fcf58f142fd277238	2	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	965	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56831341cf58f1479a0ab983	283	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54d8fa70e138238471e80530	210	Main Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
57c19a92cf58f16ab04df2ec	505	Trenton Group	460.9	471.8	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
5590aba6e13823109f3ef147	80	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
57c19e14cf58f16bf61df64c	261	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
578aea2bcf58f13920dc7baa	19	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55c121fdcf58f1a8110b7ddc	29	Lisan mention	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
5936c38dcf58f12dc3451d1e	69	Salt Plain Formation	271.885	276.3813	Hanlon, Corinne et al.	Comparison of δ 81 Br and δ 37 Cl composition of volatiles, salt precipitates, and associated water in terrestrial evaporative saline lake systems	Isotopes in Environmental and Health Studies		2017	Taylor and Francis	10.1080/10256016.2017.1324856
54e733ace138237cc9150889	235	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
57320459cf58f19ced0f7bc5	152	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57a1b61ecf58f1154eb55fb9	2	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
54fb3438e138239936c6d321	161	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
57126f9fcf58f142fd277238	2	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
557c738ee138239225f8685b	201	Castile Formation	253.8	260.4	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
5c2bea2e1faed655488b221b	6	Nugget Formation	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
54b4324de138239d8684aa17	167	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b64a4de1382314227d0039	4	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
574f1369cf58f10afd57189e	4	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55c01a9ecf58f16e99a37305	316	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
550901a3e138238460c4f59b	279	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5509217ee138238460c4f689	321	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5713c429cf58f1b6a070dc5b	43	Wisconsin Computer Group			Heuvel, K. J. P. T. et al.	Effect of Gibberellic Acid on Cell Division and Cell Elongation in Anthers of the Gibberellin Deficient gib-1 Mutant of Tomato	Plant Biology	3	2001	Wiley-Blackwell	10.1055/s-2001-12904
5c31c4821faed655488ba064	23	Maha Sarakham Formation	65.5	145.5	REN, Qianhui et al.	A Multi-fluid Constrain for the Forming of Potash Deposits in the Savannakhet Basin: Geochemical Evidence from Halite	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13552
55088909e138237a6f73915f	185	East mention			Knauth, L. Paul	Origin and mixing history of brines, Palo Duro Basin, Texas, U.S.A.	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90019-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55afeeece138238f9de483c5	416	Drill Hole Bed			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
579aae1bcf58f112b1fd775d	86	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55c0d379cf58f16e99a378b9	345	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57484ab3cf58f13effae7ac5	183	Halite Mabou Gp			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
5732032ecf58f19cbcbc550f	66	Castile Formation	253.8	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55c0d379cf58f16e99a378b9	55	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
54b4328ce138239d86855b5a	74	Tripoli Formation	5.332	7.246	Taberner, C. et al.	The use of environmental markers to distinguish marine vs. continental deposition and to quantify the significance of recycling in evaporite basins	Sedimentary Geology	137	2000	Elsevier	10.1016/S0037-0738(00)00105-6
558eb5d6e13823109f3ee517	774	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
57c19a96cf58f16ab04df2f3	196	Athabasca mention	538.8	1600	Richard, A. et al.	Synchrotron XRF and XANES investigation of uranium speciation and element distribution in fluid inclusions from unconformity-related uranium deposits	Geofluids	13	2013	Wiley	10.1111/gfl.12009
5713034ccf58f175a32a0111	84	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
558ecdcbe13823109f3ee5af	5025	Wyoming mention			U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55c2e5c8cf58f1a8110b8c08	246	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55c36968cf58f1a8110b9014	83	Salina Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
5c2fe60d1faed655488b6bad	158	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
58c18a43cf58f1a6ba4ea493	52	Long Point Bed	1.806	65.5	Tänavsuu-Milkeviciene, Kati et al.	Depositional Cycles and Sequences In An Organic-Rich Lake Basin: Eocene Green River Formation, Lake Uinta, Colorado and Utah, U.S.A.	Journal of Sedimentary Research	87	2017	Society for Sedimentary Geology	10.2110/jsr.2017.11
54d4bb37e138238471e7f379	425	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
54b5345de138239571b90a0d	149	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
572cf1fccf58f13accaa0e61	59	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5713034ccf58f175a32a0111	134	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a850dffcf58f13f065e41c5	261	Me'arat Sedom Mbr			Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55989b6ce1382390cc640e7d	169	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
5743c295cf58f14fe2e25b0d	26	Carnallite-halite Rock Formation			GONCHARENKO, Olga et al.	Character of Sedimentation in the Potassium-Bearing Basin of the Gremyachinskoye Field (The Volga Monocline)	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_16
55c0d379cf58f16e99a378b9	362	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55765b42e138234790a011e4	71	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
5674a234cf58f12215607647	4	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
558e672ce13823109f3ee322	331	Castile mention	259	259.51	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fb51c0e138239936c6d400	1	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
5c31c4821faed655488ba064	186	Maha Sarakham Formation	65.5	145.5	REN, Qianhui et al.	A Multi-fluid Constrain for the Forming of Potash Deposits in the Savannakhet Basin: Geochemical Evidence from Halite	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13552
55baa3b5e1382373b63b89e7	370	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54b4328ce138239d86855aad	793	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57a43018cf58f11204e17fe0	835	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5748c817cf58f16342b08158	101	Eurydice Formation	175.6	199.6	ettanah, Yawooz A. and Greenough, Joh	Hydrocarbon fluid inclusions in the Argo salt, offshore Canadian Atlantic margin 1	Canadian Journal of Earth Sciences	50	2013	Canadian Science Publishing	10.1139/cjes-2012-0040
54bedb19e13823023e43d91d	141	Esterhazy mention			Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
573090ddcf58f160029e9d90	126	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
572cf900cf58f13d86a1bdc8	198	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
557cd3cfe138239225f869e5	1183	Castile Formation	253.8	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
55b6d4bfe13823bd29ba7dc0	60	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579b56dacf58f13d24f0d7ef	69	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54e7c15ae138237cc9150ae2	40	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5c3e6d6c1faed655488cd35a	394	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5732032ecf58f19cbcbc550f	91	Salado mention	256.0278	262.2168	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
579f1578cf58f1168e64ad7f	462	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55c2a9cacf58f1a8110b8a1e	77	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5730cdcccf58f16acaf6b5aa	35	Salado mention	256.0278	262.2168	Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
5733004ccf58f1066ffdaeaa	3	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
57516912cf58f129ff61ef40	201	Macumber mention	323.2	358.9	Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
568315efcf58f1479a0ab9a9	254	Arcs mention	373.25	375.7	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
558c4ae2e13823109f3ed7ce	8400	Creek mention			U.S. Geological Survey	Geological Survey research 1968, Chapter C	Professional Paper		1968	United States Geological Survey	10.3133/pp600C
577bca4acf58f1538dda98fd	263	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
574f1369cf58f10afd57189e	4	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
58b6daf1cf58f11f2b0dde84	251	Maha Sarakham Fm	65.5	145.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
57c19e14cf58f16bf61df64c	304	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57918b3fcf58f18d278ec3a6	109	Salina Group	416	443.7	Hardie, Lawrence A.	Secular variation in seawater chemistry: An explanation for the coupled secular variation in the mineralogies of marine limestones and potash evaporites over the past 600 m.y.	Geol	24	1996	GSA	10.1130/0091-7613(1996)024<0279:svisca>2.3.co;2
55a7c745e13823757cc70251	119	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5c4044881faed655488cfe1e	526	Zaragoza mention	23.03	33.9	Soriano, María Asunción et al.	Some evolutionary patterns of palaeokarst developed in Pleistocene deposits (Ebro Basin, NE Spain): Improving geohazard awareness in present-day karst	Geological Journal			Wiley	10.1002/gj.3181
550901a3e138238460c4f59b	106	Cardona Fm.			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5579c265e138231c7c52c464	349	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5509217ee138238460c4f689	331	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5a2f778acf58f10a775a37f3	204	MARRE CREEK Zaragoza Fm			Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
563bc6dacf58f13ba85ac0d9	290	Strontianite Sylvite Dolomite			Kazemi Nia Korrani, Aboulghasem et al.	Coupling IPhreeqc with UTCHEM to model reactive flow and transport	Computers & Geosciences		2015	Elsevier	10.1016/j.cageo.2015.06.004
558eb5d6e13823109f3ee517	374	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
58c18a99cf58f1a6ba4ea54d	119	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
57e65deecf58f186b6da86bd	167	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55a7c745e13823757cc70251	18	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54e0a4c9e138238a47f974e4	861	Prairie Evaporite Formation	385.3	397.5	Nachshon, Uri et al.	Sulfate salt dynamics in the glaciated plains of North America	Journal of Hydrology		2013	Elsevier	10.1016/j.jhydrol.2013.07.001
54d899b7e138238471e803b7	20	Angara Formation	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55bfc14ecf58f16e99a3703b	37	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
550895c3e138237a6f7391ae	215	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b4328ce138239d86855aad	763	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5682e3a8cf58f1479a0ab727	414	Salado Formation	251	260.4	YENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
5731ac74cf58f18e0ffaff50	94	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
56c1c470cf58f15c72c905bd	434	Salado Formation	251	260.4	Rodriguez-Aranda, Juan P. et al.	Lower Miocene gypsum palaeokarst in the Madrid Basin (central Spain): dissolution diagenesis, morphological relics and karst end-products	Sedimentology	49	2002	Wiley-Blackwell	10.1046/j.1365-3091.2002.00504.x
55baa3b5e1382373b63b89e7	94	Halite Dolomite	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
558bbed5e13823109f3ed4f8	265	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55b31289e138231cbdd6cfe3	537	Coconino Sandstone	251	299	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
57320459cf58f19ced0f7bc5	292	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
570fe41dcf58f114a862267f	21	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579f5bc9cf58f12a53c41a24	85	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c2e5c8cf58f1a8110b8c08	257	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5a048d65cf58f1b96402a09e	168	Gull River Formation	443.7	488.3	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
574f1369cf58f10afd57189e	160	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54fb03c7e138239936c6d1e1	374	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
57bedb9ccf58f13bf01999e9	365	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
54d4bb37e138238471e7f379	32	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
57c86f06cf58f141c6f7b1e5	62	Clay mention	175.6	199.6	Bridges, J. C. et al.	Diagenesis and clay mineral formation at Gale Crater, Mars	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004757
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
57474ebdcf58f1b6f0394e11	260	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
5731ac74cf58f18e0ffaff50	70	Salado mention	256.0278	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
55ae4f4be13823763a830ada	64	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
56c1a95dcf58f15c72c903aa	226	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
57a43018cf58f11204e17fe0	604	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57126f9fcf58f142fd277238	31	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55989b6ce1382390cc640e7d	121	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
57c19c0acf58f16b1877f797	518	Qusaiba Hot Shale			Walter, B. F. et al.	Long-term chemical evolution and modification of continental basement brines - a field study from the Schwarzwald, SW Germany	Geofluids	16	2016	Wiley	10.1111/gfl.12167
55c0d379cf58f16e99a378b9	258	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54d899b7e138238471e803b7	124	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
558e232de13823109f3ee187	72	Salado Formation	251	260.4	Rowe, Jack James et al.	The quinary reciprocal salt system Na, K, Mg, Ca/Cl, SO4; a review of the literature with new data	Professional Paper		1972	United States Geological Survey	
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	160	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b6af78e1382373b63b794d	60	Calcite Dolomite			Smith, George I et al.	Studies of Quaternary saline lakes—III. Mineral, chemical, and isotopic evidence of salt solution and crystallization processes in Owens Lake, California, 1969–1971	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90095-0
5c319a241faed655488b9bcc	148	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5598d566e1382390cc640f84	147	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54b43249e138239d8684a19a	57	Tripoli Formation	5.332	7.246	Blanc-Valleron, M.-M et al.	Sedimentary, stable isotope and micropaleontological records of paleoceanographic change in the Messinian Tripoli Formation (Sicily, Italy)	Palaeogeography, Palaeoclimatology, Palaeoecology	185	2002	Elsevier	10.1016/S0031-0182(02)00302-4
55c36968cf58f1a8110b9014	262	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558eb5d6e13823109f3ee517	259	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54bffee9e1382389c54c3458	59	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55986cdae1382390cc640d7c	481	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
573133c3cf58f17ae858e28c	242	Supai Formation	251	299	M. A. McCaffrey et al.	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite	SEPM Journal of Sedimentary Research	Vol. 57	1987	Society for Sedimentary Geology	10.1306/212f8cab-2b24-11d7-8648000102c1865d
579fe160cf58f15528a4466f	15	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
58bf2d90cf58f1867eb10946	119	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
561c20bfcf58f184cc075c66	212	Quartz Dolomite			Díaz-Hernández, J.L. et al.	Quantitative analysis of mineral phases in atmospheric dust deposited in the south-eastern Iberian Peninsula	Atmospheric Environment	45	2011	Elsevier	10.1016/j.atmosenv.2011.03.024
579fe160cf58f15528a4466f	38	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55b365b1e138231cbdd6d18f	331	Green River mention	34.8525	58.4	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	184	Zechstein Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5c3539e11faed655488c10ed	1407	Prairie Evaporite Formation	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
55c35bc5cf58f1a8110b8fcc	109	Haynesville Formation	150.8	155.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
55c0d379cf58f16e99a378b9	324	Salado Formation			Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b43276e138239d86851d3b	250	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55afeeece138238f9de483c5	183	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
54fb3438e138239936c6d321	178	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c319a241faed655488b9bcc	344	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55c35bc5cf58f1a8110b8fcc	109	Haynesville Formation	150.8	155.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
56c1effacf58f15c72c9090b	264	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55c0d379cf58f16e99a378b9	77	Hutchinson Salt Member	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c00a00cf58f16e99a3727f	106	Salado Formation	251	260.4	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
54fc8912e138239936c6dc7a	109	Salado mention	256.0278	262.2168	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
572cf1fccf58f13accaa0e61	328	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55c2a9cacf58f1a8110b8a1e	115	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54b43281e138239d86853bfd	141	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
579f1578cf58f1168e64ad7f	413	Rustler mention	253.9652	256.0278	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b4327fe138239d868537ad	249	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d5f9cf58f15c72c90717	137	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5713034ccf58f175a32a0111	95	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b6d4bfe13823bd29ba7dc0	1223	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
58d042d8cf58f13a8ae55cf9	186	Corella/Doherty Formation			Oliver, N. H. S.	Hydrothermal history of the Mary Kathleen Fold Belt, Mt Isa Block, Queensland	Australian Journal of Earth Sciences	42	1995	Taylor and Francis	10.1080/08120099508728201
55c01a9ecf58f16e99a37305	577	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57d0097ccf58f145d627bfaf	72	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
54e7c15ae138237cc9150ae2	78	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
56c1a95dcf58f15c72c903aa	39	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
574fae1acf58f142f8fdc4f8	567	Prairie Evaporite Formation	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
578401d6cf58f1376ec9463f	351	Parachute Creek Member	33.9	55.8	COLE, REX D. and PICARD, M. DANE	Comparative mineralogy of nearshore and offshore lacustrine lithofacies, Parachute Creek Member of the Green River Formation, Piceance Creek Basin, Colorado, and eastern Uinta Basin, Utah	Geol Soc America Bull	89	1978	GSA	10.1130/0016-7606(1978)89<1441:cmonao>2.0.co;2
5713034ccf58f175a32a0111	76	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55a7c745e13823757cc70251	128	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5683006acf58f1479a0ab88f	12	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
55af1c5ce13823763a830fe9	879	Magenta mention	251.902	273.01	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
579fe160cf58f15528a4466f	79	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
579fe160cf58f15528a4466f	197	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
579fe160cf58f15528a4466f	146	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5733004ccf58f1066ffdaeaa	46	Clear Fork Group	260.4	270.6	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54b4328be138239d86855814	136	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A
55bf96d4cf58f16e99a36eea	241	Sedom mention	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
5743c295cf58f14fe2e25b0d	26	Carnallite-halite Rock Formation			GONCHARENKO, Olga et al.	Character of Sedimentation in the Potassium-Bearing Basin of the Gremyachinskoye Field (The Volga Monocline)	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_16
5509217ee138238460c4f689	334	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55ae4f4be13823763a830ada	468	Heriaosa Formation			Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5503421ae1382326932d7e6d	1387	Angara Fm	513	542	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
579f1578cf58f1168e64ad7f	317	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	1346	Salado Formation	251	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae4f4be13823763a830ada	279	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5579c559e138231c9f688420	40	BVD Group			Bradley, Robin	Mining districts and mineral deposits of the Basin and Range Province of Oregon	Open-File Report		1982	United States Geological Survey	10.3133/ofr8258
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55af1c5ce13823763a830fe9	516	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b389aae138231cbdd6d262	7809	Salt mention	251	260.4	U.S. Geological Survey	Geological Survey research 1970, Chapter D	Professional Paper		1970	United States Geological Survey	10.3133/pp700D
56c1a95dcf58f15c72c903aa	253	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558e3094e13823109f3ee1d7	52	Paradox mention	306	319.714	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5c319a241faed655488b9bcc	167	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5626ca66cf58f15b6993aaaa	108	Shales Sandstone			Winid, Bogumiła	Bromine and water quality – Selected aspects and future perspectives	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.10.004
5c19917d1faed655488915e2	283	Tripoli Formation	5.332	7.246	Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
579fe160cf58f15528a4466f	12	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
57bedb9ccf58f13bf01999e9	82	Honaker Trail Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55a7c745e13823757cc70251	18	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57c19e14cf58f16bf61df64c	286	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
558bbed5e13823109f3ed4f8	166	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
5c319a241faed655488b9bcc	98	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5674a234cf58f12215607647	326	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
579fe160cf58f15528a4466f	93	Marker Bed			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
56c1d9bbcf58f15c72c9075f	269	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5579c265e138231c7c52c464	286	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54b4328ae138239d86855586	37	Patience Lake Member			Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
5694cf35cf58f1377d5990d4	584	Ca Group			Vanko, David A.	Temperature, pressure, and composition of hydrothermal fluids, with their bearing on the magnitude of tectonic uplift at mid-ocean ridges, inferred from fluid inclusions in oceanic layer 3 rocks	Journal of Geophysical Research	93	1988	Wiley-Blackwell	10.1029/JB093iB05p04595
57c1a08dcf58f16cbd62157f	286	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
572f9e49cf58f1399347bfef	148	Cayman Formation	5.332	23.03	Brian Jones	Processes Associated with Microbial Biofilms in the Twilight Zone of Caves: Examples from the Cayman Islands	SEPM Journal of Sedimentary Research	Vol. 65A	1995	Society for Sedimentary Geology	10.1306/d426812b-2b26-11d7-8648000102c1865d

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	505	Prairie Evaporite Formation	385.3	397.5	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5579c559e138231c9f688420	43	Pinto Group	0.6538	2.58	Bradley, Robin	Mining districts and mineral deposits of the Basin and Range Province of Oregon	Open-File Report		1982	United States Geological Survey	10.3133/ofr8258
5a850dffcf58f13f065e41c5	238	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55c176c1cf58f1a8110b808a	2223	UK mention				Goldschmidt Abstracts 2008- B	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.005
54b43281e138239d86853bfd	141	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
57d0097ccf58f145d627bfaf	60	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5713b9c6cf58f1b30e05036e	388	Papaghni Group			Pope, M. C. and Grotzinger, J. P.	Paleoproterozoic Stark Formation, Athapuscow Basin, Northwest Canada: Record of Cratonic-Scale Salinity Crisis	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/091302730280
54b4327ee138239d86853305	55	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
54b4328ce138239d86855aad	401	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
572cf900cf58f13d86a1bdc8	49	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54b43277e138239d86851f14	142	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
54d4bb37e138238471e7f379	2	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
55b6d4bfe13823bd29ba7dc0	203	Argillaceous mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57a43018cf58f11204e17fe0	471	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55bf96d4cf58f16e99a36eea	244	Sedom Formation	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
55c0d379cf58f16e99a378b9	170	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54fb3438e138239936c6d321	184	Salado Formation	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54faf2e4e138239936c6d161	208	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5713034ccf58f175a32a0111	182	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5c33be321faed655488bd3d5	374	Castile Formation	253.8	260.4	Holser, W.T. et al.	Geochemistry and Petrology of Evaporites Cored from a Deep-Sea Diapir at Site 546 offshore Morocco	Initial Reports of the Deep Sea Drilling Project	79		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.79.117.1984
558df7d7e13823109f3ee082	2344	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56c1effacf58f15c72c9090b	246	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54e736c1e138237cc915089d	505	Muskeg Formation	385.3	397.5	Bottomley, D.J. et al.	The origin and evolution of Canadian Shield brines: evaporation or freezing of seawater? New lithium isotope and geochemical evidence from the Slave craton	Chemical Geology	155	1999	Elsevier	10.1016/S0009-2541(98)00166-1
55baa3b5e1382373b63b89e7	234	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
578fb2c8cf58f1bdcd2df236	412	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
558ec3e3e13823109f3ee570	113	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
557bfbc7e138239225f86664	110	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1ca03cf58f15c72c90620	244	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
558eb5d6e13823109f3ee517	382	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5730cdcccf58f16acaf6b5aa	250	Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
58b8b92acf58f12547587738	71	Green River Formation	33.9	55.8	Pan, Feng et al.	Forecasting evolution of formation water chemistry and long-term mineral alteration for GCS in a typical clastic reservoir of the Southwestern United States	International Journal of Greenhouse Gas Control	54	2016	Elsevier	10.1016/j.ijggc.2016.07.035
578f2c07cf58f19aabebdf04	286	San Andres mention	150.6	154.8	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
55bfc14ecf58f16e99a3703b	122	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
57bedb9ccf58f13bf01999e9	366	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
5d3f58060b45c76cafa2004f	328	Paradox Formation	299	318.1	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
579f1578cf58f1168e64ad7f	256	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5cd2be170b45c76caf88002e	21	Francis Group	305.425	305.7125	Ciceri, Davide et al.	Fertilizing Properties of Potassium Feldspar Altered Hydrothermally	Communications in Soil Science and Plant Analysis	50	2019	Informa UK Limited	10.1080/00103624.2019.1566922
55a7c745e13823757cc70251	23	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5518b748e1382394b500dcce	1	Zaragoza mention	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5a2b7516cf58f108104211ac	417	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
5a0493edcf58f1b96402aae7	177	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
574c1c0bcf58f1957a2a36f7	42	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5733004ccf58f1066ffdaeaa	207	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54b43280e138239d8685381d	131	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
568315efcf58f1479a0ab9a9	383	Cairn Formation	359.2	385.3	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54fb3438e138239936c6d321	93	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55c01a9ecf58f16e99a37305	581	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54b4328de138239d86855ceb	138	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
572cf1fccf58f13accaa0e61	79	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c3e6d6c1faed655488cd35a	294	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57d0097ccf58f145d627bfaf	72	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54facf27e138239936c6d068	346	Salina Group	416	443.7	Timofeeff, Michael N. et al.	ESEM-EDS: an improved technique for major element chemical analysis of fluid inclusions	Chemical Geology	3-4	2000	Elsevier	10.1016/S0009-2541(99)00153-9
5503421ae1382326932d7e6d	1452	Prairie mention	383.95	389.1	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55c2a9cacf58f1a8110b8a1e	72	Loeme mention	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
558eb5d6e13823109f3ee517	66	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55a7c745e13823757cc70251	61	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b43245e138239d86849681	303	CarmSpolis Member			Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
58bf2d90cf58f1867eb10946	163	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
550889f7e138237a6f739166	142	Alum Shale	488.3	501		Contents of Volume 3, 1988	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90100-X
55c01a9ecf58f16e99a37305	17	Culebra mention	251	299	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57c87d1dcf58f1470e996667	274	ND mention			Lynch, Kennda L. et al.	Near-infrared spectroscopy of lacustrine sediments in the Great Salt Lake Desert: An analog study for Martian paleolake basins	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004707
55baa3b5e1382373b63b89e7	94	Halite Limestone	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b83b40e1382373b63b7fe6	450	Supai Formation	251	299	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
55c48dc6cf58f1a8110b94db	110	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5c3e6d6c1faed655488cd35a	81	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5a850dffcf58f13f065e41c5	216	Lisan mention	0.01143	0.126	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57c1b591cf58f173fefe15b4	2	St. George Group	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
57a43018cf58f11204e17fe0	927	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54e733ace138237cc9150889	338	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54dc2da6e138238a47f96228	204	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
5b526230cf58f1a50a464a8d	318	SZG Fm.			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
57bedb9ccf58f13bf01999e9	352	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
558eb5d6e13823109f3ee517	259	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5733004ccf58f1066ffdaeaa	7	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
557b7e6ae138239225f86458	2163	Parachute Creek Member	33.9	55.8	Geological Survey (U.S.)	Geochemical survey of the western energy regions, 4th annual progress report, July 1977	Open-File Report		1977	United States Geological Survey	10.3133/ofr77872
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5732032ecf58f19cbcbc550f	365	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
589ebd9dcf58f101e1d918ac	77	Reference Huntite Calcite Dolomite			Balci, Nurgül et al.	Reproducing Authigenic Carbonate Precipitation in the Hypersaline Lake Acıgöl (Turkey) with Microbial Cultures	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099763
55ccae39cf58f190b49048c1	1	Carlsbad Program Group			Thakur, Punam et al.	An Improved Thermodynamic Model for the Complexation of Trivalent Actinides and Lanthanide with Oxalic acid valid to high ionic strength	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.07.029
54bedb19e13823023e43d91d	45	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
5733004ccf58f1066ffdaeaa	229	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4328ce138239d86855aad	369	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55c0ffbdcf58f16e99a37a1d	55	New Albany Shale	359.2	416		Goldschmidt Abstracts 2010 – L	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.04.037
55c0d379cf58f16e99a378b9	189	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57d0097ccf58f145d627bfaf	72	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5a2f2335cf58f1a999f75445	10	Australian Shale			Grawunder, Anja et al.	Rare earth elements in Permian salts and brines, Thuringia, Germany	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.09.001
550f21dce1382369a6f940aa	443	Zaragoza Gypsum Formation	5.332	23.03	Guinea, Ander et al.	Geoelectrical prospecting of glauberite deposits in the Ebro basin (Spain)	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.03.007
54b4328de138239d86855ceb	131	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5c6237091faed65548958f65	35	Soligorsk Formation	359.2	385.3	Plax, Dmitry P. et al.	A new genus of eurypterid (Chelicerata, Eurypterida) from the Upper Devonian salt deposits of Belarus	Journal of Paleontology	92	2018	Cambridge University Press (CUP)	10.1017/jpa.2018.11
57a3d5e1cf58f1b6afc43ebc	2	Green River Formation	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
54b4324ae138239d8684a3c9	156	Eggenburgian Vorotyshcha Formation			Cendón, D.I. et al.	The importance of recycling processes in the Middle Miocene Badenian evaporite basin (Carpathian foredeep): palaeoenvironmental implications	Palaeogeography, Palaeoclimatology, Palaeoecology	212	2004	Elsevier	10.1016/j.palaeo.2004.05.021
55c3965ccf58f1a8110b90be	153	Heletz mention			Chan, Lui-Heung et al.	The behavior of lithium and its isotopes in oilfield brines: evidence from the Heletz-Kokhav field, Israel	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00800-6
557b1abde138239225f86255	170	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
55b3641de138231cbdd6d189	3249	Pierre Shale	65.5	145.5	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
57c19a92cf58f16ab04df2ec	505	Trenton Group	460.9	471.8	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
56c1d8a6cf58f15c72c9073f	50	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
558eb5d6e13823109f3ee517	1416	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5590ec95e13823109f3ef2e5	1121	Wasatch mention	36.11	145	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
557bfbc7e138239225f86664	311	Castile Formation	253.8	260.4	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
56c1a95dcf58f15c72c903aa	226	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5b6d936dcf58f1a92c2d33b5	22	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
579ed180cf58f1030df9c51e	158	Viento Formation			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
578bfa0bcf58f17fc5a016a6	87	Mascot Formation	471.8	488.3	Eastoe, Christopher J. et al.	Preliminary evidence for fractionation of stable chlorine isotopes in ore-forming hydrothermal systems	Geol	17	1989	GSA	10.1130/0091-7613(1989)017<0285:peffos>2.3.co;2
577c41d6cf58f188cebdd1fb	225	Second Red Bed			WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
574f1369cf58f10afd57189e	160	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5a0495c3cf58f1b96402acf5	45	Hecho Group	33.9	55.8	Blasco, Mónica et al.	Geochemistry, geothermometry and influence of the concentration of mobile elements in the chemical characteristics of carbonate-evaporitic thermal systems. The case of the Tiermas geothermal system (Spain)	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.07.013
572cf1fccf58f13accaa0e61	92	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5a204e4dcf58f14176699214	309	Soil Sandstone			Costa, Pedro V.M. et al.	UGS in giant offshore salt caverns to substitute the actual Brazilian NG storage in LNG vessels	Journal of Natural Gas Science and Engineering	46	2017	Elsevier	10.1016/j.jngse.2017.06.035
5682e272cf58f1479a0ab716	485	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b43288e138239d86854e95	112	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
572cf1fccf58f13accaa0e61	328	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55c2a9cacf58f1a8110b8a1e	53	Loeme Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
579fe160cf58f15528a4466f	275	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
574f1369cf58f10afd57189e	283	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
57d0097ccf58f145d627bfaf	61	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
558bbed5e13823109f3ed4f8	137	Paradox mention	306	319.714	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54eba4f0e138237cc9151b1e	38	Anhydrite Upgang Fm			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
578b8ab6cf58f1645f54f0c6	49	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b43277e138239d86851f14	141	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
5731ac74cf58f18e0ffaff50	70	Salado mention	256.0278	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	12	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b7869fe13823bd29ba8231	557	Michigan mention	342.0833	348.8334	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2bea2e1faed655488b221b	199	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55b67d1ae1382373b63b7852	1233	Salado Formation	251	260.4		List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55baa3b5e1382373b63b89e7	340	Sedom Fm.	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54eba4f0e138237cc9151b1e	80	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55baa3b5e1382373b63b89e7	135	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5509217ee138238460c4f689	375	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5d35e56c0b45c76caf93f034	1312	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
5682e3a8cf58f1479a0ab727	414	Salado Formation	251	260.4	YENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
56c1a95dcf58f15c72c903aa	253	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b82002e1382373b63b7f4f	60	Salina Group	416	443.7	Graf, Donald L.	Chemical osmosis, reverse chemical osmosis, and the origin of subsurface brines	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90277-0
54d2216be13823302d02428b	24	SherwoodSandstoneGroup Bold-ManchesterMarl Formation			Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
55c36968cf58f1a8110b9014	260	Salina Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
57320459cf58f19ced0f7bc5	133	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
572cf900cf58f13d86a1bdc8	18	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54b4328de138239d86855dfa	183	Salwa Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55f28a1bcf58f16256a2178c	259	Ain Ghrab Formation			Jellalia, Dalila et al.	Hydro-geophysical and geochemical investigation of shallow and deep Neogene aquifer systems in Hajeb Layoun-Jilma-Ouled Asker area, Central Tunisia	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.06.016
56833ddfcf58f1479a0abbcc	233	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b45cb4e1382314227cf4a4	205	Cumulative Index mention				Cumulative index: Volumes 21–30	Geochimica et Cosmochimica Acta		1970	Elsevier	10.1016/0016-7037(70)90001-3
559d4d6ee138230816dad784	111	Vaca Triste Sandstone	251.902	273.01	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
55c36968cf58f1a8110b9014	124	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
550ab8aae138238460c4fe5e	155	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
579fe160cf58f15528a4466f	18	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b7869fe13823bd29ba8231	1369	Rustler mention	253.9652	256.0278	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c19917c1faed65548891586	697	Clay mention	175.6	199.6	The Shipboard Scientific Party	Site 374: Messina Abyssal Plain	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.105.1978
57a43018cf58f11204e17fe0	604	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5682e272cf58f1479a0ab716	211	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5733004ccf58f1066ffdaeaa	7	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a470efe13823757cc6f241	185	Parachute Creek Member	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	272	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1effacf58f15c72c9090b	88	Mudstone Anhydrite Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55ae4f4be13823763a830ada	688	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
578f2c07cf58f19aabebdf04	110	San Andres Formation	251	299	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
5682e272cf58f1479a0ab716	413	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c3965ccf58f1a8110b90be	153	Heletz mention			Chan, Lui-Heung et al.	The behavior of lithium and its isotopes in oilfield brines: evidence from the Heletz-Kokhav field, Israel	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00800-6
56c1a95dcf58f15c72c903aa	192	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
57320459cf58f19ced0f7bc5	83	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
54b4324de138239d8684aa17	293	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5c319a241faed655488b9bcc	81	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
57131acecf58f17d8d881dcb	207	Belayin Formation			Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
5508c83fe138238460c4f3ef	227	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
55c48dc6cf58f1a8110b94db	71	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
550895c3e138237a6f7391ae	182	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
572cf1fccf58f13accaa0e61	226	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b35463e138231cbdd6d13e	1119	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
54b4328de138239d86855ceb	131	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5731ac74cf58f18e0ffaff50	187	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
55b31289e138231cbdd6cfe3	671	Verde mention	4.1777	8.342	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
57a1b61ecf58f1154eb55fb9	77	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
55ae4f4be13823763a830ada	880	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5b6f0819cf58f1539ffa6759	435	Arab Formation	150.8	155.7	Morad, Daniel et al.	Comparison of the diagenetic and reservoir quality evolution between the anticline crest and flank of an Upper Jurassic carbonate gas reservoir, Abu Dhabi, United Arab Emirates	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2018.02.008
5a39ee95cf58f1314cf12808	63	Sedom mention	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
57132e62cf58f183d20b8a53	354	Colemanite mention			Helvaci, C. and Orti, F.	Sedimentology and diagenesis of Miocene colemanite-ulexite deposits (western Anatolia, Turkey)	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.1021
5c319a241faed655488b9bcc	156	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577bca4acf58f1538dda98fd	24	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55c2a9cacf58f1a8110b8a1e	48	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54b4328ce138239d86855aad	173	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57a43018cf58f11204e17fe0	590	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5731ac74cf58f18e0ffaff50	71	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
557b1abde138239225f86255	105	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57a43018cf58f11204e17fe0	485	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b43279e138239d8685271f	376	Lam Formation	145.5	161.2	Worden, Richard H.	Dawsonite cement in the Triassic Lam Formation, Shabwa Basin, Yemen: A natural analogue for a potential mineral product of subsurface CO2 storage for greenhouse gas reduction	Marine and Petroleum Geology	23	2006	Elsevier	10.1016/j.marpetgeo.2005.07.001
54b4327ee138239d868533ae	98	Calcite Aragonite Dolomite			Xiao, Jun et al.	Geochemistry and solute sources of surface waters of the Tarim River Basin in the extreme arid region, NW Tibetan Plateau	Journal of Asian Earth Sciences		2012	Elsevier	10.1016/j.jseaes.2012.04.009
57d0097ccf58f145d627bfaf	118	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
54b4328ae138239d86855597	148	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
54be1b30e138233c8bc4f9d7	85	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55ae9887e13823763a830cad	107	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
57c19e14cf58f16bf61df64c	285	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54b4328ce138239d86855aad	505	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
578b8ab6cf58f1645f54f0c6	241	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56830ae3cf58f1479a0ab915	134	Winnipegosis Member	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
5682e3a8cf58f1479a0ab727	180	Prairie mention	383.95	389.1	/ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
579f5bc9cf58f12a53c41a24	366	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b7869fe13823bd29ba8231	1369	Rustler mention	253.9652	256.0278	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	182	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5590ec95e13823109f3ef2e5	616	Cedar Mesa Sandstone	251	299	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
5d3f58060b45c76cafa2004f	23	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
5a3dff46cf58f12be0bde56e	47	Zaragoza Formation	23.03	33.9	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
55b5b33be1382314227cfda7	173	Louann Formation	145.5	199.6	Herut, Barak et al.	The role of seawater freezing in the formation of subsurface brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90190-V
574f1369cf58f10afd57189e	8	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
572cf900cf58f13d86a1bdc8	26	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578fb2c8cf58f1bdcd2df236	236	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55911c4ee13823109f3ef407	142	Parachute Creek Member	33.9	55.8	Robson, S. G. and Saulnier, G. J., Jr.	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Professional Paper		1981	United States Geological Survey	
55c48dc6cf58f1a8110b94db	98	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55ae0df7e13823763a830928	1458	Salado mention	256.0278	262.2168	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55ad3126e13823763a8303a0	112	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54fb3438e138239936c6d321	142	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5d3f58060b45c76cafa2004f	193	Rotliegend Group	251	299	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54fb3438e138239936c6d321	33	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b64a4de1382314227d0039	381	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
579fe160cf58f15528a4466f	93	Marker Bed			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5732032ecf58f19cbcbc550f	19	Salado mention	256.0278	262.2168	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
590173d4cf58f19960f445d2	684	Turquoise Graphite Siderite Dolomite				Classified Advertisements	Rocks & Minerals	34	1959	Taylor and Francis	10.1080/00357529.1959.11766806
55087dc1e138237a6f73910e	266	Panoche Formation	65.5	99.6	Presser, Theresa S. and Swain, Walter C	Geochemical evidence for Se mobilization by the weathering of pyritic shale, San Joaquin Valley, California, U.S.A.	Applied Geochemistry	5	1990	Elsevier	10.1016/0883-2927(90)90066-E
55a7c745e13823757cc70251	17	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4328de138239d86855c7b	51	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b6d4bfe13823bd29ba7dc0	1232	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
572cf1fccf58f13accaa0e61	72	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b4327fe138239d868537ad	94	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
54b4328ee138239d86855f3a	217	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
57c1a08dcf58f16cbd62157f	282	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54b4325ce138239d8684d4cc	178	Gypsum mention			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
5590ec95e13823109f3ef2e5	532	Hermosa Formation	299	318.1	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
55b35463e138231cbdd6d13e	2341	Green River Formation	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
55af1c5ce13823763a830fe9	862	Salado mention	256.0278	262.2168	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
579f1578cf58f1168e64ad7f	392	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
56c1a95dcf58f15c72c903aa	253	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55af1c5ce13823763a830fe9	146	Salado Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55088909e138237a6f73915f	105	San Andres Dolomite	268.51	271.3225	Knauth, L. Paul	Origin and mixing history of brines, Palo Duro Basin, Texas, U.S.A.	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90019-4
57ec2895cf58f1b1c442edb0	443	Clear Fork Formation	270.6	299	imon, Sharane S.T. and Gibling, Martin	Fine-grained meandering systems of the Lower Permian Clear Fork Formation of north-central Texas, USA: Lateral and oblique accretion on an arid plain	Sedimentology		2016	Wiley	10.1111/sed.12322
577bca4acf58f1538dda98fd	255	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54d4bb37e138238471e7f379	51	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
54b43245e138239d8684952a	177	Arab Formation	150.8	155.7	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
550901a3e138238460c4f59b	30	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54b4324de138239d8684aa17	158	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6d4bfe13823bd29ba7dc0	334	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56833ddfcf58f1479a0abbcc	112	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54b4324de138239d8684aa17	153	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6d4bfe13823bd29ba7dc0	72	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
550b6ce8e1382369a6f9311e	186	Cadjebut Formation	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
54be7fc1e13823299564b0b3	224	Salado Formation	251	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55088909e138237a6f73915f	255	East mention			Knauth, L. Paul	Origin and mixing history of brines, Palo Duro Basin, Texas, U.S.A.	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90019-4
574c1c0bcf58f1957a2a36f7	42	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5506a9ebe1382326932d924e	326	Samra Fm			Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
5cfd88b00b45c76caf8df4b1	2	Francis Group	305.425	305.7125	John, N. Joseph and Mahadevan, C. K.	Studies on NaCl Added ADP Single Crystals	Materials and Manufacturing Processes	23	2008	Informa UK Limited	10.1080/10426910802384573
573090ddcf58f160029e9d90	1	Salado Formation	251	260.4	ennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
57132e62cf58f183d20b8a53	362	Colemanite Formation			Helvaci, C. and Orti, F.	Sedimentology and diagenesis of Miocene colemanite-ulexite deposits (western Anatolia, Turkey)	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.1021
580b91b8cf58f14ba918ac36	183	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and “Cline” shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
55c2e5c8cf58f1a8110b8c08	186	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
572cf1fccf58f13accaa0e61	88	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5c319a241faed655488b9bcc	117	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
54b4325ae138239d8684ce96	187	Mamfe mention			Eseme, E. et al.	Geochemistry and genesis of brine emanations from Cretaceous strata of the Mamfe Basin, Cameroon	Journal of African Earth Sciences	35	2002	Elsevier	10.1016/S0899-5362(02)00171-9
572cf900cf58f13d86a1bdc8	200	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57f66ba7cf58f11e2b44f8c5	43	Sahara Formation	419.2	443.8	Kovalevych, Volodymyr M. et al.	Composition of brines in halite-hosted fluid inclusions in the Upper Ordovician, Canning Basin, Western Australia: new data on seawater chemistry	Terra Nova	18	2006	Wiley	10.1111/j.1365-3121.2006.00668.x
564d7e07cf58f141b60ca7df	34	Chromite Chrysotile Cronstedtite Dolomite			Zolotov, Mikhail Yu.	Aqueous fluid composition in CI chondritic materials: Chemical equilibrium assessments in closed systems	Icarus	220	2012	Elsevier	10.1016/j.icarus.2012.05.036

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5681b377cf58f1ba274d4854	217	Qom Formation	5.332	23.03	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069
557b4c6fe138239225f86356	114	Salt mention	251	260.4	Leith, William	Geologic and engineering constraints on the feasibility of clandestine nuclear testing by decoupling in large underground cavities	Open-File Report		2000	United States Geological Survey	10.3133/ofr0128
550e9025e1382369a6f93e44	77	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Paleosubsidence and active subsidence due to evaporite dissolution in the Zaragoza area (Huerva River valley, NE Spain): processes, spatial distribution and protection measures for transport routes	Engineering Geology	72	2004	Elsevier	10.1016/j.enggeo.2003.10.002
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4324de138239d8684aa17	158	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6d4bfe13823bd29ba7dc0	963	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57484ab3cf58f13effae7ac5	194	Middle/Basal Halite Upperton Fm			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
5509217ee138238460c4f689	359	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b78281e13823bd29ba8218	1956	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
5a21053ecf58f18a3170d1ed	231	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
55b78281e13823bd29ba8218	1950	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
550eff8ce1382369a6f94026	83	Sdom Formation	-5.5012E-05	23.03	Frydman, Sam et al.	A geotechnical study of evaporitic, lacustrine sediments in the saline environment of the Dead Sea area	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.08.028
578b8ab6cf58f1645f54f0c6	68	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5682e272cf58f1479a0ab716	130	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
598bc577cf58f12aa26601d6	90	Green River Formation	33.9	55.8	Shteyngol'ts, V. L. et al.	THE ASSOCIATION OF SODA DEPOSITS WITH ORGANIC-RICH SEDIMENTS	International Geology Review	34	1992	Taylor and Francis	10.1080/00206819209465620
5509217ee138238460c4f689	77	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
577bca4acf58f1538dda98fd	24	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
550901a3e138238460c4f59b	250	S.U. Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5733004ccf58f1066ffdaeaa	231	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5ce056a10b45c76caf8a6731	2	Francis Group	305.425	305.7125	Lesar, Boštjan et al.	Sorption Properties of Wood Impregnated with Boron Compounds, Sodium Chloride and Glucose	Drying Technology	27	2009	Informa UK Limited	10.1080/07373930802565947
55ccb9a0cf58f190b490491b	196	Monterey Formation	5.332	23.03	Theiling, Bethany P. and Coleman, Max	Refining the extraction methodology of carbonate associated sulfate: Evidence from synthetic and natural carbonate samples	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.06.018
572cf900cf58f13d86a1bdc8	210	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55b7869fe13823bd29ba8231	1288	Salado Formation	251	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550ab8aae138238460c4fe5e	155	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
578b8ab6cf58f1645f54f0c6	49	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a7c745e13823757cc70251	114	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b67d1ae1382373b63b7852	1235	Petroleum Clay Formation				List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
5c3539e11faed655488c10ed	212	Prairie Evaporite mention	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
54e733ace138237cc9150889	244	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55c01a9ecf58f16e99a37305	353	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55baa3b5e1382373b63b89e7	193	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55c2a9cacf58f1a8110b8a1e	57	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55989b6ce1382390cc640e7d	160	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55af1c5ce13823763a830fe9	529	Culebra Dolomite	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5590aa05e13823109f3ef13c	11	Paradox Member	299	318.1	Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
578fb2c8cf58f1bdcd2df236	236	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5734ae60cf58f14cf9f691bb	264	Gharif Formation	270.6	299	Hartmann, B. H. et al.	Diagenesis and Pore-Water Evolution in Permian Sandstones, Gharif Formation, Sultanate of Oman	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40925-0e47-11d7-8643000102c1865d
55b8484be13823bd29ba869d	78	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
55b78281e13823bd29ba8218	798	Yeso Formation	251	299	artsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55c3965ccf58f1a8110b90be	202	Heletz mention			Chan, Lui-Heung et al.	The behavior of lithium and its isotopes in oilfield brines: evidence from the Heletz-Kokhav field, Israel	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00800-6
5c3539e11faed655488c10ed	1407	Prairie Evaporite Formation	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
55a7c745e13823757cc70251	119	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56a038b2cf58f1079fd4ba21	152	Edwards Limestone	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
55af1c5ce13823763a830fe9	445	Culebra Dolomite	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
557cd3cfe138239225f869e5	3300	Dakota mention	98.85	119.3	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5732032ecf58f19cbcbc550f	13	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
56c458a5cf58f17493f85551	164	Calcite Dolomite			Luzón, A. et al.	Evolution from a freshwater to saline lake: a climatic or hydrogeological change? The case of Gallocanta Lake (northeast Spain)	Hydrological Processes	21	2007	Wiley-Blackwell	10.1002/hyp.6243
55c48dc6cf58f1a8110b94db	122	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
559ba4dce1382390cc642100	483	Bunter Sandstone	245	251	Hesshaus, Annalena et al.	Halite clogging in a deep geothermal well – Geochemical and isotopic characterisation of salt origin	Physics and Chemistry of the Earth, Parts A/B/C		2013	Elsevier	10.1016/j.pce.2013.06.002
55ae9887e13823763a830cad	120	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55ccae39cf58f190b49048c1	1	Carlsbad Program Group			Thakur, Punam et al.	An Improved Thermodynamic Model for the Complexation of Trivalent Actinides and Lanthanide with Oxalic acid valid to high ionic strength	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.07.029
57c19e14cf58f16bf61df64c	207	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5749d6cacf58f1b0d4fcbc51	117	Majiagou Formation	443.7	488.3	ZHANG, Jing et al.	Controlling effects of paleo-climate and paleo-ocean on formation of carbonate reservoirs	Petroleum Exploration and Development	41	2014	Elsevier	10.1016/S1876-3804(14)60016-1
5a850dffcf58f13f065e41c5	66	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57934985cf58f16f329e7c23	290	Halite Calcite Dolomite			Kauffman, Shelley J. et al.	Lithological and hydrological influences on ground-water composition in a heterogeneous carbonate-clay aquifer system	Geological Society of America Bulletin	110	1998	GSA	10.1130/0016-7606(1998)110<1163:lahiog>2.3.co;2
558eb5d6e13823109f3ee517	434	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5682e3a8cf58f1479a0ab727	376	Salado mention	256.0278	262.2168	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55b87207e13823bd29ba87aa	2052	Brunswick mention	0.0117	0.129	Margolis, Jacob et al.	Annotated bibliography of studies on the geology, geochemistry, mineral resources, and geophysical character of the early Mesozoic basins of the eastern United States, 1880-1984	Bulletin		1986	United States Geological Survey	
54e76d92e138237cc915098c	116	Furnace Creek Formation	1.806	5.332	Böhlke, J.K. et al.	Stable isotope evidence for an atmospheric origin of desert nitrate deposits in northern Chile and southern California, U.S.A.	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00124-6
5c3e6d6c1faed655488cd35a	42	Larne Halite Member			Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57c19e14cf58f16bf61df64c	61	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
58c0712ccf58f14e47a6f092	3	Serpentina mention			Oliveira, Lucilia Aparecida Ramos de et a	Nature and evolution of fluids associated with specularite-bearing Fe and Au-PGE (Jacutinga) mineralization during the Brasiliano orogeny in the eastern São Francisco Craton, Minas Gerais, Brazil	Ore Geology Reviews		2017	Elsevier	10.1016/j.oregeorev.2017.02.017
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5ce2f9b20b45c76caf8ae21e	316	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55f4877fcf58f16256a22522	305	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5b6f081fcf58f1539ffa6761	165	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
5ac0838acf58f14977b0cef8	84	Aqueous Layer Formation			Mohamed, Gehad G. et al.	New Screen-Printed Ion-Selective Electrodes for Potentiometric Titration of Cetyltrimethylammonium Bromide in Different Civilic Media	Electroanalysis	22	2010	Wiley-Blackwell	10.1002/elan.201000096
579f5bc9cf58f12a53c41a24	184	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5682e272cf58f1479a0ab716	381	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b2c402e138231cbdd6ce3e	203	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55b35463e138231cbdd6d13e	1008	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
55b31289e138231cbdd6cfe3	583	Supai Formation	251	299	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
578fb2c8cf58f1bdcd2df236	193	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
573133c3cf58f17ae858e28c	242	Supai Formation	251	299	M. A. McCaffrey et al.	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite	SEPM Journal of Sedimentary Research	Vol. 57	1987	Society for Sedimentary Geology	10.1306/212f8cab-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	351	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578aea2bcf58f13920dc7baa	24	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c1a08dcf58f16cbd62157f	220	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
56833ddfcf58f1479a0abbcc	149	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
557c738ee138239225f8685b	1003	Carlsbad mention	446.4667	449	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
56dfe4ebcf58f149817f5b4d	289	Phyllosilicate Formation			Story, Stacy et al.	Authigenic phyllosilicates in modern acid saline lake sediments and implications for Mars	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2010JE003687
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
56831341cf58f1479a0ab983	204	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55c2a9cacf58f1a8110b8a1e	86	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55f2ced1cf58f16256a21973	261	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
5733004ccf58f1066ffdaeaa	2	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54c060fbe1382389c54c3757	468	Salina Group	416	443.7	Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55b359cce138231cbdd6d15d	1524	Wilkins Peak Member	33.9	55.8	Bradley, W.H.	Geology of Green River Formation and associated Eocene rocks in southwestern Wyoming and adjacent parts of Colorado and Utah	Professional Paper		1964	United States Geological Survey	10.3133/pp496A
54cf0cc5e138236bcc92aaf6	79	Soledad Biotite Fm			Sáez, Alberto et al.	The stratigraphic record of changing hyperaridity in the Atacama desert over the last 10Ma	Earth and Planetary Science Letters		2012	Elsevier	10.1016/j.epsl.2012.08.029
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
54be90c7e13823299564b137	43	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
57320459cf58f19ced0f7bc5	88	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55a6d3f3e13823757cc6fc08	353	Quartz mention			Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
58c18a99cf58f1a6ba4ea54d	118	Sedom mention	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5733004ccf58f1066ffdaeaa	161	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54b4328de138239d86855ceb	215	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
550901a3e138238460c4f59b	118	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c0d379cf58f16e99a378b9	164	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
56c1fcefcf58f15c72c90a17	511	Khorat Group	65.5	251	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
578aea2bcf58f13920dc7baa	215	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55ae0df7e13823763a830928	1339	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54ef9078e138237cc9152b86	512	Salt mention	251	260.4	Jackson, Christopher A.-L. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 1: Geometry and kinematics from 3D seismic reflection and well data	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.010
56c44114cf58f17493f8536e	205	Salado Formation	251	260.4	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
558cbceae13823109f3eda41	199	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
574ee6e1cf58f1ba70939d9f	46	Windsor Group	318.1	359.2	Roberts, Wyn and Williams, Paul F.	Evidence for early Mesozoic extensional faulting in Carboniferous rocks, southern New Brunswick, Canada	Canadian Journal of Earth Sciences	30	1993	Canadian Science Publishing	10.1139/e93-113
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
557bfbc7e138239225f86664	200	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
57a43018cf58f11204e17fe0	844	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55f49f72cf58f16256a225dc	128	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55986e49e1382390cc640d84	186	Kamoto mention			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
5674a234cf58f12215607647	345	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
5502e189e1382326932d7bd2	305	Dolostones Chert			Melezhik, Victor A. et al.	Extreme 13Ccarb enrichment in ca. 2.0 Ga magnesite–stromatolite–dolomite–'red beds' association in a global context: a case for the world-wide signal enhanced by a local environment	Earth-Science Reviews	1-2	1999	Elsevier	10.1016/S0012-8252(99)00044-6
58b6daf1cf58f11f2b0dde84	835	Haselgebirge Formation	245	251	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
579f1578cf58f1168e64ad7f	92	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
559dcd1ae138230816dad9be	6626	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54b4328ce138239d86855aad	334	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5683349ccf58f1479a0abb4e	91	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
5a850dffcf58f13f065e41c5	183	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
579f1578cf58f1168e64ad7f	392	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558df7d7e13823109f3ee082	2332	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54e64c66e138237cc91504d3	29	Rustler mention	253.9652	256.0278	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
57a43018cf58f11204e17fe0	471	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55c0d379cf58f16e99a378b9	146	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5cfd88b00b45c76caf8df4b1	2	Francis Group	305.425	305.7125	John, N. Joseph and Mahadevan, C. K.	Studies on NaCl Added ADP Single Crystals	Materials and Manufacturing Processes	23	2008	Informa UK Limited	10.1080/10426910802384573
5682e272cf58f1479a0ab716	351	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c0d379cf58f16e99a378b9	196	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b4324de138239d8684aa17	296	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558eb5d6e13823109f3ee517	392	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b73032e13823bd29ba8000	277	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55a0946ee1382381ff364540	118	Salado mention	256.0278	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
579f1578cf58f1168e64ad7f	93	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55c0d379cf58f16e99a378b9	58	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5731ac74cf58f18e0ffaff50	72	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
57c19e14cf58f16bf61df64c	260	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55b6d4bfe13823bd29ba7dc0	1390	Argillaceous mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5573b2b9e13823980c4912af	55	Unayzah mention	299	318.1	Birkle, P. et al.	Origin of Formation Water from the Unayzah and Khuff Petroleum Reservoirs, Saudi Arabia	Procedia Earth and Planetary Science		2013	Elsevier	10.1016/j.proeps.2013.03.214
54b43271e138239d86850ff4	171	Bilara mention	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
56c1effacf58f15c72c9090b	88	Mudstone Anhydrite Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54fb2ecfe138239936c6d30a	43	Ouldburra Formation	488.3	542	Halas, S. et al.	Oxygen isotopes in authigenic quartz from massive salt deposits	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.02.034
55b54e9de1382314227cfc23	1141	Australia Brockman Iron Formation				List of referees, list of contents, subject index and author index volume 54, 1990	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90315-C
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55c36968cf58f1a8110b9014	66	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55f4877fcf58f16256a22522	305	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5590aa05e13823109f3ef13c	11	Paradox Member	299	318.1	Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
55b73032e13823bd29ba8000	64	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
559d0264e138230816dad63a	400	Nome Group	439.825	517.255	Nokleberg, W.J. et al.	Metallogeny and major mineral deposits of Alaska	Open-File Report		1988	United States Geological Survey	10.3133/ofr8873
56c1a95dcf58f15c72c903aa	798	Prairie Evaporite Formation	385.3	397.5	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5a0493edcf58f1b96402aae7	281	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
56b4fb9ecf58f14c238d30ea	212	Hydrohalite Dolomite			Ayllon, F. et al.	Re-equilibration of fluid inclusions in diagenetic-anchizonal rocks of the Cinera-Matallana coal basin (NW Spain)	Geofluids	3	2003	Wiley-Blackwell	10.1046/j.1468-8123.2003.00048.x
55f4877fcf58f16256a22522	8	Sulphur Limestone			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54fb3438e138239936c6d321	38	Main Dolomite	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
579411f4cf58f1a07169666f	20	Creede Formation	23.03	33.9	Finkelstein, D. B. et al.	Origin and diagenesis of lacustrine sediments, upper Oligocene Creede Formation, southwestern Colorado	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1175:oadols>2.3.co;2
557b436fe138239225f86325	2148	GEOCHEMISTRY mention			Roedder, Edwin	Composition of fluid inclusions	Professional Paper		1972	United States Geological Survey	10.3133/pp440JJ
55afeeece138238f9de483c5	190	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf1fccf58f13accaa0e61	227	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
56c44114cf58f17493f8536e	140	Dockum Group	199.6	251	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
551775abe1382394b500d785	41	Calatayud Gypsum Formation			Gutiérrez, Francisco	Gypsum karstification induced subsidence: effects on alluvial systems and derived geohazards (Calatayud Graben, Iberian Range, Spain)	Geomorphology	16	1996	Elsevier	10.1016/0169-555X(96)00004-9
57d0097ccf58f145d627bfaf	124	Nippewalla Group	251	299	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
57516912cf58f129ff61ef40	46	Watering Brook Formation			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
557f199ce13823bc80ba25a0	840	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
550ab8aae138238460c4fe5e	247	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
55c01578cf58f16e99a372dc	145	MS mention			Guidotti, Charles V. et al.	The paragonite-muscovite solvus: I. P-T-X limits derived from the Na-K compositions of natural, quasibinary paragonite-muscovite pairs	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90009-4
57320459cf58f19ced0f7bc5	240	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5682ea89cf58f1479a0ab77c	299	Opeche Shale	251	299	IIECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
56830ae3cf58f1479a0ab915	264	Leofnard mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55b6d4bfe13823bd29ba7dc0	190	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57c1a071cf58f16cbd62155c	290	Qusaiba Hot Shale			Chu, H. et al.	Freezing and melting behaviors of H 2 O-NaCl-CaCl 2 solutions in fused silica capillaries and glass-sandwiched films: implications for fluid inclusion studies	Geofluids	16	2016	Wiley	10.1111/gfl.12173
56c1a95dcf58f15c72c903aa	420	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55986cdae1382390cc640d7c	412	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
572ee8a5cf58f11bb5bc1a43	448	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55bfc14ecf58f16e99a3703b	37	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
54b4327fe138239d868537ad	308	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5c3e6d6c1faed655488cd35a	203	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b4328de138239d86855ceb	275	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55ae4f4be13823763a830ada	371	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5682e272cf58f1479a0ab716	226	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
574ee6e1cf58f1ba70939d9f	52	Cassidy Lake Formation			Roberts, Wyn and Williams, Paul F.	Evidence for early Mesozoic extensional faulting in Carboniferous rocks, southern New Brunswick, Canada	Canadian Journal of Earth Sciences	30	1993	Canadian Science Publishing	10.1139/e93-113
55baa3b5e1382373b63b89e7	78	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b32d74e138231cbdd6d072	346	Ely mention	273.01	323.2	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D
5509217ee138238460c4f689	310	Rustler mention	253.9652	256.0278	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.902	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
579f1578cf58f1168e64ad7f	414	Dockum Group	199.6	251	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
58d05105cf58f13f39efd424	525	San Andres Formation	251	299	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54b4328be138239d8685580e	7	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
5c34671e1faed655488bf01a	53	Basalt Pyrite Dolomite			Stoffers, P. and Ross, D.A.	Sedimentary History of the Red Sea	Initial Reports of the Deep Sea Drilling Project	23		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.23.123.1974
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56c1a95dcf58f15c72c903aa	373	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5631a8d9cf58f10c477fe6a8	370	Athabasca mention	538.8	1600	Richard, Antonin et al.	An evaporated seawater origin for the ore-forming brines in unconformity-related uranium deposits (Athabasca Basin, Canada): Cl/Br and δ37Cl analysis of fluid inclusions	Geochimica et Cosmochimica Acta	75	2011	Elsevier	10.1016/j.gca.2011.02.026
557bfbc7e138239225f86664	543	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	188	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b78281e13823bd29ba8218	1961	Salado Formation	251	260.4	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5682e272cf58f1479a0ab716	3	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5733004ccf58f1066ffdaeaa	125	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	92	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
577959b6cf58f16b6b61b62a	230	California mention			INGERSON, EARL	NONRADIOGENIC ISOTOPES IN GEOLOGY: A REVIEW	Geol Soc America Bull	64	1953	Geological Society of America	10.1130/0016-7606(1953)64[301:niigar]2.0.co;2
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
56c1a95dcf58f15c72c903aa	192	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b7869fe13823bd29ba8231	2920	Michigan mention	342.0833	348.8334	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56830b14cf58f1479a0ab918	559	Sorbas mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
550aa1a2e138238460c4fdf5	119	Baza mention			Hidalgo, M.Carmen and Cruz-Sanjulián, Jav	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
558df7d7e13823109f3ee082	1004	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
57320459cf58f19ced0f7bc5	77	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55ae0df7e13823763a830928	1453	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55c2a9cacf58f1a8110b8a1e	63	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.902	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5598d566e1382390cc640f84	232	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
57a43018cf58f11204e17fe0	756	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
58b6daf1cf58f11f2b0dde84	235	Salado mention	256.0278	262.2168	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5ab9a5fbcf58f196f620b199	221	Coboconk Formation	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
54c060fbe1382389c54c3757	202	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54b4328de138239d86855ceb	108	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5590aa05e13823109f3ef13c	98	Description mention			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
55ae0df7e13823763a830928	1457	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
57a43018cf58f11204e17fe0	527	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5508c83fe138238460c4f3ef	251	Sedom Formation	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
54fb3438e138239936c6d321	21	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5731ac74cf58f18e0ffaff50	72	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	596	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328ce138239d86855aad	12	Middle Member			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b4324de138239d8684aa17	225	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54be7fc1e13823299564b0b3	224	Salado Formation	251	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
558bbed5e13823109f3ed4f8	201	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55bfc14ecf58f16e99a3703b	122	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
54b4328be138239d86855804	196	Green River Formation	33.9	55.8	De Ros, Luiz Fernando et al.	Authigenesis of amphibole and its relationship to the diagenetic evolution of lower cretaceous sandstones of the Potiguar rift basin, northeastern Brazil	Sedimentary Geology	88	1994	Elsevier	10.1016/0037-0738(94)90065-5
579fe160cf58f15528a4466f	98	Marker Bed			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54b4327fe138239d868537ad	249	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
56833ddfcf58f1479a0abbcc	63	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54fab87ce138239936c6cfbb	820	Paradox Member	299	318.1	Risacher, François and Fritz, Bertrand	Bromine geochemistry of salar de Uyuni and deeper salt crusts, Central Altiplano, Bolivia	Chemical Geology	3-4	2000	Elsevier	10.1016/S0009-2541(99)00251-X
54e733ace138237cc9150889	474	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55c36968cf58f1a8110b9014	162	Carribuddy Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55af1c5ce13823763a830fe9	390	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
578fb2c8cf58f1bdcd2df236	276	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c0d379cf58f16e99a378b9	345	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
559877c2e1382390cc640dba	320	Sonta Sandstone			El Desouky, Hamdy A. et al.	The sandstone-hosted stratiform copper mineralization at Mwitapile and its relation to the mineralization at Lufukwe, Lufilian foreland, Democratic Republic of Congo	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.09.004
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
574c1c0bcf58f1957a2a36f7	50	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
54b4328ae138239d86855597	219	Alpine Haselgebirge Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
5590aba6e13823109f3ef147	279	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
578fb2c8cf58f1bdcd2df236	201	Salado-Tansill mention			HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5681b377cf58f1ba274d4854	54	Qom Formation	5.332	23.03	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069
574f1369cf58f10afd57189e	160	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
579fe160cf58f15528a4466f	171	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5c27bdc61faed655488ab0f4	816	Khewra mention	488.3	542	Hakhoo, N. et al.	Petroleum systems and hydrocarbon potential of the North-West Himalaya of India and Pakistan	Earth-Science Reviews	187	2018	Elsevier	10.1016/j.earscirev.2018.09.012
55bfbd79cf58f16e99a3701c	575	Prairie Evaporite Formation	385.3	397.5	Roberts, Sheila M. and Spencer, Ronald	Paleotemperatures preserved in fluid inclusions in halite	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00253-V
58cded3ccf58f12a356abeab	230	Mineral mention	307	315.2	Delgado, Gabriel et al.	Carbonate and Phosphate Precipitation by Saline Soil Bacteria in a Monitored Culture Medium	Geomicrobiology Journal	30	2013	Taylor and Francis	10.1080/01490451.2012.665148
55a7c745e13823757cc70251	60	Tamarisk mention	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5c2f443f1faed655488b5ed9	301	Cal Dol Qz Gp			Santo, A. et al.	Deep seated fault-related volcanogenic H 2 S as the key agent of high sinkhole concentration areas	Earth Surface Processes and Landforms			Wiley	10.1002/esp.4526
579ed180cf58f1030df9c51e	238	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55c0a3c8cf58f16e99a37754	177	Salado Formation	251	260.4	Roedder, Edwin	Fluid inclusion evidence for immiscibility in magmatic differentiation	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90113-W
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b73032e13823bd29ba8000	340	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
558bbed5e13823109f3ed4f8	175	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54d899b7e138238471e803b7	93	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55c2ce13cf58f1a8110b8b48	415	Ca Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57320459cf58f19ced0f7bc5	306	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
550895c3e138237a6f7391ae	156	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
57a3d5e1cf58f1b6afc43ebc	40	Green River Formation	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
550895c3e138237a6f7391ae	182	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
5ab9a5fbcf58f196f620b199	221	Coboconk Formation	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
550895c3e138237a6f7391ae	178	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
572cf1fccf58f13accaa0e61	205	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c3e6d6c1faed655488cd35a	137	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5590aa05e13823109f3ef13c	74	Description mention			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
58b6daf1cf58f11f2b0dde84	835	Haselgebirge Formation	245	251	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
54b43248e138239d86849e30	38	Zaragoza mention	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
5713034ccf58f175a32a0111	335	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a2bec80cf58f1362cab15c8	244	Salina Group	416	443.7	Shen, Lijian et al.	The remaking of the Mengyejing potash deposit in Yunnan, China: Evidence from Rb-Sr isotopic systematics	Ore Geology Reviews	89	2017	Elsevier	10.1016/j.oregeorev.2017.07.025
559c3f39e138230816dad2ff	200	Forty-niner Member			Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55c2e5c8cf58f1a8110b8c08	248	San Andres mention	150.6	154.8	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c49460cf58f1a8110b94f1	11	Salado Formation	251	260.4	Thakur, Punam et al.	Improved thermodynamic model for interaction of EDTA with trivalent actinides and lanthanide to ionic strength of 6.60m	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2013.09.040
580b91b8cf58f14ba918ac36	183	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and “Cline” shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
55c0d379cf58f16e99a378b9	242	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
598c914bcf58f17206d6eb4d	29	Asmari Formation	5.332	23.03	Pourkaseb, Houshang et al.	The occurrence and origin of celestite in the Abolfares region, Iran: Implications for Sr-mineralization in Zagros fold belt (ZFB)	Journal of African Earth Sciences	134	2017	Elsevier	10.1016/j.jafrearsci.2017.06.010
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5732032ecf58f19cbcbc550f	13	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	68	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c48dc6cf58f1a8110b94db	43	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
572cf1fccf58f13accaa0e61	285	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
557f61d1e13823bc80ba26ae	463	Leadville mention	343.5	357.05	Lovering, T.S. et al.	Ore deposits of the Gilman District, Eagle County, Colorado	Professional Paper		1978	United States Geological Survey	10.3133/pp1017
55af1c5ce13823763a830fe9	382	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55c0d379cf58f16e99a378b9	63	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b4328ce138239d86855aad	392	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5509217ee138238460c4f689	263	Castile Formation	253.8	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56830b14cf58f1479a0ab918	439	Sorbas Member			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
572cf1fccf58f13accaa0e61	46	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b43276e138239d86851ec2	326	Habshan mention	99.6	145.5	Vandeginste, Veerle et al.	Interplay between depositional facies, diagenesis and early fractures in the Early Cretaceous Habshan Formation, Jebel Madar, Oman	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.11.006
5733004ccf58f1066ffdaeaa	155	Halite Group	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
559d4d6ee138230816dad784	111	Vaca Triste Sandstone	251.902	273.01	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
5506a9ebe1382326932d924e	266	Lisan mention	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55afeeece138238f9de483c5	183	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
5682e272cf58f1479a0ab716	34	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1ca03cf58f15c72c90620	169	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
57c1a08dcf58f16cbd62157f	235	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
54b4328ce138239d86855aad	267	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b4328ee138239d86855f3a	188	Wieliczka mention			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
572cf900cf58f13d86a1bdc8	38	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
578b8ab6cf58f1645f54f0c6	248	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57c19e14cf58f16bf61df64c	286	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5506a9ebe1382326932d924e	259	Lisan Fm	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
54b4324de138239d8684aa17	299	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b5345de138239571b90a0d	148	Haynesville mention	147.52	155.939	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
54c060fbe1382389c54c3757	333	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5c3e6d6c1faed655488cd35a	319	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
57132e62cf58f183d20b8a53	362	Colemanite Formation			Helvaci, C. and Orti, F.	Sedimentology and diagenesis of Miocene colemanite-ulexite deposits (western Anatolia, Turkey)	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.1021
5732032ecf58f19cbcbc550f	204	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5509217ee138238460c4f689	332	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
578aea2bcf58f13920dc7baa	53	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
56c1a95dcf58f15c72c903aa	174	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5733004ccf58f1066ffdaeaa	163	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5a850dffcf58f13f065e41c5	278	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
558df7d7e13823109f3ee082	2332	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
577bca4acf58f1538dda98fd	263	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55ae9887e13823763a830cad	99	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557bfbc7e138239225f86664	646	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
56831341cf58f1479a0ab983	251	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
56c1ca03cf58f15c72c90620	111	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b35463e138231cbdd6d13e	1537	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	50	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
58d05105cf58f13f39efd424	376	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
559c3f39e138230816dad2ff	128	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
574fae1acf58f142f8fdc4f8	567	Prairie Evaporite Formation	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
558eb5d6e13823109f3ee517	316	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54fb3438e138239936c6d321	255	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54c060fbe1382389c54c3757	157	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57ec17eccf58f1ac335ac1b3	5	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5c19917d1faed655488915d3	619	Gessoso-Solfifera Formation	Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Ki			Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
598c0beccf58f14465ea77bf	404	Gejiu mention			Mlnlu, Fu and Kwak, Teunis A. P.	Geology, Geochemistry, and Fluid Inclusions of the Gejiu Tin-Polymetallic Field, People's Republic of China	International Geology Review	36	1994	Taylor and Francis	10.1080/00206819409465461
558e672ce13823109f3ee322	334	Castile mention	259	259.51	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
55b64a4de1382314227d0039	4	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
558bbed5e13823109f3ed4f8	183	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
574f1369cf58f10afd57189e	149	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
578b8ab6cf58f1645f54f0c6	283	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55c0d379cf58f16e99a378b9	105	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54c060fbe1382389c54c3757	325	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
579aae1bcf58f112b1fd775d	127	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
57a3d5e1cf58f1b6afc43ebc	46	Green River mention	34.8525	58.4	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
578b8ab6cf58f1645f54f0c6	235	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
557bfbc7e138239225f86664	414	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54be7fc1e13823299564b0b3	184	Castile mention	259	259.51	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
54be7fc1e13823299564b0b3	308	Salina Formation	416	443.7	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57a1b61ecf58f1154eb55fb9	58	Cedar Hills Sandstone	270.31	276.3813	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
55997d5ee1382390cc641332	27	Surface Dolomite			Gac, J.Y. et al.	Chemical model for origin and distribution of elements in salts and brines during evaporation of waters. Application to some saline lakes of Tibesti, Chad	Physics and Chemistry of the Earth		1979	Elsevier	10.1016/0079-1946(79)90018-1
5749d59dcf58f1b0821791d1	96	Windsor Group	318.1	359.2	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
55ae9887e13823763a830cad	91	Rustler Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
5509217ee138238460c4f689	244	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e75c56e138237cc9150930	292	Marls Formation	199.6	228	Tritlla, J. and Cardellach, E.	Fluid inclusions in pre-ore minerals from the carbonate-hosted mercury deposits in the Espadán Ranges (eastern Spain)	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00158-1
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
574f1369cf58f10afd57189e	208	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54b4324de138239d8684aa17	94	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
557b1abde138239225f86255	482	Pyrite Formation			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
55b6df25e13823bd29ba7dfe	1616	Verde Formation	5.332	23.03	Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
56833ddfcf58f1479a0abbcc	326	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
579fe160cf58f15528a4466f	222	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5907c51bcf58f1b45c88c8fc	220	Rush Springs Sandstone	251	260.4	Hanson, Sarah L.	Midwest Places of Geologic Interest	Rocks & Minerals	92	2017	Taylor and Francis	10.1080/00357529.2017.1241696
55c0d379cf58f16e99a378b9	154	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54fae770e138239936c6d10b	203	Castile Formation	253.8	260.4	Raab, M. and Spiro, B.	Sulfur isotopic variations during seawater evaporation with fractional crystallization	Chemical Geology: Isotope Geoscience section	86	1991	Elsevier	10.1016/0168-9622(91)90014-N
55ae9887e13823763a830cad	107	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
55c2a9cacf58f1a8110b8a1e	72	Loeme mention	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55c48dc6cf58f1a8110b94db	110	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
559dcd1ae138230816dad9be	6626	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
58c18a43cf58f1a6ba4ea493	172	Green River Formation	33.9	55.8	Tänavsuu-Milkeviciene, Kati et al.	Depositional Cycles and Sequences In An Organic-Rich Lake Basin: Eocene Green River Formation, Lake Uinta, Colorado and Utah, U.S.A.	Journal of Sedimentary Research	87	2017	Society for Sedimentary Geology	10.2110/jsr.2017.11
5743c295cf58f14fe2e25b0d	26	Carnallite-halite Rock Formation			GONCHARENKO, Olga et al.	Character of Sedimentation in the Potassium-Bearing Basin of the Gremyachinskoye Field (The Volga Monocline)	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_16
55af1c5ce13823763a830fe9	881	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
57a3d5e1cf58f1b6afc43ebc	2	Green River Formation	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
5683006acf58f1479a0ab88f	44	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
559e58a2e138230816dadbe2	741	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54c060fbe1382389c54c3757	202	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55ada974e13823763a830682	413	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
56831341cf58f1479a0ab983	251	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55baa3b5e1382373b63b89e7	373	Louann Fm	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
57a43018cf58f11204e17fe0	156	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55ae4f4be13823763a830ada	516	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
579f1578cf58f1168e64ad7f	147	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54faf2e4e138239936c6d161	179	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
557c738ee138239225f8685b	1004	Carlsbad mention	446.4667	449	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
54b4328ee138239d86855f01	365	Colombacci Fm	5.332	7.246	Rouchy, Jean Marie and Caruso, Antonio	The Messinian salinity crisis in the Mediterranean basin: A reassessment of the data and an integrated scenario	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.02.005
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55ae9887e13823763a830cad	99	Salado mention	256.0278	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
579f5bc9cf58f12a53c41a24	45	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
5a2cf7f0cf58f19a331caf3c	55	Zechstein mention	251.902	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
5c319a241faed655488b9bcc	163	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
56a038b2cf58f1079fd4ba21	143	Salina Group	416	443.7	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
5c3e6d6c1faed655488cd35a	271	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5682ea89cf58f1479a0ab77c	391	Nippewalla Group	251	299	NIECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
558bbed5e13823109f3ed4f8	10	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
557cd3cfe138239225f869e5	1326	Salado Formation	251	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
550895c3e138237a6f7391ae	156	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55a470efe13823757cc6f241	34	Green River Formation	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
558e3094e13823109f3ee1d7	47	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
558e3094e13823109f3ee1d7	230	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
579b56dacf58f13d24f0d7ef	14	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5c2fe60d1faed655488b6bad	213	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55c2a9cacf58f1a8110b8a1e	72	Loeme mention	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55184839e1382394b500daf7	64	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Evaluating and comparing methods of sinkhole susceptibility mapping in the Ebro Valley evaporite karst (NE Spain)	Geomorphology	111	2009	Elsevier	10.1016/j.geomorph.2009.04.017
54b4328ce138239d86855aad	505	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b6d4bfe13823bd29ba7dc0	293	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
584a9819cf58f19999526ff5	229	Range Group			Desouky, Hamdy El et al.	Novel applications of fluid inclusions and isotope geochemistry in unravelling the genesis of fossil travertine systems	Sedimentology	62	2015	Wiley	10.1111/sed.12137
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5682e272cf58f1479a0ab716	485	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e733ace138237cc9150889	475	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
557cd3cfe138239225f869e5	3243	Minnekahta Limestone	251	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55c01a9ecf58f16e99a37305	581	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57c19e14cf58f16bf61df64c	249	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
550895c3e138237a6f7391ae	182	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55b389aae138231cbdd6d262	7807	Salt mention	251	260.4	U.S. Geological Survey	Geological Survey research 1970, Chapter D	Professional Paper		1970	United States Geological Survey	10.3133/pp700D
558eb5d6e13823109f3ee517	259	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
58bb7f59cf58f1878850d92a	386	EdiacaranCambrian Ara Group			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
572cf900cf58f13d86a1bdc8	223	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
574f1369cf58f10afd57189e	149	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
57464969cf58f165ff103f08	12	Blomidon Formation	203.6	216.5	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
577bca4acf58f1538dda98fd	75	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55c2a9cacf58f1a8110b8a1e	98	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5749d59dcf58f1b0821791d1	90	Dead Sea Group	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
5c319a241faed655488b9bcc	168	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5682e272cf58f1479a0ab716	475	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
572ee8a5cf58f11bb5bc1a43	448	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55989b6ce1382390cc640e7d	160	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
54fb3438e138239936c6d321	161	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5a2b7516cf58f108104211ac	134	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
579fd5b3cf58f150b74d1050	56	Zaragoza mention	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
578b8ab6cf58f1645f54f0c6	257	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
57a1b61ecf58f1154eb55fb9	94	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
5c95cba74e85ba2e7cc05ac9	286	Berea Sandstone	353.35	362.225	Farooq, Umer et al.	Surface Characterization of Model, Outcrop, and Reservoir Samples in Low Salinity Aqueous Solutions	Journal of Dispersion Science and Technology	32		Informa UK Limited	10.1080/01932691003756936
5682ea89cf58f1479a0ab77c	351	Nippewalla Group	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57320459cf58f19ced0f7bc5	201	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
54fb03c7e138239936c6d1e1	381	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
55c2e5c8cf58f1a8110b8c08	220	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55989b6ce1382390cc640e7d	169	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
54d4bb37e138238471e7f379	425	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
54d25bffe138235369fe011c	93	Aragonite Bloedite Calcite Dolomite			Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
54b43288e138239d86854fba	249	Hanor mention			Hanor, Jeffrey S.	Physical and chemical controls on the composition of waters in sedimentary basins	Marine and Petroleum Geology	11	1994	Elsevier	10.1016/0264-8172(94)90007-8
56c1a95dcf58f15c72c903aa	152	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55a7c745e13823757cc70251	113	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
550895c3e138237a6f7391ae	156	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55a69d57e13823757cc6fac4	52	Paradox mention	306	319.714	Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
56c44114cf58f17493f8536e	125	Dockum Group	199.6	251	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
578bfa0bcf58f17fc5a016a6	87	Mascot Formation	471.8	488.3	Eastoe, Christopher J. et al.	Preliminary evidence for fractionation of stable chlorine isotopes in ore-forming hydrothermal systems	Geol	17	1989	GSA	10.1130/0091-7613(1989)017<0285:peffos>2.3.co;2
5b6f081fcf58f1539ffa6761	156	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
54b43270e138239d86850d70	36	Buck Reef Chert			Meng, Fanwei et al.	Ediacaran seawater temperature: Evidence from inclusions of Sinian halite	Precambrian Research	184	2011	Elsevier	10.1016/j.precamres.2010.10.004
54b43277e138239d86852025	149	Catoche Formation	471.8	488.3	Conliffe, J. et al.	Dolomitization of the lower Ordovician Catoche formation: Implications for hydrocarbon exploration in western Newfoundland	Marine and Petroleum Geology	30	2012	Elsevier	10.1016/j.marpetgeo.2011.10.007
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4324de138239d8684aa17	94	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55c0d379cf58f16e99a378b9	44	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
558fda65e13823109f3eec30	1121	Paradox Member	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54d899b7e138238471e803b7	138	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54faf2e4e138239936c6d161	208	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
572cf1fccf58f13accaa0e61	222	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c3e6d6c1faed655488cd35a	149	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
572cf1fccf58f13accaa0e61	288	Nippewalla Group	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a2b7516cf58f108104211ac	417	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
558bbed5e13823109f3ed4f8	108	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
5743c295cf58f14fe2e25b0d	26	Carnallite-halite Rock Formation			GONCHARENKO, Olga et al.	Character of Sedimentation in the Potassium-Bearing Basin of the Gremyachinskoye Field (The Volga Monocline)	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_16
5c95cba74e85ba2e7cc05ac9	286	Berea Sandstone	353.35	362.225	Farooq, Umer et al.	Surface Characterization of Model, Outcrop, and Reservoir Samples in Low Salinity Aqueous Solutions	Journal of Dispersion Science and Technology	32		Informa UK Limited	10.1080/01932691003756936
57c8716ccf58f1429a42896c	197	TES mention			Glotch, Timothy D. et al.	Constraints on the composition and particle size of chloride salt-bearing deposits on Mars	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004921
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.902	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54b4328ce138239d86855aad	363	Halite Member	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b35463e138231cbdd6d13e	1051	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
55b6d4bfe13823bd29ba7dc0	975	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558fa710e13823109f3eeaeb	516	Salt Lake mention	2.58	23.03	mpiled and edited by Tooker, Edwin Wil	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
56831341cf58f1479a0ab983	491	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
574f9a2fcf58f13bebe8af72	551	Prairie Evaporite Formation	385.3	397.5	McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
55b78281e13823bd29ba8218	1961	Salado Formation	251	260.4	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54b4324de138239d8684aa17	190	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56a038b2cf58f1079fd4ba21	199	Edwards Group	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
54b43250e138239d8684b46c	168	Maha Sarakham Formation	65.5	145.5	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54b4328ae138239d86855586	130	Patience Lake Member			Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
58d03bf3cf58f138516d1200	419	Maha Sarakham mention	33.9	100.5	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
56f2f98bcf58f1892b30205d	199	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ry	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
578fb2c8cf58f1bdcd2df236	257	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5c31a7df1faed655488b9d7b	54	Majiagou Formation	443.7	488.3	WANG, Zhentao and ZHENG, Mianping	Potash-Forming Regularity of the Ordovician Marine Northern Shaanxi Salt Basin: Insight from Review and Prospect of the Deep Geology of the Ordos Basin	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13648
57320459cf58f19ced0f7bc5	272	Salado Formation	251	260.4	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
578653e1cf58f10c846f939b	6	Green River Formation	33.9	55.8	Dyni, John R. and Hawkins, James E.	Lacustrine turbidites in the Green River Formation, northwestern Colorado	Geol	9	1981	GSA	10.1130/0091-7613(1981)9<235:ltitgr>2.0.co;2
54b4324de138239d8684aa17	98	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6d4bfe13823bd29ba7dc0	181	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54fb3438e138239936c6d321	269	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5b6d22edcf58f18ba5e73c75	142	Middle Evaporite Bed			Stewart, F. H.	Replacements involving early carnallite in the potassium-bearing evaporites of Yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	31	1956	Mineralogical Society	10.1180/minmag.1956.031.233.02

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c19e14cf58f16bf61df64c	216	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55ae0df7e13823763a830928	1461	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
579b56dacf58f13d24f0d7ef	19	Opeche Shale	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54e672c7e138237cc9150573	144	Salado Formation	251	260.4	Brookins, D.G.	Natural analogues for radwaste disposal: Elemental migration in igneous contact zones	Chemical Geology	55	1986	Elsevier	10.1016/0009-2541(86)90034-3
57ec17eccf58f1ac335ac1b3	5	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
579f1578cf58f1168e64ad7f	127	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5c1d9b0c1faed65548898c42	659	Glaxo Group				Communications	British Journal of Pharmacology	91	1987	Wiley-Blackwell	10.1111/j.1476-5381.1987.tb16271.x
54be90c7e13823299564b137	459	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
54b43280e138239d8685381d	79	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
56830285cf58f1479a0ab8a5	23	Bunter Formation	199.6	251	SCHOENHERR, JOHANNES et al.	Halite cementation and carbonate diagenesis of intra-salt reservoirs from the Late Neoproterozoic to Early Cambrian Ara Group (South Oman Salt Basin)	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00986.x
57a43018cf58f11204e17fe0	534	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
577bca4acf58f1538dda98fd	27	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
580b91b8cf58f14ba918ac36	41	Woodford Shale	359.2	385.3	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and "Cline" shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
55b6d4bfe13823bd29ba7dc0	5	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5503421ae1382326932d7e6d	105	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5c95e7c04e85ba2e7cc05cb1	2	Francis Group	305.425	305.7125	Ali, Hazem et al.	The Effect of Media Composition, pH, and Formulation Excipients on the In Vitro Lipolysis of Self-Emulsifying Drug Delivery Systems (SEDDS)	Journal of Dispersion Science and Technology	31		Informa UK Limited	10.1080/01932690903110566
55b7869fe13823bd29ba8231	1762	Supai Formation	251	299	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b5b47ce1382314227cfdae	25	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
57320459cf58f19ced0f7bc5	201	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
56833ddfcf58f1479a0abbcc	171	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5631a8d9cf58f10c477fe6a8	6	Athabasca mention	538.8	1600	Richard, Antonin et al.	An evaporated seawater origin for the ore-forming brines in unconformity-related uranium deposits (Athabasca Basin, Canada): Cl/Br and δ37Cl analysis of fluid inclusions	Geochimica et Cosmochimica Acta	75	2011	Elsevier	10.1016/j.gca.2011.02.026
55b6d4bfe13823bd29ba7dc0	1120	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5590aa05e13823109f3ef13c	163	Halite Anhydrite Calcite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
558b2c2be13823109f3ed1ee	452	Horse Spring Fm	5.332	23.03	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
57c87d1dcf58f1470e996667	274	ND Dolomite			Lynch, Kennda L. et al.	Near-infrared spectroscopy of lacustrine sediments in the Great Salt Lake Desert: An analog study for Martian paleolake basins	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004707
558eb5d6e13823109f3ee517	377	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d05105cf58f13f39efd424	494	San Andres mention	150.6	154.8	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55b2fa0ce138231cbdd6cf57	655	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Correlation, composition, areal distribution, and thickness of Eocene stratigraphic units, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1992	United States Geological Survey	
55b3055ce138231cbdd6cf97	854	Eghei Sandstone			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
54fc8912e138239936c6dc7a	1	Palaeozoic Carribuddy Group			Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
54b5345de138239571b90a0d	149	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
579b56dacf58f13d24f0d7ef	40	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	GeoI	34	2006	Geological Society of America	10.1130/g22176.1
558e672ce13823109f3ee322	334	Castile mention	259	259.51	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
55baa3b5e1382373b63b89e7	431	Plio-Pleistocene Sedom Fm			Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54fb3438e138239936c6d321	13	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54d3bc73e13823811a06902d	121	DISSOLVE Calcite Dolomite			Eckstein, Yoram and Hau, Joseph A.	Modeling the neutralizing processes of acid precipitation in soils and glacial sediments of northern Ohio	Journal of Hydrology	131	1992	Elsevier	10.1016/0022-1694(92)90226-L
55baa3b5e1382373b63b89e7	148	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55ae4f4be13823763a830ada	349	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54fc8912e138239936c6dc7a	109	Salado mention	256.0278	262.2168	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55c01a9ecf58f16e99a37305	494	Rustler Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
579f1578cf58f1168e64ad7f	82	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5b199d0dcf58f13e9d9dc48e	330	Cobar mention	407.6	427.4	Seccombe, P. K. et al.	Sulfur isotope and fluid inclusion geochemistry of metamorphic Cu–Au vein deposits, central Cobar area, NSW, Australia	Australian Journal of Earth Sciences	64	2017	Informa UK Limited	10.1080/08120099.2017.1297330
54be90c7e13823299564b137	479	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
5694cf35cf58f1377d5990d4	584	Ca Group			Vanko, David A.	Temperature, pressure, and composition of hydrothermal fluids, with their bearing on the magnitude of tectonic uplift at mid-ocean ridges, inferred from fluid inclusions in oceanic layer 3 rocks	Journal of Geophysical Research	93	1988	Wiley-Blackwell	10.1029/JB093iB05p04595
54b4328de138239d86855c7b	108	Opeche Shale	251	299	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
57bedb9ccf58f13bf01999e9	357	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
58c18a99cf58f1a6ba4ea54d	116	Sedom Formation	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5731ac74cf58f18e0ffaff50	10	Salado mention	256.0278	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	1369	Rustler mention	253.9652	256.0278	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558e3094e13823109f3ee1d7	98	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55c2a9cacf58f1a8110b8a1e	102	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d05f04cf58f143d83df298	745	Zechstein mention	251.902	273.01	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54eba4f0e138237cc9151b1e	549	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5590c038e13823109f3ef1c7	83	Culebra mention	251	299	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
557b7e6ae138239225f86458	3031	Green River Formation	33.9	55.8	Geological Survey (U.S.)	Geochemical survey of the western energy regions, 4th annual progress report, July 1977	Open-File Report		1977	United States Geological Survey	10.3133/ofr77872
5694cf35cf58f1377d5990d4	584	Ca Group			Vanko, David A.	Temperature, pressure, and composition of hydrothermal fluids, with their bearing on the magnitude of tectonic uplift at mid-ocean ridges, inferred from fluid inclusions in oceanic layer 3 rocks	Journal of Geophysical Research	93	1988	Wiley-Blackwell	10.1029/JB093iB05p04595
55b73032e13823bd29ba8000	83	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5733004ccf58f1066ffdaeaa	151	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55a0946ee1382381ff364540	278	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
57e65deecf58f186b6da86bd	157	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5503421ae1382326932d7e6d	512	Albert Formation	318.1	359.2	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5c95cba74e85ba2e7cc05ac9	2	Francis Group	305.425	305.7125	Farooq, Umer et al.	Surface Characterization of Model, Outcrop, and Reservoir Samples in Low Salinity Aqueous Solutions	Journal of Dispersion Science and Technology	32		Informa UK Limited	10.1080/01932691003756936
54e7447fe138237cc91508e5	802	Salina Group	416	443.7	Fanlo, Isabel and Ayora, Carlos	The evolution of the Lorraine evaporite basin: implications for the chemical and isotope composition of the Triassic ocean	Chemical Geology	146	1998	Elsevier	10.1016/S0009-2541(98)00007-2
55b7869fe13823bd29ba8231	1984	Verde Formation	5.332	23.03	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	37	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
579cc800cf58f111052984df	15	Vorotyshcha Salt-bearing Formation			Kotarba, Maciej J. et al.	Unique Quaternary environment for discoveries of woolly rhinoceroses in Starunia, fore-Carpathian region, Ukraine: Geochemical and geoelectric studies	Geol	36	2008	Geological Society of America	10.1130/g24654a.1
58b7df47cf58f18af629a04c	593	Gachsaran Formation	5.332	23.03	Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55a43da1e13823757cc6f19a	292	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5674a234cf58f12215607647	326	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
572cf900cf58f13d86a1bdc8	28	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
559afea3e1382390cc641cc4	2	Diaspri Formation			Montomoli, Chiara et al.	Fluid source and pressure–temperature conditions of high-salinity fluids in syn-tectonic veins from the Northeastern Apuan Alps (Northern Apennines, Italy)	Physics and Chemistry of the Earth, Parts A/B/C	30	2005	Elsevier	10.1016/j.pce.2005.01.003
58d05105cf58f13f39efd424	196	San Andres Formation	251	299	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54d899b7e138238471e803b7	130	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7c404e13823bd29ba8379	2049	Green River Formation	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
557b436fe138239225f86325	488	GEOCHEMISTRY mention			Roedder, Edwin	Composition of fluid inclusions	Professional Paper		1972	United States Geological Survey	10.3133/pp440JJ
54b4324de138239d8684aa17	182	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56830b14cf58f1479a0ab918	439	Pasquasia mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
577ef8c7cf58f1ac737005ec	163	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
58bf2d90cf58f1867eb10946	305	Chandler mention	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5508c83fe138238460c4f3ef	181	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
55c48dc6cf58f1a8110b94db	59	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
54fb3438e138239936c6d321	1	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4327de138239d868530d9	209	Green River Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
5733004ccf58f1066ffdaeaa	255	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54d4bb37e138238471e7f379	433	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
54e733ace138237cc9150889	32	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
54d899b7e138238471e803b7	130	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55b3055ce138231cbdd6cf97	5047	Zmam Formation			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
578fb2c8cf58f1bdcd2df236	396	San Andres Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5682e3a8cf58f1479a0ab727	411	Salado Formation	251	260.4	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
579b56dacf58f13d24f0d7ef	73	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
56833ddfcf58f1479a0abbcc	274	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5d3f58060b45c76cafa2004f	246	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55a470efe13823757cc6f241	449	Green River Formation	33.9	55.8	Dyni, John R.	Stratigraphy and nahcolite resources of the saline facies of the Green River Formation, Rio Blanco County, Colorado	Open-File Report		1974	United States Geological Survey	
572cf1fccf58f13accaa0e61	134	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
57484ab3cf58f13effae7ac5	130	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
55b5b47ce1382314227cfdae	227	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55b6dc28e13823bd29ba7dec	868	See mention			Schrader, Frank Charles et al.	Useful minerals of the United States	Bulletin		1917	United States Geological Survey	10.3133/b624
54b4328de138239d86855c34	91	Cßayirhan mention			Orb, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
574c1c0bcf58f1957a2a36f7	42	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
54b4328de138239d86855c7b	51	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
5a0493edcf58f1b96402aae7	361	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c2e5c8cf58f1a8110b8c08	167	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579f5bc9cf58f12a53c41a24	30	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5683006acf58f1479a0ab88f	65	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
54b4324de138239d8684aa17	284	Serrata Fm			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57bee020cf58f13d88794bee	261	Windsor mention	95.2	99.5	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
578b8ab6cf58f1645f54f0c6	87	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1a95dcf58f15c72c903aa	192	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55c2a9cacf58f1a8110b8a1e	98	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
557f61d1e13823bc80ba26ae	463	Leadville mention	343.5	357.05	Lovering, T.S. et al.	Ore deposits of the Gilman District, Eagle County, Colorado	Professional Paper		1978	United States Geological Survey	10.3133/pp1017
5c319a241faed655488b9bcc	110	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
54b43277e138239d86851f14	118	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
57a43018cf58f11204e17fe0	434	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
572cf900cf58f13d86a1bdc8	58	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57a3d5e1cf58f1b6afc43ebc	71	Wilkins Peak Member	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
5710e047cf58f16dc5c8824c	360	La Vid Group	397.5	416	Schneider, J. et al.	Fluid Evolution During Burial Diagenesis and Subsequent Orogenetic Uplift: The La Vid Group (Cantabrian Zone, Northern Spain)	Journal of Sedimentary Research	78	2008	Society for Sedimentary Geology	10.2110/jsr.2008.032
55088909e138237a6f73915f	185	East mention			Knauth, L. Paul	Origin and mixing history of brines, Palo Duro Basin, Texas, U.S.A.	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90019-4
56fecd78cf58f1575a00f57d	16	Caen Limestone			Jerwood, L. C. et al.	Experimental frost and salt weathering of chalk—I	Earth Surface Processes and Landforms	15	1990	Wiley-Blackwell	10.1002/esp.3290150704
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5d35e56c0b45c76caf93f034	1339	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
57320459cf58f19ced0f7bc5	291	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
559afea3e1382390cc641cc4	282	Diaspri Formation			Montomoli, Chiara et al.	Fluid source and pressure–temperature conditions of high-salinity fluids in syn-tectonic veins from the Northeastern Apuan Alps (Northern Apennines, Italy)	Physics and Chemistry of the Earth, Parts A/B/C	30	2005	Elsevier	10.1016/j.pce.2005.01.003
572cf1fccf58f13accaa0e61	108	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
573090ddcf58f160029e9d90	126	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	408	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56c1a95dcf58f15c72c903aa	445	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54bffee9e1382389c54c3458	6	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54b4324de138239d8684aa17	5	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
579fe160cf58f15528a4466f	238	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57611ef6cf58f130993e9b1a	49	Salina Group	416	443.7	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
572cf1fccf58f13accaa0e61	72	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54fb03c7e138239936c6d1e1	336	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
55b7869fe13823bd29ba8231	1078	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a0493edcf58f1b96402aae7	144	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5674a234cf58f12215607647	4	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
57a43018cf58f11204e17fe0	927	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b8b478e1382373b63b81e1	13	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
558eb5d6e13823109f3ee517	374	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
579b56dacf58f13d24f0d7ef	76	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5682e272cf58f1479a0ab716	275	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b43288e138239d86854e95	56	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
55b78281e13823bd29ba8218	2070	Yeso mention	275.2575	286.225	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5a30910ccf58f1715016597b	38	Wilkins Peak Member	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
578fb2c8cf58f1bdcd2df236	311	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5713034ccf58f175a32a0111	77	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56833ddfcf58f1479a0abbcc	326	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b6d6a7e13823bd29ba7dcc	8139	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
557f199ce13823bc80ba25a0	854	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
578b8ab6cf58f1645f54f0c6	283	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55917e77e13823109f3ef5e3	311	Panoche mention	67.525	114.4	Presser, T.S. et al.	Geologic sources, mobilization, and transport of selenium from the California Coast Ranges to the western San Joaquin Valley; a reconnaissance study	Water-Resources Investigations Report		1990	United States Geological Survey	10.3133/wri904070
5682e3a8cf58f1479a0ab727	345	Prairie Formation	359.2	416	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
574fae1acf58f142f8fdc4f8	47	Prairie Evaporite mention	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
56833ddfcf58f1479a0abbcc	271	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c2e5c8cf58f1a8110b8c08	127	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a048d65cf58f1b96402a09e	1	Rock-Water Interaction Group			Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
5833ce7ecf58f1110fa956dd	191	Stratigraphic Depth Calcite Dolomite			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
54c060fbe1382389c54c3757	218	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54d4bb37e138238471e7f379	433	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
5682e272cf58f1479a0ab716	413	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
557cd3cfe138239225f869e5	1738	San Andres Limestone	269.635	279.0034	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55c2e5c8cf58f1a8110b8c08	188	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54b4324de138239d8684aa17	167	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5a850dffcf58f13f065e41c5	8	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
578b8ab6cf58f1645f54f0c6	334	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55c2e5c8cf58f1a8110b8c08	98	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5733004ccf58f1066ffdaeaa	151	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
574f1369cf58f10afd57189e	208	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
57a43018cf58f11204e17fe0	119	Bouse Formation	1.806	5.332	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
558ec3e3e13823109f3ee570	114	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
5682e272cf58f1479a0ab716	408	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57c1a08dcf58f16cbd62157f	210	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
5a2b7516cf58f108104211ac	417	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
577bca4acf58f1538dda98fd	129	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5736e0e3cf58f1a73cb1f05e	671	Smackover mention	150.6	158.8535	Spotl, C. et al.	Diagenesis and pore water evolution in the Keuper Reservoir, Paris Basin (France)	Journal of Sedimentary Research	63	1993	Society for Sedimentary Geology	10.1306/d4267c44-2b26-11d7-8648000102c1865d
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57320459cf58f19ced0f7bc5	324	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
58d05f04cf58f143d83df298	375	Carrols Corner Formation			Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55c0d379cf58f16e99a378b9	44	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b64a4de1382314227d0039	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
57e65deecf58f186b6da86bd	210	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
57132e62cf58f183d20b8a53	354	Colemanite mention			Helvaci, C. and Orti, F.	Sedimentology and diagenesis of Miocene colemanite-ulexite deposits (western Anatolia, Turkey)	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.1021
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54e7c15ae138237cc9150ae2	156	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5d3f58060b45c76cafa2004f	263	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
54b4327fe138239d868537ad	237	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5598d566e1382390cc640f84	179	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5c3540ea1faed655488c1248	100	Basal mention	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
54b43288e138239d86854e95	96	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
577bca4acf58f1538dda98fd	118	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54b4328ce138239d86855b5a	74	Tripoli Formation	5.332	7.246	Taberner, C. et al.	The use of environmental markers to distinguish marine vs. continental deposition and to quantify the significance of recycling in evaporite basins	Sedimentary Geology	137	2000	Elsevier	10.1016/S0037-0738(00)00105-6
54dc2da6e138238a47f96228	246	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
572cf900cf58f13d86a1bdc8	33	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55986e49e1382390cc640d84	140	B.O.M.Z. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
55c48dc6cf58f1a8110b94db	164	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
56c1ca03cf58f15c72c90620	179	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55ae9887e13823763a830cad	107	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
57a43018cf58f11204e17fe0	485	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
56a1ac99cf58f19442528389	1984	Aragonite Monohydrocalcite Dolomite			Gibson, Everett K. et al.	Chemical weathering and diagenesis of a cold desert soil from Wright Valley, Antarctica: An analog of Martian weathering processes	Journal of Geophysical Research	88	1983	Wiley-Blackwell	10.1029/JB088iS02p0A912
55f49f72cf58f16256a225dc	128	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
57602b35cf58f1b1e9b07e02	77	Retiro Formation	113	114.05	Alvarenga, R.S. et al.	Seismic characteristics and distribution of hydrothermal vent complexes in the Cretaceous offshore rift section of the Campos Basin, offshore Brazil	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.03.030
54bffee9e1382389c54c3458	55	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
551ddd48e138236e51a99900	17	Prairie Evaporite Formation	385.3	397.5	Hill, D.G.	Multiple log potash assay	Journal of Applied Geophysics	30	1993	Elsevier	10.1016/0926-9851(93)90037-Y
578fb2c8cf58f1bdcd2df236	258	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5713034ccf58f175a32a0111	313	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
577bca4acf58f1538dda98fd	129	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
559e58a2e138230816dadbe2	742	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
5508d3cde138238460c4f445	155	Sdom mention	-5.5012E-05	23.03	Stiller, Mariana et al.	Cl-37 in the Dead Sea system---preliminary results	Applied Geochemistry	13	1998	Elsevier	10.1016/S0883-2927(98)00017-1
54b43288e138239d86854e95	104	Fats mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
5a2b7516cf58f108104211ac	148	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
558eb5d6e13823109f3ee517	349	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
578b8ab6cf58f1645f54f0c6	61	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b4327ee138239d868533ae	98	Calcite Aragonite Dolomite			Xiao, Jun et al.	Geochemistry and solute sources of surface waters of the Tarim River Basin in the extreme arid region, NW Tibetan Plateau	Journal of Asian Earth Sciences		2012	Elsevier	10.1016/j.jseaes.2012.04.009
550895c3e138237a6f7391ae	156	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b43281e138239d86853bfd	127	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b7869fe13823bd29ba8231	1796	Supai mention	275.2575	313.75	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5732032ecf58f19cbcbc550f	17	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
574f1369cf58f10afd57189e	214	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55f49f72cf58f16256a225dc	207	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55ae4f4be13823763a830ada	293	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
572cf900cf58f13d86a1bdc8	294	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5682e272cf58f1479a0ab716	596	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5508c83fe138238460c4f3ef	251	Sedom Formation	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
578b8ab6cf58f1645f54f0c6	270	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b4328ee138239d86855f3a	195	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
57320459cf58f19ced0f7bc5	495	Clear Fork mention	273.01	286.225	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
54b4327fe138239d868537ad	94	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
572cf900cf58f13d86a1bdc8	248	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5731ac74cf58f18e0ffaff50	187	Salado Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
54eba4f0e138237cc9151b1e	80	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
54b4327ce138239d86852e9c	111	Monterey Formation	5.332	23.03	Munz, I.a et al.	The fluid regime during fracturing of the Embla field, Central Trough, North Sea	Marine and Petroleum Geology	15	1998	Elsevier	10.1016/S0264-8172(98)00062-2
584a9819cf58f19999526ff5	229	Range Group			Desouky, Hamdy El et al.	Novel applications of fluid inclusions and isotope geochemistry in unravelling the genesis of fossil travertine systems	Sedimentology	62	2015	Wiley	10.1111/sed.12137
578d2f6bcf58f10dd389f132	34	Parachute Creek Member	33.9	55.8	EN, WALLACE R. and DICKINSON, WILLI	Paleogeographic and paleotectonic setting of Laramide sedimentary basins in the central Rocky Mountain region: Alternative interpretation and reply	Geological Society of America Bulletin	102	1990	GSA	10.1130/0016-7606(1990)102<0280:papsol>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fb3438e138239936c6d321	329	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4325ce138239d8684d4cc	115	Salt Member	251	260.4	Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
58b6558bcf58f1b09c25b181	455	Crato Formation	99.6	145.5	Varejão, Filipe Giovanini et al.	Upper Aptian mixed carbonate-siliciclastic sequences from Tucano Basin, Northeastern Brazil: Implications for paleogeographic reconstructions following Gondwana break-up	Cretaceous Research		2016	Elsevier	10.1016/j.cretres.2016.06.014
57a43018cf58f11204e17fe0	168	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
579aae1bcf58f112b1fd775d	25	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
56f2f98bcf58f1892b30205d	146	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ry	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b7869fe13823bd29ba8231	2714	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5733004ccf58f1066ffdaeaa	163	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
558cdbe6e13823109f3edaf4	4488	Green River Formation	33.9	55.8	compiled by Erickson, Ralph L.	Characteristics of mineral deposit occurrences	Open-File Report		1982	United States Geological Survey	10.3133/ofr82795
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
56c1da4bcf58f15c72c90764	124	Sample Formation	332.3182	333.23	ONIGLIO, M. and WILLIAMS-JONES, A.	Diagenesis of Ordovician carbonates from the north-east Michigan Basin, Manitoulin Island area, Ontario: evidence from petrography, stable isotopes and fluid inclusions	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb02155.x
56833ddfcf58f1479a0abbcc	233	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54b4327fe138239d868537ad	1	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
58c18a99cf58f1a6ba4ea54d	61	Sedom mention	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5733004ccf58f1066ffdaeaa	2	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5503421ae1382326932d7e6d	1445	Prairie Evaporite Formation	385.3	397.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54b4327ee138239d868532b9	322	Calcite Dolomite			Xing, Lina et al.	Groundwater hydrochemical characteristics and processes along flow paths in the North China Plain	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.03.017
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
5599341be1382390cc641189	47	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
57320459cf58f19ced0f7bc5	88	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
559c3f39e138230816dad2ff	160	Salado Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54e733ace138237cc9150889	117	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
57c1a06bcf58f16cbd621551	281	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
54b4327fe138239d868537ad	249	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
55ad3126e13823763a8303a0	207	Rustler mention	253.9652	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b35463e138231cbdd6d13e	7	Green River Formation	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
55c319eacf58f1a8110b8db1	326	Salina Group	416	443.7	Klein-BenDavid, Ofra et al.	The evolution of marine evaporitic brines in inland basins: The Jordan-Dead Sea Rift valley	Geochimica et Cosmochimica Acta	68	2004	Elsevier	10.1016/j.gca.2003.08.002

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5506a9ebe1382326932d924e	381	Ze'elim Formation	-5.5012E-05	0.01143	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
54b4328ce138239d86855aad	374	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54e64c66e138237cc91504d3	31	Castile Formation	253.8	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
55b3f64ce138231cbdd6d4cb	6879	Green River Formation	33.9	55.8	Geological Survey (U.S.)	Geological Survey research 1971, Chapter B	Professional Paper		1971	United States Geological Survey	
5509217ee138238460c4f689	198	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
579fe160cf58f15528a4466f	176	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	:Kee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
57484ab3cf58f13effae7ac5	192	Mabou Gp	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
5733004ccf58f1066ffdaeaa	167	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55c2e5c8cf58f1a8110b8c08	186	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5733004ccf58f1066ffdaeaa	142	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5a0493edcf58f1b96402aae7	128	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
57a43018cf58f11204e17fe0	541	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54faf2e4e138239936c6d161	436	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
54b4325ae138239d8684d019	1268	Grudja Formation	65.5	145.5		11TH International Conference of the Geological Society of Africa Earth Resources for Africa Edited by H.E. Frimmel	Journal of African Earth Sciences	28	1999	Elsevier	10.1016/S0899-5362(99)00028-7
5a0495c3cf58f1b96402acf5	45	Hecho Group	33.9	55.8	Blasco, Mónica et al.	Geochemistry, geothermometry and influence of the concentration of mobile elements in the chemical characteristics of carbonate-evaporitic thermal systems. The case of the Tiermas geothermal system (Spain)	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.07.013
561c20bfcf58f184cc075c66	212	Quartz Dolomite			Díaz-Hernández, J.L. et al.	Quantitative analysis of mineral phases in atmospheric dust deposited in the south-eastern Iberian Peninsula	Atmospheric Environment	45	2011	Elsevier	10.1016/j.atmosenv.2011.03.024
579aae1bcf58f112b1fd775d	25	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
558eb5d6e13823109f3ee517	333	Tamarisk mention	251.902	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b8484be13823bd29ba869d	392	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
54cf0cc5e138236bcc92aaf6	52	Soledad Fm			Sáez, Alberto et al.	The stratigraphic record of changing hyperaridity in the Atacama desert over the last 10Ma	Earth and Planetary Science Letters		2012	Elsevier	10.1016/j.epsl.2012.08.029
5732032ecf58f19cbcbc550f	204	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5713034ccf58f175a32a0111	235	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55f49f72cf58f16256a225dc	133	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
5a21053ecf58f18a3170d1ed	228	Khorat Group	65.5	251	Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5c3e6d6c1faed655488cd35a	114	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5733004ccf58f1066ffdaeaa	87	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
573090ddcf58f160029e9d90	1	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5a0493edcf58f1b96402aae7	325	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54bffee9e1382389c54c3458	33	Sedom Fm	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54b4324de138239d8684aa17	153	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
579f5bc9cf58f12a53c41a24	265	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54d4bb37e138238471e7f379	533	Salado Formation	251	260.4	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
54b4328ce138239d86855aad	254	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
579fe160cf58f15528a4466f	334	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5682e272cf58f1479a0ab716	413	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5682e272cf58f1479a0ab716	34	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5a048d65cf58f1b96402a09e	231	Black River Group	443.7	488.3	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
54fb03c7e138239936c6d1e1	477	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
572cf1fccf58f13accaa0e61	328	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c319a241faed655488b9bcc	2	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
578fb2c8cf58f1bdcd2df236	348	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
574f1369cf58f10afd57189e	8	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
557f199ce13823bc80ba25a0	243	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57c19e14cf58f16bf61df64c	285	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55986e49e1382390cc640d84	144	S.D.B. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
5682e3a8cf58f1479a0ab727	378	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
584a9819cf58f19999526ff5	229	Range Group			Desouky, Hamdy El et al.	Novel applications of fluid inclusions and isotope geochemistry in unravelling the genesis of fossil travertine systems	Sedimentology	62	2015	Wiley	10.1111/sed.12137
577c41d6cf58f188cebdd1fb	318	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55ae4f4be13823763a830ada	673	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55a0946ee1382381ff364540	257	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55986e49e1382390cc640d84	204	S.D.B. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
578aea2bcf58f13920dc7baa	121	Andres mention			DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fb3438e138239936c6d321	13	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
56830ae3cf58f1479a0ab915	245	Prairie Evaporite mention	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
54b4328ae138239d86855586	209	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
55986e49e1382390cc640d84	223	R.S.C. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
5732032ecf58f19cbcbc550f	177	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b2c402e138231cbdd6ce3e	648	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5d3f58060b45c76cafa2004f	116	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
5683349ccf58f1479a0abb4e	129	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
578b8ab6cf58f1645f54f0c6	43	Castile mention	259	259.51	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1d9bbcf58f15c72c9075f	262	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5a2b7516cf58f108104211ac	350	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
550eebb2e1382369a6f93fc6	356	Zaragoza Gypsum Formation	5.332	23.03	Pueyo Anchuela, Ó. et al.	Assessing karst hazards in urbanized areas. Case study and methodological considerations in the mantle karst from Zaragoza city (NE Spain)	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2014.10.025
589ebd9dcf58f101e1d918ac	201	Anhydrite Aragonite Calcite Dolomite			Balci, Nurgül et al.	Reproducing Authigenic Carbonate Precipitation in the Hypersaline Lake Acıgöl (Turkey) with Microbial Cultures	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099763
55c0f018cf58f16e99a3799f	34	Castile Formation	253.8	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
572cf900cf58f13d86a1bdc8	247	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
558eb5d6e13823109f3ee517	262	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
550901a3e138238460c4f59b	279	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54b4328ce138239d86855aad	334	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54be7fc1e13823299564b0b3	184	Castile mention	259	259.51	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
558eb5d6e13823109f3ee517	376	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b30ea3e138231cbdd6cfcd	1055	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328ee138239d86855ef7	114	Jindong Formation	65.5	99.6	Paik, I.S. and Kim, H.J.	Playa lake and sheetflood deposits of the Upper Cretaceous Jindong Formation, Korea: Occurrences and palaeoenvironments	Sedimentary Geology	187	2006	Elsevier	10.1016/j.sedgeo.2005.12.006
55c0d379cf58f16e99a378b9	146	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55bf96d4cf58f16e99a36eea	214	Sedom mention	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5a850dffcf58f13f065e41c5	269	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
558ecdcbe13823109f3ee5af	3759	Salado Formation	251	260.4	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
57474ebdcf58f1b6f0394e11	66	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
5753f377cf58f159e9b156db	91	Prairie Evaporite Formation	385.3	397.5	Stimpson, B. and Chen, Rui	Measurement of rock elastic moduli in tension and in compression and its practical significance	Canadian Geotechnical Journal	30	1993	Canadian Science Publishing	10.1139/t93-028
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
54fb3438e138239936c6d321	1	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5c319a241faed655488b9bcc	129	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
54d4bb37e138238471e7f379	30	Salado Formation	251	260.4	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
57a43018cf58f11204e17fe0	168	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56faac60cf58f15186bf46cd	264	Calcite mention			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
572cf900cf58f13d86a1bdc8	192	Salado Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57a1b61ecf58f1154eb55fb9	18	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55af1c5ce13823763a830fe9	838	Capitan Limestone	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b31289e138231cbdd6cfe3	608	Tapeats Sandstone	488.3	542	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
55b6d6a7e13823bd29ba7dcc	8136	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5a30910ccf58f1715016597b	44	Green River Formation	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
5509217ee138238460c4f689	90	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
558df7d7e13823109f3ee082	605	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56833ddfcf58f1479a0abbcc	175	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
574822d9cf58f13411b192a3	174	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
573090ddcf58f160029e9d90	5	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
55af1c5ce13823763a830fe9	146	Salado Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5a30910ccf58f1715016597b	81	Green River Formation	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
55c35bc5cf58f1a8110b8fcc	193	Carribuddy mention	419.2	458.4	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
577b5e79cf58f13907e5e76d	57	Prairie mention	383.95	389.1	De MILLE, G. et al.	Collapse Structures Related to Evaporites of the Prairie Formation, Saskatchewan	Geol Soc America Bull	75	1964	Geological Society of America	10.1130/0016-7606(1964)75[307:csrteo]2.0.co;2
54b4328ce138239d86855a1e	575	Falces mention			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57320459cf58f19ced0f7bc5	77	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
56c1e5e7cf58f15c72c90847	200	Rome Formation	513	542	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
55a0946ee1382381ff364540	22	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
558fb46ee13823109f3eeb3e	1081	Preuss Sandstone	145.5	199.6	Eddy-Miller, C. A. et al.	Water resources of Lincoln County, Wyoming	Water-Resources Investigations Report		1996	United States Geological Survey	10.3133/wri964246
5ac3dd8fcf58f1bdc2a569af	199	Main Group	251	260.4	Giacalone, Alba et al.	Sequestration of organometallic compounds by natural organic matter. binding of trimethyltin(IV) by fulvic and alginic acids	Applied Organometallic Chemistry	20	2006	Wiley-Blackwell	10.1002/aoc.1128
55986e49e1382390cc640d84	223	R.S.C. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
54fb3438e138239936c6d321	13	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4327fe138239d868537ad	1	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5a048d65cf58f1b96402a09e	231	Black River Group	443.7	488.3	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
568315efcf58f1479a0ab9a9	383	Cairn Formation	359.2	385.3	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
550a2b43e138238460c4fc04	155	Osaka Group	0.01143	1.806	Yamanaka, Masaru et al.	Hydrogeochemical evolution of confined groundwater in northeastern Osaka Basin, Japan: estimation of confined groundwater flux based on a cation exchange mass balance method	Applied Geochemistry	20	2005	Elsevier	10.1016/j.apgeochem.2004.07.004
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b30ea3e138231cbdd6cfcd	1432	Organic mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54e7c15ae138237cc9150ae2	70	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
55c2e5c8cf58f1a8110b8c08	155	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55ae4f4be13823763a830ada	557	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
56c44114cf58f17493f8536e	205	Salado Formation	251	260.4	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
5c319a241faed655488b9bcc	168	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
57c1a08dcf58f16cbd62157f	210	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
572cf900cf58f13d86a1bdc8	189	Maha Sarakham Formation	65.5	145.5	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
58bf2d90cf58f1867eb10946	213	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
572cf1fccf58f13accaa0e61	362	San Andres Formation	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579f1578cf58f1168e64ad7f	340	Dockum Group	199.6	251	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55ae0df7e13823763a830928	1453	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55c35bc5cf58f1a8110b8fcc	141	Boulby mention			Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
54b4328ae138239d86855586	113	Prairie Evaporite mention	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
558df7d7e13823109f3ee082	2327	Salina Formation	416	443.7	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b35463e138231cbdd6d13e	273	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
550901a3e138238460c4f59b	90	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54e733ace138237cc9150889	434	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5a0493edcf58f1b96402aae7	126	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5508d3cde138238460c4f445	54	Sdom mention	-5.5012E-05	23.03	Stiller, Mariana et al.	Cl-37 in the Dead Sea system---preliminary results	Applied Geochemistry	13	1998	Elsevier	10.1016/S0883-2927(98)00017-1
57a43018cf58f11204e17fe0	12	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b3e6a3e138231cbdd6d46d	3863	Muddy Creek Formation	5.332	23.03	Edited by Vine, James David	Lithium resources and requirements by the year 2000	Professional Paper		1976	United States Geological Survey	10.3133/pp1005
58c0712ccf58f14e47a6f092	3	Serpentina Group			Oliveira, Lucilia Aparecida Ramos de et a	Nature and evolution of fluids associated with specularite-bearing Fe and Au-PGE (Jacutinga) mineralization during the Brasiliano orogeny in the eastern São Francisco Craton, Minas Gerais, Brazil	Ore Geology Reviews		2017	Elsevier	10.1016/j.oregeorev.2017.02.017
578b8ab6cf58f1645f54f0c6	50	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1a95dcf58f15c72c903aa	517	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55f49f72cf58f16256a225dc	124	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55c0d379cf58f16e99a378b9	46	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
574f1369cf58f10afd57189e	123	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
572e90c3cf58f10a55fa1b31	370	Prairie Formation	359.2	416	Enrique Casas (2) and Tim K. Lowenstei	Carnallite Mineralization in the Nonmarine, Qaidam Basin, China: Evidence for the Early Diagenetic Origin of Potash Evaporites	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a05-2b26-11d7-8648000102c1865d
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5682ea89cf58f1479a0ab77c	390	Opeche mention	273.01	283.5	NIECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4328ce138239d86855aad	392	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
572cf1fccf58f13accaa0e61	230	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5509217ee138238460c4f689	317	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b8484be13823bd29ba869d	165	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57320459cf58f19ced0f7bc5	133	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	205	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55c0a3c8cf58f16e99a37754	106	Salado mention	256.0278	262.2168	Roedder, Edwin	Fluid inclusion evidence for immiscibility in magmatic differentiation	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90113-W
550895c3e138237a6f7391ae	172	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
5b199d0dcf58f13e9d9dc48e	331	Cobar mention	407.6	427.4	Seccombe, P. K. et al.	Sulfur isotope and fluid inclusion geochemistry of metamorphic Cu–Au vein deposits, central Cobar area, NSW, Australia	Australian Journal of Earth Sciences	64	2017	Informa UK Limited	10.1080/08120099.2017.1297330
5508c83fe138238460c4f3ef	251	Sedom Formation	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
54b4325ae138239d8684ce96	187	Mamfe mention			Eseme, E. et al.	Geochemistry and genesis of brine emanations from Cretaceous strata of the Mamfe Basin, Cameroon	Journal of African Earth Sciences	35	2002	Elsevier	10.1016/S0899-5362(02)00171-9
550901a3e138238460c4f59b	300	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55986e49e1382390cc640d84	337	R.A.T. Formation			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
5509217ee138238460c4f689	274	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
550895c3e138237a6f7391ae	172	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57a43018cf58f11204e17fe0	880	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
58be1b7dcf58f11cebf41535	85	Liposome Formation			Sommerville, Mark L. et al.	Lecithin Microemulsions in Dimethyl Ether and Propane for the Generation of Pharmaceutical Aerosols Containing Polar Solutes	Pharmaceutical Development and Technology	7	2002	Taylor and Francis	10.1081/PDT-120005724
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54e64c66e138237cc91504d3	30	Salado Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
576f2916cf58f12d806616ca	32	Prairie Evaporite Formation	385.3	397.5	Tallin, J. E. et al.	Waste management schemes of potash mines in Saskatchewan	Canadian Journal of Civil Engineering	17	1990	Canadian Science Publishing	10.1139/l90-061
550895c3e138237a6f7391ae	10	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
572cf1fccf58f13accaa0e61	205	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
550ec333e1382369a6f93f25	323	Zechstein mention	251.902	273.01	Stewart, S	Exploring the continental shelf for low geological risk nuclear waste repository sites using petroleum industry databases: a UK case study	Engineering Geology	67	2002	Elsevier	10.1016/S0013-7952(02)00150-3
57126f9fcf58f142fd277238	35	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
5a2b7516cf58f108104211ac	138	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
550901a3e138238460c4f59b	257	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
557bfbc7e138239225f86664	543	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55c2a9cacf58f1a8110b8a1e	134	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c3e6d6c1faed655488cd35a	365	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b6d4bfe13823bd29ba7dc0	891	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55baa3b5e1382373b63b89e7	215	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5732d749cf58f1be482cdc3e	539	Prairie Evaporite Formation	385.3	397.5	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
57611ef6cf58f130993e9b1a	161	Ellicott Creek Breccia Member	419.2	427.4	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5682e3a8cf58f1479a0ab727	353	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
574f1369cf58f10afd57189e	8	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54b4328de138239d86855ceb	275	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
577bca4acf58f1538dda98fd	24	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
56c1ca03cf58f15c72c90620	119	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54b4324ae138239d8684a487	356	Fushun mention	1.806	65.5	Sun, Xiangjun and Wang, Pinxian	How old is the Asian monsoon system?—Palaeobotanical records from China	Palaeogeography, Palaeoclimatology, Palaeoecology	222	2005	Elsevier	10.1016/j.palaeo.2005.03.005
55af1c5ce13823763a830fe9	177	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55c2a9cacf58f1a8110b8a1e	53	Loeme Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55af1c5ce13823763a830fe9	721	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
56830ae3cf58f1479a0ab915	257	Leofnard mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55b6d4bfe13823bd29ba7dc0	475	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b64a4de1382314227d0039	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
550895c3e138237a6f7391ae	396	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55b7c5a4e13823bd29ba8382	324	Salado Formation	251	260.4	Harrington, James Foster et al.	Sources of fertilizer minerals in South America; a preliminary study	Bulletin		1966	United States Geological Survey	10.3133/b1240
54fb03c7e138239936c6d1e1	381	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
574c1c0bcf58f1957a2a36f7	224	Clover Hill Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5a2b7516cf58f108104211ac	417	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
54fb51c0e138239936c6d400	1	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
54e97acfe138237cc915120b	71	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
570fe41dcf58f114a862267f	230	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
5590aba6e13823109f3ef147	218	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
55b8a244e13823bd29ba88e9	850	Green River Formation	33.9	55.8	Mullens, Marjorie C.	Bibliography of the geology of the Green River Formation, Colorado, Utah, and Wyoming, to March 1, 1977	Circular		1977	United States Geological Survey	10.3133/cir754
56bfab1ecf58f15c72c8dd25	213	Sardine mention	2.58	23.03	Cummings, Michael L. et al.	Stratigraphic development and hydrothermal activity in the Central Western Cascade Range, Oregon	Journal of Geophysical Research	95	1990	Wiley-Blackwell	10.1029/JB095iB12p19601

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a2f778acf58f10a775a37f3	72	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55a7c745e13823757cc70251	113	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	345	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5682e272cf58f1479a0ab716	179	Salado Formation	251	260.4	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5683349ccf58f1479a0abb4e	129	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55ae9887e13823763a830cad	91	Rustler Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
574c1c0bcf58f1957a2a36f7	1	Windsor Group	318.1	359.2	Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5b6d3f1ecf58f193bb367046	52	Magneslan Limestone			Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
54b4328fe138239d868563a5	300	Joachim Dolomite	456.8167	462.1334	Rychliński, Tomasz et al.	Unusually well preserved casts of halite crystals: A case from the Upper Frasnian of northern Lithuania	Sedimentary Geology		2014	Elsevier	10.1016/j.sedgeo.2014.05.005
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
5a850dffcf58f13f065e41c5	246	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
578b8ab6cf58f1645f54f0c6	82	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5c2567d81faed655488a6dd8	286	Prairie Formation	359.2	416	Koděra, Peter et al.	Identification of anhydrous CaCl2 and KCaCl3 in natural inclusions by Raman spectroscopy	Chemical Geology	493	2018	Elsevier	10.1016/j.chemgeo.2018.07.017
578179c1cf58f1a7f40f7d0f	38	Parachute Creek Member	33.9	55.8	Lundell, Leslie L. and Surdam, Ronald C.	Playa-lake deposition: Green River Formation, Piceance Creek Basin, Colorado	Geol	3	1975	GSA	10.1130/0091-7613(1975)3<493:pdgrfp>2.0.co;2
5682e272cf58f1479a0ab716	408	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b30ea3e138231cbdd6cfcd	1052	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
572cf900cf58f13d86a1bdc8	154	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5732032ecf58f19cbcbc550f	25	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	37	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
557cbb8ae138239225f8697d	1261	Verde mention	4.1777	8.342	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
579f1578cf58f1168e64ad7f	63	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b2b633e138231cbdd6cdf4	719	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
55986cdae1382390cc640d7c	431	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
5592a4a8e138236ee22180c0	83	Calcite Dolomite			Boyle, R.W. and Jonasson, I.R.	The geochemistry of antimony and its use as an indicator element in geochemical prospecting	Journal of Geochemical Exploration	20	1984	Elsevier	10.1016/0375-6742(84)90071-2
5a850dffcf58f13f065e41c5	65	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5907a1e5cf58f1a696dd7cce	70	Boulby Halite Formation	251	260.4	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57320459cf58f19ced0f7bc5	133	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
55b2cdb4e138231cbdd6ce74	326	UNITS Sandstone			Brown, C. Erwin	Determination of rock properties by borehole-geophysical and physical-testing techniques and ground-water quality and movement in the Durham Triassic basin, North Carolina	Professional Paper		1988	United States Geological Survey	10.3133/pp1432
54b4328ce138239d86855b7a	108	Salina Group	416	443.7	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
5682e3a8cf58f1479a0ab727	373	Salado mention	256.0278	262.2168	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55afeeece138238f9de483c5	402	Green River Formation	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
58b4cba9cf58f1302bcba91f	1	WASTe Group			Hahn, Ramona et al.	Complexation of europium and uranium with natural organic matter (NOM) in highly saline water matrices analysed by ultrafiltration and inductively coupled plasma mass spectrometry (ICP-MS)	Applied Geochemistry		2017	Elsevier	10.1016/j.apgeochem.2017.01.008
55af1c5ce13823763a830fe9	452	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54fb3438e138239936c6d321	62	Zechstein Group	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
5590aba6e13823109f3ef147	13	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
55ae4f4be13823763a830ada	866	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
550ab8aae138238460c4fe5e	313	Macumber mention	323.2	358.9	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
55af1c5ce13823763a830fe9	223	Castile mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
575d04f6cf58f198893b8def	155	Ibura Member			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
572ee8a5cf58f11bb5bc1a43	331	Yates Formation	251	299	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
56c1effacf58f15c72c9090b	425	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
557cd3cfe138239225f869e5	1318	Castile Formation	253.8	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5732032ecf58f19cbcbc550f	197	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
557b1abde138239225f86255	482	Pyrite Formation			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57c19e14cf58f16bf61df64c	224	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
578f2c07cf58f19aabebdf04	95	San Andres mention	150.6	154.8	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
577bca4acf58f1538dda98fd	23	Prairie Evaporite mention	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54bedb19e13823023e43d91d	137	Esterhazy Member			Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
550ab33ee138238460c4fe4c	387	ORE mention			Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	586	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55bf8aa9e138232db707b806	107	Prairie Formation	359.2	416	Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
5a850dffcf58f13f065e41c5	238	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5a850dffcf58f13f065e41c5	1	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
54f9553fe138239936c6c748	111	Sorbas Member			Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55afeeece138238f9de483c5	304	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
558eb5d6e13823109f3ee517	760	Culebra Dolomite	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5a850dffcf58f13f065e41c5	246	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55c01a9ecf58f16e99a37305	316	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5713034ccf58f175a32a0111	92	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
579f1578cf58f1168e64ad7f	143	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c01a9ecf58f16e99a37305	582	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57bee020cf58f13d88794bee	261	Windsor mention	95.2	99.5	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
572cf900cf58f13d86a1bdc8	245	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57a43018cf58f11204e17fe0	541	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55adfa4be13823763a8308b1	44	Paradox Member	299	318.1	Hite, R. J.	A potential target for potash solution mining in Cycle 13, Paradox Member, near Moab, Utah	Open-File Report		1976	United States Geological Survey	10.3133/ofr76755
5734b312cf58f14dbc2c579f	100	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
56c1e5e7cf58f15c72c90847	19	Brunswick mention	0.0117	0.129	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5731ac74cf58f18e0ffaff50	70	Salado mention	256.0278	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
54b4324de138239d8684aa17	293	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5598d566e1382390cc640f84	179	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55917e77e13823109f3ef5e3	456	Panoche Formation	65.5	99.6	Presser, T.S. et al.	Geologic sources, mobilization, and transport of selenium from the California Coast Ranges to the western San Joaquin Valley; a reconnaissance study	Water-Resources Investigations Report		1990	United States Geological Survey	10.3133/wri904070
558bbed5e13823109f3ed4f8	108	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
5d04ec390b45c76caf8eb03c	368	Basicity mention			Pal, Jagannath	Innovative development on agglomeration of iron ore fines and iron oxide wastes	Mineral Processing and Extractive Metallurgy Review			Informa UK Limited	10.1080/08827508.2018.1518222

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579ed180cf58f1030df9c51e	304	Minas Viejas Formation			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
578fb2c8cf58f1bdcd2df236	289	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5733004ccf58f1066ffdaeaa	114	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55989b6ce1382390cc640e7d	88	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
579aae1bcf58f112b1fd775d	62	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5a0493edcf58f1b96402aae7	277	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
550901a3e138238460c4f59b	118	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55bfc14ecf58f16e99a3703b	237	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
578aea2bcf58f13920dc7baa	9	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55b7c404e13823bd29ba8379	688	Green River Formation	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
579f1578cf58f1168e64ad7f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b4324de138239d8684aa17	225	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
574f1369cf58f10afd57189e	199	Prairie Evaporite Formation	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
550ab8aae138238460c4fe5e	342	Windsor Group	318.1	359.2	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
55765c3ce138234790a011e9	58	Salt IV mention			Hofmann, P. et al.	Organic matter of the Mulhouse Basin, France: a synthesis	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90003-T
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
574f1369cf58f10afd57189e	149	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
57a3dceccf58f1b8b5b032b5	264	Castile Formation	253.8	260.4	Kiro, Yael et al.	Environmental implications of salt facies in the Dead Sea	Geological Society of America Bulletin	128	2015	Geological Society of America	10.1130/b31357.1
55f49f72cf58f16256a225dc	128	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
578aea2bcf58f13920dc7baa	114	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5c319a241faed655488b9bcc	129	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
54f9769de138239936c6c7d5	377	Rot Formation	228	245	Závada, P. et al.	Impact of solid second phases on deformation mechanisms of naturally deformed salt rocks (Kuh-e-Namak, Dashti, Iran) and rheological stratification of the Hormuz Salt Formation	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.02.009
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56831341cf58f1479a0ab983	115	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55baa3b5e1382373b63b89e7	401	Louann Fm.	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57126f9fcf58f142fd277238	35	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
579f1578cf58f1168e64ad7f	228	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
56e3575ccf58f16eed4a9ad2	22	Komati Formation			de Ronde, Cornel E. J. and de Wit, Maarte	Tectonic history of the Barberton greenstone belt, South Africa: 490 million years of Archean crustal evolution	Tectonics	13	1994	Wiley-Blackwell	10.1029/94TC00353
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54b4328ce138239d86855aad	309	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54fc8912e138239936c6dc7a	278	Carribuddy Formation	251	542	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
57a43018cf58f11204e17fe0	590	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
578fb2c8cf58f1bdcd2df236	415	Wellington Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
579fd7fccf58f151a1b6ac91	192	Phase Calcite Dolomite			Nield, Joanna M. et al.	Climate-surface-pore-water interactions on a salt crusted playa: implications for crust pattern and surface roughness development measured using terrestrial laser scanning	Earth Surface Processes and Landforms	41	2016	Wiley-Blackwell	10.1002/esp.3860
55c2e5c8cf58f1a8110b8c08	257	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
574f1369cf58f10afd57189e	390	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
557b1abde138239225f86255	134	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	74	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
572cf900cf58f13d86a1bdc8	22	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
558eb5d6e13823109f3ee517	265	Salado mention	256.0278	262.2168	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55ae4f4be13823763a830ada	646	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
558ecdcbe13823109f3ee5af	3759	Salado Formation	251	260.4	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55c2e5c8cf58f1a8110b8c08	154	Salado mention	256.0278	262.2168	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5598fe2be1382390cc641068	228	Tongkuangyu mention			Jiang, Yuhang et al.	Fluid evolution of the Tongkuangyu porphyry copper deposit in the Zhongtiaoshan region: Evidence from fluid inclusions	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.05.018
55b6d4bfe13823bd29ba7dc0	1140	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57611ef6cf58f130993e9b1a	184	Vernon Formation	422.3667	424.1	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
5508c83fe138238460c4f3ef	227	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
55b64a4de1382314227d0039	371	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b5b47ce1382314227cfdae	31	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55a3df0fe13823757cc6f032	224	Parachute Creek Member	33.9	55.8	obson, Stanley G. and Saulnier, George	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8072
579fe160cf58f15528a4466f	98	Marker Bed			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
578fb2c8cf58f1bdcd2df236	189	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55ae4f4be13823763a830ada	266	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557b1abde138239225f86255	149	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
5503421ae1382326932d7e6d	1342	Muribeca Fm	112	125	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54b4324de138239d8684aa17	312	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5a850dffcf58f13f065e41c5	74	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5682ea89cf58f1479a0ab77c	391	Nippewalla Group	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
54e733ace138237cc9150889	495	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
58d05f41cf58f143d83df312	68	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5d3f58060b45c76cafa2004f	207	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55987595e1382390cc640dae	179	Mértola Formation			Moura, António	Metallogenesis at the Neves Corvo VHMS deposit (Portugal): A contribution from the study of fluid inclusions	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.04.004
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
56c1d5f9cf58f15c72c90717	25	Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
558eb5d6e13823109f3ee517	761	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55c36968cf58f1a8110b9014	84	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
5503421ae1382326932d7e6d	1438	Winnipegosis Formation	385.3	397.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
579aae1bcf58f112b1fd775d	46	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55baa3b5e1382373b63b89e7	413	Louann Formation	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
579f1578cf58f1168e64ad7f	323	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b2b633e138231cbdd6cdf4	666	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
5509217ee138238460c4f689	372	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5732032ecf58f19cbcbc550f	10	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5c3e6d6c1faed655488cd35a	137	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5509217ee138238460c4f689	294	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5a2b7516cf58f108104211ac	5	UXG mention			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
557cd3cfe138239225f869e5	3300	Dakota mention	98.85	119.3	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
574f1369cf58f10afd57189e	199	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b365b1e138231cbdd6d18f	1074	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
57a43018cf58f11204e17fe0	485	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5a850dffcf58f13f065e41c5	275	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	835	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56831341cf58f1479a0ab983	8	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4328ae138239d8685555a	94	Pythagorion Formation			Stamatakis, M.G. et al.	Geochemistry and diagenesis of Miocene lacustrine siliceous sedimentary and pyroclastic rocks, Mytilinii basin, Samos Island, Greece	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90084-5
58bf2d90cf58f1867eb10946	305	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55b7869fe13823bd29ba8231	1796	Supai mention	275.2575	313.75	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579fe160cf58f15528a4466f	93	Marker Bed			Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
57ec17eccf58f1ac335ac1b3	4	Loeme Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
579f1578cf58f1168e64ad7f	147	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b359cce138231cbdd6d15d	1524	Wilkins Peak Member	33.9	55.8	Bradley, W.H.	Geology of Green River Formation and associated Eocene rocks in southwestern Wyoming and adjacent parts of Colorado and Utah	Professional Paper		1964	United States Geological Survey	10.3133/pp496A
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
579b56dacf58f13d24f0d7ef	76	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
58bc5274cf58f11f30c5c827	4	Dongying mention	23.03	33.9	Chen, Yong et al.	UV Raman spectroscopy of hydrocarbon-bearing inclusions in rock salt from the Dongying sag, eastern China	Organic Geochemistry		2016	Elsevier	10.1016/j.orggeochem.2016.08.010
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
55b78281e13823bd29ba8218	2070	Yeso mention	275.2575	286.225	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54bedb19e13823023e43d91d	35	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55c0d379cf58f16e99a378b9	154	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
559d0264e138230816dad63a	684	Sheep Creek Member	323.2	358.9	Nokleberg, W.J. et al.	Metallogeny and major mineral deposits of Alaska	Open-File Report		1988	United States Geological Survey	10.3133/ofr8873
55c2a9cacf58f1a8110b8a1e	186	Loeme Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
57320459cf58f19ced0f7bc5	255	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b5b47ce1382314227cfdae	381	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54b4328de138239d86855ceb	90	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54c060fbe1382389c54c3757	343	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5682e272cf58f1479a0ab716	103	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5c3458ec1faed655488bed8f	794	Prairie Evaporite Formation	385.3	397.5	Stoffers, P. and Kuhn, R.	Red Sea Evaporites: A Petrographic and Geochemical Study	Initial Reports of the Deep Sea Drilling Project	23		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.23.122.1974
55b6d4bfe13823bd29ba7dc0	1002	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56831341cf58f1479a0ab983	382	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b2bc12e138231cbdd6ce12	883	Maha Sarakam Formation	65.5	145.5	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
55c0d379cf58f16e99a378b9	90	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55bfc14ecf58f16e99a3703b	37	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5598d566e1382390cc640f84	180	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5a21053ecf58f18a3170d1ed	231	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58c8a028cf58f18e35de1266	4	Daye Formation	245	251	Zhao, Haijie et al.	Mineral compositions and fluid evolution of the Tonglushan skarn Cu–Fe deposit, SE Hubei, east-central China	International Geology Review	54	2012	Taylor and Francis	10.1080/00206814.2011.569418
57a43018cf58f11204e17fe0	471	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
575d04f6cf58f198893b8def	136	Maha Sarakham Formation	65.5	145.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
58bc5274cf58f11f30c5c827	69	Dongying mention	23.03	33.9	Chen, Yong et al.	UV Raman spectroscopy of hydrocarbon-bearing inclusions in rock salt from the Dongying sag, eastern China	Organic Geochemistry		2016	Elsevier	10.1016/j.orggeochem.2016.08.010
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	1202	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56830ae3cf58f1479a0ab915	253	Whitkow mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
574f1369cf58f10afd57189e	283	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54be1b30e138233c8bc4f9d7	302	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4328ae138239d86855586	106	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
558eb5d6e13823109f3ee517	762	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5d04ec390b45c76caf8eb03c	368	Basicity mention			Pal, Jagannath	Innovative development on agglomeration of iron ore fines and iron oxide wastes	Mineral Processing and Extractive Metallurgy Review			Informa UK Limited	10.1080/08827508.2018.1518222
55b6d4bfe13823bd29ba7dc0	453	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5682e272cf58f1479a0ab716	351	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b3d511e138231cbdd6d40e	228	Weber Sandstone	270.6	299	Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
557bfbc7e138239225f86664	697	Praire Evaporite Formation	385.3	397.5	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
5732032ecf58f19cbcbc550f	58	Salado mention	256.0278	262.2168	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
558eb5d6e13823109f3ee517	769	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5733004ccf58f1066ffdaeaa	249	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
578fb2c8cf58f1bdcd2df236	359	Seven Rivers Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55afeeece138238f9de483c5	14	Peak Member			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
5d3f58060b45c76cafa2004f	172	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54d899b7e138238471e803b7	75	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54e76d92e138237cc915098c	116	Furnace Creek Formation	1.806	5.332	Böhlke, J.K. et al.	Stable isotope evidence for an atmospheric origin of desert nitrate deposits in northern Chile and southern California, U.S.A.	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00124-6
54b4328ae138239d86855586	101	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
55ae4f4be13823763a830ada	431	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	158	Supai Formation	251	299	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4328de138239d86855ceb	275	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b5b47ce1382314227cfdae	2	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5590d1bfe13823109f3ef23b	192	Salado Formation	251	260.4	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
577bca4acf58f1538dda98fd	272	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
56c1effacf58f15c72c9090b	440	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
57a43018cf58f11204e17fe0	880	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56833ddfcf58f1479a0abbcc	329	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b73032e13823bd29ba8000	86	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55a6f648e13823757cc6fcd7	485	Horse Spring Formation	5.332	23.03	Vine, James David and Dooley, J.R.	Where on Earth is all the lithium?; with a section on uranium isotope studies	Open-File Report		1980	United States Geological Survey	10.3133/ofr801234
5a850dffcf58f13f065e41c5	51	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55b2b633e138231cbdd6cdf4	1692	Green River Formation	33.9	55.8	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
5c2567d81faed655488a6dd8	286	Prairie Formation	359.2	416	Koděra, Peter et al.	Identification of anhydrous CaCl2 and KCaCl3 in natural inclusions by Raman spectroscopy	Chemical Geology	493	2018	Elsevier	10.1016/j.chemgeo.2018.07.017
5713034ccf58f175a32a0111	92	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54b4325be138239d8684d239	112	Andoni Formation			Buch, M.W. and Rose, D.	Mineralogy and geochemistry of the sediments of the Etosha Pan Region in northern Namibia: a reconstruction of the depositional environment	Journal of African Earth Sciences	22	1996	Elsevier	10.1016/0899-5362(96)00020-6
54b43281e138239d86853bfd	102	Prairie Evaporite Formation	385.3	397.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
57c91310cf58f17b7ba8638b	149	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55b7869fe13823bd29ba8231	1277	Castile Formation	253.8	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
579f1578cf58f1168e64ad7f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55185d29e1382394b500db56	514	Zaragoza Gypsum Formation	5.332	23.03	Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
550912cce138238460c4f61b	60	Lucas Formation	385.3	397.5	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
5732032ecf58f19cbcbc550f	197	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5a2d0619cf58f19f7117d37a	53	CdB mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
5c24b1141faed655488a5926	95	Antrim Shale	359.2	385.3	Sheets, Julie M. et al.	Assessing geochemical reactions during CO2 injection into an oil-bearing reef in the Northern Michigan basin	Applied Geochemistry	100	2019	Elsevier	10.1016/j.apgeochem.2018.12.008

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54c060fbe1382389c54c3757	218	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
578fb2c8cf58f1bdcd2df236	193	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55af1c5ce13823763a830fe9	390	Rustler mention	253.9652	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
57c19e2ccf58f16bf61df668	209	MF Fm			Gabellone, T. et al.	Fluid channeling along thrust zones: the Lagonegro case history, southern Apennines, Italy	Geofluids	13	2013	Wiley	10.1111/gfl.12020
5632747ecf58f10c477fea1a	318	Porphyry mention			Smith, M.P. et al.	Hydrothermal fluid evolution and metal transport in the Kiruna District, Sweden: Contrasting metal behaviour in aqueous and aqueous–carbonic brines	Geochimica et Cosmochimica Acta		2013	Elsevier	10.1016/j.gca.2012.10.015
55af1c5ce13823763a830fe9	423	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5c2fd7d01faed655488b6a6c	2	Beitashan Formation	385.3	397.5	Chen, Huayong et al.	Mineralization and ore genesis of the Qiaoxiahala Fe-Cu-(Au) deposit in the northern margin of East Junggar terrane, Central Asian Orogenic Belt: Constraints from fluid inclusions and stable isotopes	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.03.014
5b6d22edcf58f18ba5e73c75	22	Evaporite Bed			Stewart, F. H.	Replacements involving early carnallite in the potassium-bearing evaporites of Yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	31	1956	Mineralogical Society	10.1180/minmag.1956.031.233.02
572cf900cf58f13d86a1bdc8	219	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54b4328ee138239d86855f3a	450	Wieliczka mention			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55c35bc5cf58f1a8110b8fcc	167	Windsor Group	318.1	359.2	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
572cf900cf58f13d86a1bdc8	58	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
572cf900cf58f13d86a1bdc8	212	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5a850dffcf58f13f065e41c5	208	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5a048d65cf58f1b96402a09e	368	Shadow Lake mention	451.595	461.228	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
55c2e5c8cf58f1a8110b8c08	56	Wellington Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5682e272cf58f1479a0ab716	103	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57a43018cf58f11204e17fe0	878	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56831341cf58f1479a0ab983	382	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5509217ee138238460c4f689	310	Tamarisk mention	251.902	273.01	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54d8fa70e138238471e80530	85	Main Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
57ec17eccf58f1ac335ac1b3	393	Bambata mention	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
576043cfcf58f1b7e5721de2	269	Athabasca mention	538.8	1600	Chu, Haixia and Chi, Guoxiang	Thermal profiles inferred from fluid inclusion and illite geothermometry from sandstones of the Athabasca basin: Implications for fluid flow and unconformity-related uranium mineralization	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2015.12.013
578b8ab6cf58f1645f54f0c6	272	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b4327ce138239d86852f70	577	Ezanga Formation			Karner, Garry D. et al.	Tectonic significance of syn-rift sediment packages across the Gabon-Cabinda continental margin	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00040-8

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56b4fb9ecf58f14c238d30ea	212	Hydrohalite Dolomite			Ayllon, F. et al.	Re-equilibration of fluid inclusions in diagenetic-anchizonal rocks of the Cinera-Matallana coal basin (NW Spain)	Geofluids	3	2003	Wiley-Blackwell	10.1046/j.1468-8123.2003.00048.x
55ae4f4be13823763a830ada	880	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5730cdcccf58f16acaf6b5aa	250	Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
57ec17eccf58f1ac335ac1b3	220	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5b6eacbfcf58f13a71cc91a3	29	Magnesian Limestone	251	299	Stewart, F. H.	The petrology of the evaporites of the Eskdale no. 2 boring, east Yorkshire. Part I. The lower evaporite bed	Mineralogical Magazine and Journal of the Mineralogical Society	28	1949	Mineralogical Society	10.1180/minmag.1949.28.206.01
54b4328ee138239d86855f3a	188	Wieliczka mention			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
54b43246e138239d86849919	693	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
54b4328de138239d86855ceb	82	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54b4328de138239d86855ceb	90	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
572cf1fccf58f13accaa0e61	244	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5730cdcccf58f16acaf6b5aa	250	Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
578179c1cf58f1a7f40f7d0f	124	Green River Formation	33.9	55.8	Lundell, Leslie L. and Surdam, Ronald C.	Playa-lake deposition: Green River Formation, Piceance Creek Basin, Colorado	Geol	3	1975	GSA	10.1130/0091-7613(1975)3<493:pdgrfp>2.0.co;2
56831341cf58f1479a0ab983	173	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5682e272cf58f1479a0ab716	546	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4327be138239d86852c99	9	Zechstein mention	251.902	273.01	Cartwright, Joe et al.	Salt dissolution and salt-related deformation of the Forth Approaches Basin, UK North Sea	Marine and Petroleum Geology	18	2001	Elsevier	10.1016/S0264-8172(01)00019-8
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
579f1578cf58f1168e64ad7f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55c0d379cf58f16e99a378b9	261	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5a0493edcf58f1b96402aae7	174	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
57a1b61ecf58f1154eb55fb9	2	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
589ebd9ccf58f101e1d918aa	29	Francis Group	305.425	305.7125	Beyer, Andrea et al.	Bacterial Communities in Marine Salt Evaporate Rocks and Pristine Zechstein Aquifers	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099764
55b64a4de1382314227d0039	20	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b64a4de1382314227d0039	406	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55c2a9cacf58f1a8110b8a1e	72	Loeme mention	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5509217ee138238460c4f689	322	Tamarisk Member	251.902	273.01	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
574f1369cf58f10afd57189e	255	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
54d2216be13823302d02428b	355	Northwich Halite Formation	242	247.2	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
57a43018cf58f11204e17fe0	429	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b6d4bfe13823bd29ba7dc0	965	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54d899b7e138238471e803b7	141	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
54b4328de138239d86855ceb	238	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b31289e138231cbdd6cfe3	694	Verde mention	4.1777	8.342	Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
57a43018cf58f11204e17fe0	541	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54d3bc73e13823811a06902d	137	DISSOLVE Siderite Dolomite			Eckstein, Yoram and Hau, Joseph A.	Modeling the neutralizing processes of acid precipitation in soils and glacial sediments of northern Ohio	Journal of Hydrology	131	1992	Elsevier	10.1016/0022-1694(92)90226-L
578fb2c8cf58f1bdcd2df236	348	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54b43280e138239d86853889	33	Qom Formation	5.332	23.03	himpour-Bonab, H. and Kalantarzadeh,	Origin of secondary potash deposits; a case from Miocene evaporites of NW Central Iran	Journal of Asian Earth Sciences	25	2005	Elsevier	10.1016/j.jseaes.2004.02.004
55c01a9ecf58f16e99a37305	278	Culebra mention	251	299	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
58b6daf1cf58f11f2b0dde84	835	Haselgebirge Formation	245	251	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
558e3094e13823109f3ee1d7	68	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
5503421ae1382326932d7e6d	503	Rodeo Fm			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55a7c745e13823757cc70251	61	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55bf96d4cf58f16e99a36eea	65	Sedom mention	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
5c3e6d6c1faed655488cd35a	76	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
55c48dc6cf58f1a8110b94db	66	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
550995fee138238460c4f997	30	Salado Formation	251	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035
54b4328de138239d86855ceb	108	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
56c1effacf58f15c72c9090b	264	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
58c18a43cf58f1a6ba4ea493	172	Green River Formation	33.9	55.8	Tänavsuu-Milkeviciene, Kati et al.	Depositional Cycles and Sequences In An Organic-Rich Lake Basin: Eocene Green River Formation, Lake Uinta, Colorado and Utah, U.S.A.	Journal of Sedimentary Research	87	2017	Society for Sedimentary Geology	10.2110/jsr.2017.11
5c319a241faed655488b9bcc	129	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43277e138239d86852025	149	Catoche Formation	471.8	488.3	Conliffe, J. et al.	Dolomitization of the lower Ordovician Catoche formation: Implications for hydrocarbon exploration in western Newfoundland	Marine and Petroleum Geology	30	2012	Elsevier	10.1016/j.marpetgeo.2011.10.007
55ae0df7e13823763a830928	1363	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5682e272cf58f1479a0ab716	501	Queen-Grayburg Formation			HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4327fe138239d868537ad	94	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
57126f9fcf58f142fd277238	35	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
57131acecf58f17d8d881dcb	299	Salina Group	416	443.7	Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
5730cdcccf58f16acaf6b5aa	59	Potash mention			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
557cd3cfe138239225f869e5	1082	Artesia Group	251	260.4	:Kee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54e733ace138237cc9150889	504	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
579f5bc9cf58f12a53c41a24	30	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5682e272cf58f1479a0ab716	546	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
598b38c9cf58f1b504494af2	255	Buritirama Group			De Medeiros Delgado, Inacio et al.	Geology and Mineral Resources of Brazil: A Review	International Geology Review	36	1994	Taylor and Francis	10.1080/00206819409465474
55b6d6a7e13823bd29ba7dcc	8133	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56833ddfcf58f1479a0abbcc	87	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
558bbed5e13823109f3ed4f8	56	Mancos Shale	65.5	145.5	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
5a0493edcf58f1b96402aae7	126	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
558bbed5e13823109f3ed4f8	184	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b6d4bfe13823bd29ba7dc0	266	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5a850dffcf58f13f065e41c5	216	Lisan mention	0.01143	0.126	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
579f1578cf58f1168e64ad7f	275	Forty-niner Member			Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
558eb5d6e13823109f3ee517	259	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
579b56dacf58f13d24f0d7ef	19	Opeche Shale	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
5730cdcccf58f16acaf6b5aa	59	Potash mention			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2fc9b61faed655488b690e	32	Prices Creek Group	458.4	485.4	Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
54b4328ae138239d86855597	148	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
54b4328fe138239d8685629f	216	Loeme Formation	112	125	Bosence, Dan	6 Carbonate-dominated marine rifts	Regional Geology and Tectonics: Phanerozoic Rift Systems and Sedimentary Basins		2012	Elsevier	10.1016/B978-0-444-56356-9.00005-5
58ac5d20cf58f19ef394a23d	31	Prairie Evaporite Formation	385.3	397.5	Border, S. and Sawyer, L.	Evaporites and brines – geological, hydrological and chemical aspects of resource estimation	Applied Earth Science	123	2014	Taylor and Francis	10.1179/1743275814Y.0000000053
54e733ace138237cc9150889	386	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
559d4d6ee138230816dad784	29	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55a6d3f3e13823757cc6fc08	168	Green River Formation	33.9	55.8	Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
55986e49e1382390cc640d84	132	Kamoto mention			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
55f49f72cf58f16256a225dc	32	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
579f1578cf58f1168e64ad7f	392	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5503421ae1382326932d7e6d	782	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5674a234cf58f12215607647	4	Volterra mention			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
55c176c1cf58f1a8110b808a	1882	Navajo Sandstone	145.5	199.6		Goldschmidt Abstracts 2008- B	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.005
54b4324de138239d8684aa17	158	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
550995fee138238460c4f997	66	Castile Formation	253.8	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035
55b6d4bfe13823bd29ba7dc0	53	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5799dd81cf58f19aa930e09e	40	Angarskaya Formation			Brennan, Sean T. et al.	Seawater chemistry and the advent of biocalcification	Geol	32	2004	Geological Society of America	10.1130/g20251.1
55ae4f4be13823763a830ada	289	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
57bedb9ccf58f13bf01999e9	364	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
54b4328ce138239d86855aad	505	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b43288e138239d86854e95	104	Fats mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
5743c295cf58f14fe2e25b0d	26	Carnallite-halite Rock Formation			GONCHARENKO, Olga et al.	Character of Sedimentation in the Potassium-Bearing Basin of the Gremyachinskoye Field (The Volga Monocline)	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_16
57a1b61ecf58f1154eb55fb9	73	Stone Corral Formation	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
5732032ecf58f19cbcbc550f	66	Castile Formation	253.8	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
5509217ee138238460c4f689	365	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5682e272cf58f1479a0ab716	596	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558bbed5e13823109f3ed4f8	175	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5731ac74cf58f18e0ffaff50	70	Salado mention	256.0278	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
56833ddfcf58f1479a0abbcc	455	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54b4324de138239d8684aa17	92	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6d4bfe13823bd29ba7dc0	908	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557b1abde138239225f86255	112	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57a43018cf58f11204e17fe0	46	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5682e272cf58f1479a0ab716	225	Salina Formation	416	443.7	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b64a4de1382314227d0039	25	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55c2e5c8cf58f1a8110b8c08	184	Zechstein Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
558bbd56e13823109f3ed4ef	289	Castile mention	259	259.51	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
57ec1ab3cf58f1acfab96941	182	Zaragoza Gypsum Formation	5.332	23.03	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
5682e272cf58f1479a0ab716	322	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
568315efcf58f1479a0ab9a9	1	Cairn Formation	359.2	385.3	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
54e733ace138237cc9150889	173	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
54b4328ee138239d86855f3a	129	Wieliczka mention			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
579f1578cf58f1168e64ad7f	214	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5598d566e1382390cc640f84	170	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
572cf1fccf58f13accaa0e61	46	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c3e6d6c1faed655488cd35a	294	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
54de0d40e138238a47f96a11	30	Jialingjiang mention	245	251	Zhou, Xun and Li, Cijun	Hydrogeochemistry of deep formation brines in the central Sichuan Basin, China	Journal of Hydrology	138	1992	Elsevier	10.1016/0022-1694(92)90152-L
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54eba4f0e138237cc9151b1e	372	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
57a43018cf58f11204e17fe0	588	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
57c19e14cf58f16bf61df64c	52	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
559d4d6ee138230816dad784	29	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
54b43288e138239d86854e95	104	Fats mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55989b6ce1382390cc640e7d	160	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
56831341cf58f1479a0ab983	175	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
577bca4acf58f1538dda98fd	118	Prairie Evaporite Formation	385.3	397.5	ARDLAW, N. C. and SCHWERDTNER, W.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54b43248e138239d86849e30	39	Zaragoza Formation	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
55986cdae1382390cc640d7c	418	II mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
578aea2bcf58f13920dc7baa	110	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
56c1a95dcf58f15c72c903aa	461	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
574f1369cf58f10afd57189e	255	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b359cce138231cbdd6d15d	1524	Wilkins Peak Member	33.9	55.8	Bradley, W.H.	Geology of Green River Formation and associated Eocene rocks in southwestern Wyoming and adjacent parts of Colorado and Utah	Professional Paper		1964	United States Geological Survey	10.3133/pp496A
56833ddfcf58f1479a0abbcc	233	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
56830ae3cf58f1479a0ab915	514	Prairie mention	383.95	389.1	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
57a43018cf58f11204e17fe0	145	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57d0097ccf58f145d627bfaf	31	Nongbok mention	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
55a0946ee1382381ff364540	118	Salado mention	256.0278	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
54e64c66e138237cc91504d3	7	Salado mention	256.0278	262.2168	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
5c3e6d6c1faed655488cd35a	214	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
550895c3e138237a6f7391ae	182	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55b64a4de138234227d0039	371	Salado mention	256.0278	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5682e272cf58f1479a0ab716	244	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
559c3f39e138230816dad2ff	507	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55986e49e1382390cc640d84	140	B.O.M.Z. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
558bbed5e13823109f3ed4f8	166	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54b43246e138239d86849834	158	Calcite Monohydrocalcite Dolomite			Teller, James T. and Last, Williams M.	Paleohydrological indicators in playas and salt lakes, with examples from Canada, Australia, and Africa	Palaeogeography, Palaeoclimatology, Palaeoecology	76	1990	Elsevier	10.1016/0031-0182(90)90114-M
579aae1bcf58f112b1fd775d	89	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
56c1effacf58f15c72c9090b	434	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
558eb5d6e13823109f3ee517	268	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5c19917d1faed655488915e2	393	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a2bec80cf58f1362cab15c8	366	Mengyejing mention	65.5	99.6	Shen, Lijian et al.	The remaking of the Mengyejing potash deposit in Yunnan, China: Evidence from Rb-Sr isotopic systematics	Ore Geology Reviews	89	2017	Elsevier	10.1016/j.oregeorev.2017.07.025
578fb2c8cf58f1bdcd2df236	55	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54b4327fe138239d868537ad	117	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5682e272cf58f1479a0ab716	325	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c48dc6cf58f1a8110b94db	78	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5d3f58060b45c76cafa2004f	246	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
5c3e6d6c1faed655488cd35a	338	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b4328ce138239d86855aad	334	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55baa3b5e1382373b63b89e7	227	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56a038b2cf58f1079fd4ba21	152	Edwards Limestone	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
54b5345de138239571b90a0d	173	Marcellus Shale	385.3	397.5	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
55b6269be1382314227cff85	1407	Petroleum Clay Formation				List of referees, list of contents, subject index and author index vol. 52, 1988	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90175-5
54cc5427e138236bcc929f92	28	Yeso Formation	251	299	Böhlke, J.K. and Irwin, J.J.	Brine history indicated by argon, krypton, chlorine, bromine, and iodine analyses of fluid inclusions from the Mississippi Valley type lead-fluorite-barite deposits at Hansonburg, New Mexico	Earth and Planetary Science Letters	110	1992	Elsevier	10.1016/0012-821X(92)90038-W
55c01a9ecf58f16e99a37305	581	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5682e3a8cf58f1479a0ab727	414	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55c0d379cf58f16e99a378b9	345	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
56c1b6a3cf58f15c72c904b4	277	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
5c19917d1faed655488915e2	466	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
55a7c745e13823757cc70251	60	Tamarisk mention	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5503421ae1382326932d7e6d	1533	Detroit Group			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55bf8aa9e138232db707b806	174	Esterhazy mention			Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54fb51c0e138239936c6d400	265	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
572cf1fccf58f13accaa0e61	324	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57474ebdcf58f1b6f0394e11	100	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54c029e6e1382389c54c35a6	347	Celestite Stronti-anite Calcite Dolomite			Möller, P. et al.	Hydrochemical processes in the lower Jordan valley and in the Dead Sea area	Chemical Geology	239	2007	Elsevier	10.1016/j.chemgeo.2006.12.004
54b4324de138239d8684aa17	94	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5c3e6d6c1faed655488cd35a	242	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
579fe160cf58f15528a4466f	275	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
58bc7562cf58f12d483cfce3	351	Mangang Fm			Wu, Chihua et al.	Mid-Cretaceous desert system in the Simao Basin, southwestern China, and its implications for sea-level change during a greenhouse climate	Palaeogeography, Palaeoclimatology, Palaeoecology		2017	Elsevier	10.1016/j.palaeo.2016.12.048
572cf900cf58f13d86a1bdc8	22	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
576043cfcf58f1b7e5721de2	269	Athabasca mention	538.8	1600	Chu, Haixia and Chi, Guoxiang	Thermal profiles inferred from fluid inclusion and illite geothermometry from sandstones of the Athabasca basin: Implications for fluid flow and unconformity-related uranium mineralization	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2015.12.013
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
55b5b47ce1382314227cfdae	188	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54dc2da6e138238a47f96228	179	Edwards mention	100.5	103.625	nd, Lynton S. and Prezbindowski, Dennis	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
577c41d6cf58f188cebdd1fb	277	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
56c1effacf58f15c72c9090b	588	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
579f1578cf58f1168e64ad7f	214	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5a850dffcf58f13f065e41c5	1	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57a43018cf58f11204e17fe0	527	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5c319a241faed655488b9bcc	86	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
558fa710e13823109f3eeaeb	568	Salt Lake mention	2.58	23.03	mpiled and edited by Tooker, Edwin Wil	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
5682e272cf58f1479a0ab716	103	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5509217ee138238460c4f689	90	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b39c73e138231cbdd6d2c1	936	Hermosa mention	298.9	312	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a69d57e13823757cc6fac4	100	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
54d4bb37e138238471e7f379	425	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
5c319a241faed655488b9bcc	29	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55f49f72cf58f16256a225dc	2	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
558eb5d6e13823109f3ee517	1215	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
550901a3e138238460c4f59b	279	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
56c1d9bbcf58f15c72c9075f	259	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558b2c2be13823109f3ed1ee	452	Horse Spring Fm	5.332	23.03	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
578fb2c8cf58f1bdcd2df236	42	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
574f1369cf58f10afd57189e	283	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5a850dffcf58f13f065e41c5	183	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5c31d9191faed655488ba2fb	189	Halite Calcite Dolomite			Stober, I. et al.	Deep hydrothermal fluid-rock interaction: the thermal springs of Da Qaidam, China	Geofluids	16	2016	Wiley	10.1111/gfl.12190
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55ae4f4be13823763a830ada	673	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
572cf900cf58f13d86a1bdc8	154	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57a39568cf58f1a4dc1b1106	41	Paradox Formation	299	318.1	Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
55992c92e1382390cc64115f	471	Galana mention			Alfieris, D. et al.	Shallow submarine epithermal Pb–Zn–Cu–Au–Ag–Te mineralization on western Milos Island, Aegean Volcanic Arc, Greece: Mineralogical, geological and geochemical constraints	Ore Geology Reviews		2013	Elsevier	10.1016/j.oregeorev.2013.01.007
5502c2cae1382326932d7ae8	278	Solfifera Formation			Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55c48dc6cf58f1a8110b94db	164	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b35463e138231cbdd6d13e	2343	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
577c41d6cf58f188cebdd1fb	270	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54b4324de138239d8684aa17	296	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
573133c3cf58f17ae858e28c	242	Supai Formation	251	299	M. A. McCaffrey et al.	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite	SEPM Journal of Sedimentary Research	Vol. 57	1987	Society for Sedimentary Geology	10.1306/212f8cab-2b24-11d7-8648000102c1865d
56c1a95dcf58f15c72c903aa	461	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55986cdae1382390cc640d7c	377	Tinggong mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
55ae0df7e13823763a830928	423	Abo Formation	270.6	280	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5733004ccf58f1066ffdaeaa	255	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5590aa05e13823109f3ef13c	164	Halite Anhydrite Calcite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57320459cf58f19ced0f7bc5	133	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
57c19e2ccf58f16bf61df668	314	CCS Fm			Gabellone, T. et al.	Fluid channeling along thrust zones: the Lagonegro case history, southern Apennines, Italy	Geofluids	13	2013	Wiley	10.1111/gfl.12020
578fb2c8cf58f1bdcd2df236	289	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54b4328ae138239d86855597	219	Alpine Haselgebirge Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
55c02636cf58f16e99a37363	264	Cherokee Group	306.5	311.7	Wojcik, Krzysztof M. et al.	History of diagenetic fluids in a distant foreland area, Middle and Upper Pennsylvanian, Cherokee basin, Kansas, USA: Fluid inclusion evidence	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90580-0
5682e3a8cf58f1479a0ab727	376	Salado mention	256.0278	262.2168	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55c0d379cf58f16e99a378b9	405	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5682e272cf58f1479a0ab716	319	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5733004ccf58f1066ffdaeaa	125	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54b4328ae138239d86855586	9	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
558b2c2be13823109f3ed1ee	452	Horse Spring Fm	5.332	23.03	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
558ecdcbe13823109f3ee5af	363	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55ae0df7e13823763a830928	1339	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
557f199ce13823bc80ba25a0	854	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55afeeece138238f9de483c5	14	Peak Member			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
55c0d379cf58f16e99a378b9	242	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5508c83fe138238460c4f3ef	224	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
558bbed5e13823109f3ed4f8	136	Paradox mention	306	319.714	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
575c59dacf58f16e37942a6a	69	Parchim Formation			Regenspurg, Simona et al.	Fluid-rock interactions in a geothermal Rotliegend/Permo-Carboniferous reservoir (North German Basin)	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2016.03.010
572cf1fccf58f13accaa0e61	285	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
57c1a06bcf58f16cbd621551	97	Mavqi'im Formation			Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
558bbd56e13823109f3ed4ef	316	Salado mention	256.0278	262.2168	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
5682e272cf58f1479a0ab716	78	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54e733ace138237cc9150889	58	Prairie Formation	359.2	416	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5a2f2335cf58f1a999f75445	10	Australian Shale			Grawunder, Anja et al.	Rare earth elements in Permian salts and brines, Thuringia, Germany	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.09.001
57a43018cf58f11204e17fe0	539	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
572ee8a5cf58f11bb5bc1a43	319	Yaks Formation			Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
578fb2c8cf58f1bdcd2df236	257	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b2c076e138231cbdd6ce2b	1565	Mineral Occurrence Dolomite			Jones, Blair F.	The hydrology and mineralogy of Deep Springs Lake, Inyo County, California	Professional Paper		1965	United States Geological Survey	10.3133/pp502A
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55986cdae1382390cc640d7c	431	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c19e14cf58f16bf61df64c	214	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
559c3f39e138230816dad2ff	488	Tamarisk Member	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
550dedb5e1382369a6f93ba1	94	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
579aae1bcf58f112b1fd775d	89	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
57ec17eccf58f1ac335ac1b3	23	Loeme Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
56ac24facf58f19442534c08	621	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
54b4328ae138239d86855597	148	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
559877c2e1382390cc640dba	250	Sonta Sandstone			El Desouky, Hamdy A. et al.	The sandstone-hosted stratiform copper mineralization at Mwitapile and its relation to the mineralization at Lufukwe, Lufilian foreland, Democratic Republic of Congo	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.09.004
57c1a08dcf58f16cbd62157f	235	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
54e733ace138237cc9150889	386	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
572cf1fccf58f13accaa0e61	8	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
57a43018cf58f11204e17fe0	156	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57516912cf58f129ff61ef40	438	Watering Brook Formation			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
54e7447fe138237cc91508e5	1097	Praire Evaporite Formation	385.3	397.5	Fanlo, Isabel and Ayora, Carlos	The evolution of the Lorraine evaporite basin: implications for the chemical and isotope composition of the Triassic ocean	Chemical Geology	146	1998	Elsevier	10.1016/S0009-2541(98)00007-2
54fb3438e138239936c6d321	326	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
58c8ed8ccf58f1a71217fb6b	193	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55c48dc6cf58f1a8110b94db	51	Windsor mention	95.2	99.5	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57c25740cf58f19f923bf1c2	990	Marcellus Shale	385.3	397.5	Senior, Lisa A. et al.	Baseline assessment of groundwater quality in Wayne County, Pennsylvania, 2014	Scientific Investigations Report		2016	USGS	
55088909e138237a6f73915f	467	Dockum Group	199.6	251	Knauth, L. Paul	Origin and mixing history of brines, Palo Duro Basin, Texas, U.S.A.	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90019-4
558eb5d6e13823109f3ee517	1379	Tamarisk mention	251.902	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55c04787cf58f16e99a3746f	237	Green River mention	34.8525	58.4	ttle, Michele L. and Goldhaber, Martin	Sedimentary sulfur geochemistry of the Paleogene Green River Formation, western USA: Implications for interpreting depositional and diagenetic processes in saline alkaline lakes	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90291-4
55987595e1382390cc640dae	168	Graça mention			Moura, António	Metallogenesis at the Neves Corvo VHMS deposit (Portugal): A contribution from the study of fluid inclusions	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.04.004
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
576043cfcf58f1b7e5721de2	269	Athabasca mention	538.8	1600	Chu, Haixia and Chi, Guoxiang	Thermal profiles inferred from fluid inclusion and illite geothermometry from sandstones of the Athabasca basin: Implications for fluid flow and unconformity-related uranium mineralization	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2015.12.013
54b4324de138239d8684aa17	293	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5783caf0cf58f13fb21dfa1a	482	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
573090ddcf58f160029e9d90	1	Salado Formation	251	260.4	)ennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
54b4328de138239d86855c7b	93	Opeche Shale	251	299	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
55c0d379cf58f16e99a378b9	44	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
54d2216be13823302d02428b	341	Northwich Halite Formation	242	247.2	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
54b4328ee138239d86855ef7	2	Jindong Formation	65.5	99.6	Paik, I.S. and Kim, H.J.	Playa lake and sheetflood deposits of the Upper Cretaceous Jindong Formation, Korea: Occurrences and palaeoenvironments	Sedimentary Geology	187	2006	Elsevier	10.1016/j.sedgeo.2005.12.006
54b4327fe138239d868537ad	1	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5d3f58060b45c76cafa2004f	30	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
54b4324de138239d8684aa17	91	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54fb3438e138239936c6d321	486	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55c02636cf58f16e99a37363	264	Cherokee Group	306.5	311.7	Wojcik, Krzysztof M. et al.	History of diagenetic fluids in a distant foreland area, Middle and Upper Pennsylvanian, Cherokee basin, Kansas, USA: Fluid inclusion evidence	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90580-0
579fc09dcf58f14956099b08	377	Hebes mention			Jackson, M. P. A. et al.	Modeling the collapse of Hebes Chasma, Valles Marineris, Mars	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30307.1
57a43018cf58f11204e17fe0	880	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56830b14cf58f1479a0ab918	560	Yesares Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54c0cf26e1382389c54c3932	267	Norseman mention	37.71	47.8	n, Kathleen Counter and Bowen, Brenda	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
5503421ae1382326932d7e6d	559	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5502c2cae1382326932d7ae8	793	Prairie mention	383.95	389.1	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
56c1ca03cf58f15c72c90620	150	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
57a43018cf58f11204e17fe0	461	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55ae4f4be13823763a830ada	746	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55c03cd3cf58f16e99a37419	40	Zaragoza Gypsum Formation	5.332	23.03	Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K
56833ddfcf58f1479a0abbcc	216	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55af1c5ce13823763a830fe9	147	Castile mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
558bbed5e13823109f3ed4f8	252	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
56c1ca03cf58f15c72c90620	111	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
57a3d5e1cf58f1b6afc43ebc	69	Parachute Creek Member	33.9	55.8	Jagniecki, Elliot A. et al.	Eocene atmospheric CO2from the nahcolite proxy	Geology		2015	Geological Society of America	10.1130/g36886.1
5a3dff46cf58f12be0bde56e	47	Zaragoza Formation	23.03	33.9	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55c48dc6cf58f1a8110b94db	171	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5598d566e1382390cc640f84	121	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1281	Castile Formation	253.8	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43281e138239d86853bfd	127	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55c0d379cf58f16e99a378b9	105	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55185d29e1382394b500db56	40	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
55b6d4bfe13823bd29ba7dc0	554	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557b7e6ae138239225f86458	2163	Parachute Creek Member	33.9	55.8	Geological Survey (U.S.)	Geochemical survey of the western energy regions, 4th annual progress report, July 1977	Open-File Report		1977	United States Geological Survey	10.3133/ofr77872
5682e272cf58f1479a0ab716	501	Queen-Grayburg Formation			HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b6d4bfe13823bd29ba7dc0	1063	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c2e5c8cf58f1a8110b8c08	93	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5c319a241faed655488b9bcc	102	Mengyejing Formation	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
573090ddcf58f160029e9d90	118	Salado Formation	251	260.4	)ennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
55bfc14ecf58f16e99a3703b	376	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
56831341cf58f1479a0ab983	8	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5a2b7516cf58f108104211ac	5	UXG mention			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55afeeece138238f9de483c5	186	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
572ee8a5cf58f11bb5bc1a43	331	Yates Formation	251	299	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
57d0097ccf58f145d627bfaf	91	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
55c0d379cf58f16e99a378b9	166	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5d3f58060b45c76cafa2004f	5	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
56a038b2cf58f1079fd4ba21	98	Edwards Group	99.6	145.5	OWENSTEIN, T. K. and TIMOFEEFF, M. M	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
57c19e14cf58f16bf61df64c	250	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5517bae4e1382394b500d8af	374	Salado Formation	251	260.4	Last, William M.	Salt dissolution features in saline lakes of the northern Great Plains, western Canada	Geomorphology	8	1993	Elsevier	10.1016/0169-555X(93)90027-Y
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
57a43018cf58f11204e17fe0	458	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55ccaaf9cf58f190b49048ab	280	Cobourg Formation	449.75	451.4025	Al, Tom A. et al.	Geochemical evolution and residence time of porewater in low-permeability rocks of the Michigan Basin, Southwest Ontario	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.03.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2e5c8cf58f1a8110b8c08	137	Hutchinson Salt mention	273.01	298.9	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
580e3bc6cf58f172dd1b8676	2	Loeme Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
57a43018cf58f11204e17fe0	827	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
58b65c8fcf58f1b2fdd8b58a	50	Loeme Formation	112	125	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
55c0d379cf58f16e99a378b9	365	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54fb3438e138239936c6d321	1	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55765d83e138234790a011f0	30	Salt IV mention			Keely, B.J. et al.	A molecular stratigraphic approach to palaeoenvironmental assessment and the recognition of changes in source inputs in marls of the Mulhouse Basin (Alsace, France)	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90007-X
56c1a95dcf58f15c72c903aa	174	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c2a9cacf58f1a8110b8a1e	79	Loeme Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5509217ee138238460c4f689	310	Tamarisk mention	251.902	273.01	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b7869fe13823bd29ba8231	1288	Salado Formation	251	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	253	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5749d59dcf58f1b0821791d1	128	Dead Sea mention	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
57a43018cf58f11204e17fe0	811	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b7869fe13823bd29ba8231	1289	Castile Formation	253.8	260.4	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327ce138239d86852e9c	111	Monterey Formation	5.332	23.03	Munz, I.a et al.	The fluid regime during fracturing of the Embla field, Central Trough, North Sea	Marine and Petroleum Geology	15	1998	Elsevier	10.1016/S0264-8172(98)00062-2
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
579f1578cf58f1168e64ad7f	68	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55c0d379cf58f16e99a378b9	189	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b4328ee138239d86855f3a	75	Deleina Formation			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
578fb2c8cf58f1bdcd2df236	401	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
579f1578cf58f1168e64ad7f	382	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5508c83fe138238460c4f3ef	231	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
5c31fc361faed655488ba53a	280	Red Head Rapids Formation	444.15	448.05	Castagner, Ariane et al.	High-temperature alteration and porosity generation in Upper Ordovician microbial reefs, Hudson Bay intracratonic Basin, Arctic Canada	Sedimentary Geology	374	2018	Elsevier	10.1016/j.sedgeo.2018.07.001
54e733ace138237cc9150889	230	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
56833ddfcf58f1479a0abbcc	217	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
58d042d8cf58f13a8ae55cf9	186	Corella/Doherty Formation			Oliver, N. H. S.	Hydrothermal history of the Mary Kathleen Fold Belt, Mt Isa Block, Queensland	Australian Journal of Earth Sciences	42	1995	Taylor and Francis	10.1080/08120099508728201

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	1229	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56aaa9f0cf58f19442532ee1	105	Thebes Formation			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
57126f9fcf58f142fd277238	2	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5c2bea2e1faed655488b221b	199	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
56c1effacf58f15c72c9090b	5	Carribuddy Group	416	443.7	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54b4328de138239d86855ceb	231	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5a0493edcf58f1b96402aae7	644	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5c319a241faed655488b9bcc	137	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
57c1b591cf58f173fefe15b4	196	Catoche Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
5713034ccf58f175a32a0111	76	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
578b8ab6cf58f1645f54f0c6	50	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1a95dcf58f15c72c903aa	35	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
557b6c66e138239225f863ff	8245	See mention			Sanford, Samuel and Stone, Ralph Walte	Useful minerals of the United States	Bulletin		1914	United States Geological Survey	10.3133/b585
55af1c5ce13823763a830fe9	147	Castile mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55a6d3f3e13823757cc6fc08	191	Wilkins Peak Member	33.9	55.8	Wiig, Stephen V. et al.	Trona resources in the Green River basin, southwest Wyoming	Open-File Report		1995	United States Geological Survey	
558ecdcbe13823109f3ee5af	4901	Wilkins Peak Member	33.9	55.8	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
5713034ccf58f175a32a0111	95	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a850dffcf58f13f065e41c5	246	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54fb03c7e138239936c6d1e1	339	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c49460cf58f1a8110b94f1	1	Carlsbad Program Group			Thakur, Punam et al.	Improved thermodynamic model for interaction of EDTA with trivalent actinides and lanthanide to ionic strength of 6.60m	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2013.09.040
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
54e64c66e138237cc91504d3	30	Salado Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
5681b377cf58f1ba274d4854	416	Praire Evaporite Formation	385.3	397.5	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069
54b4328de138239d86855c7b	108	Opeche Shale	251	299	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
5c319a241faed655488b9bcc	110	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55c13d32cf58f1a8110b7eb7	390	Interaction Group				Goldschmidt Abstracts 2009 – T	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.05.016
54bedb19e13823023e43d91d	132	Estedwzy Member			Baadsgaard, H.	Rb-Sr and K-Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
5713034ccf58f175a32a0111	313	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c01a9ecf58f16e99a37305	316	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55933fbae138236ee2218347	24	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
5d3f58060b45c76cafa2004f	280	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
57c19e14cf58f16bf61df64c	304	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
58b6daf1cf58f11f2b0dde84	340	Patience Lake mention			Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
574c1c0bcf58f1957a2a36f7	6	Windsor Group	318.1	359.2	Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5c3e6d6c1faed655488cd35a	391	Larne Halite Member			Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
579fe160cf58f15528a4466f	79	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54fb3438e138239936c6d321	486	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
579f5bc9cf58f12a53c41a24	346	Tripoli Fm	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
574f1369cf58f10afd57189e	149	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b5b47ce1382314227cfdae	88	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
57484ab3cf58f13effae7ac5	192	Mabou Gp	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5a850dffcf58f13f065e41c5	258	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
57c19e14cf58f16bf61df64c	216	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
558fda65e13823109f3eec30	1766	Paradox mention	306	319.714	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b64a4de1382314227d0039	310	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
572cdcd7cf58f132e707a2d9	213	Azougui Formation			Taylor, Cliff D. and Giles, Stuart A.	Mineral potential for sediment-hosted copper deposits in the Islamic Republic of Mauritania (phase V, deliverable 75): Chapter K in Second projet de renforcement institutionnel du secteur minier de la République Islamique de Mauritanie (PRISM-II)	Open-File Report		2015	USGS	
55f49f72cf58f16256a225dc	160	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
578b8ab6cf58f1645f54f0c6	235	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
579f1578cf58f1168e64ad7f	374	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b6d4bfe13823bd29ba7dc0	1002	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55ae0df7e13823763a830928	1339	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos[illegible] et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
584a9819cf58f19999526ff5	4	Microthermometry mention			Desouky, Hamdy El et al.	Novel applications of fluid inclusions and isotope geochemistry in unravelling the genesis of fossil travertine systems	Sedimentology	62	2015	Wiley	10.1111/sed.12137

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf1fccf58f13accaa0e61	44	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5a850dffcf58f13f065e41c5	51	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55c0d379cf58f16e99a378b9	58	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
550ab33ee138238460c4fe4c	302	Oseberg mention	161.2	175.6	Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3
550b6ce8e1382369a6f9311e	186	Cadjebut Formation	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
56830ae3cf58f1479a0ab915	134	Winnipegosis mention	386.45	393.3	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
558df7d7e13823109f3ee082	235	Castile mention	259	259.51	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5a850dffcf58f13f065e41c5	278	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
5c19917d1faed655488915e2	434	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
57320459cf58f19ced0f7bc5	440	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	1347	Salado mention	256.0278	262.2168	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558e3094e13823109f3ee1d7	68	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
54fb3438e138239936c6d321	13	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54fb3438e138239936c6d321	161	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
568315efcf58f1479a0ab9a9	377	Cairn Formation	359.2	385.3	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
55b8484be13823bd29ba869d	78	Paradox Member	299	318.1	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
5a850dffcf58f13f065e41c5	278	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
559871d1e1382390cc640d99	398	Hormoz mention			Talbot, Christopher et al.	Potash in a salt mushroom at Hormoz Island, Hormoz Strait, Iran	Ore Geology Reviews	35	2009	Elsevier	10.1016/j.oregeorev.2008.11.005
54bffee9e1382389c54c3458	219	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
579aae1bcf58f112b1fd775d	19	Salado mention	256.0278	262.2168	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
579f1578cf58f1168e64ad7f	441	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57126f9fcf58f142fd277238	43	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
5c2c0d801faed655488b25e1	132	Gachsaran mention	5.332	23.03	Rabiei, Minou et al.	A methodology for wellbore stability analysis of drilling into presalt formations: A case study from southern Iran	Journal of Petroleum Science and Engineering	167	2018	Elsevier	10.1016/j.petrol.2017.11.023

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55bfc14ecf58f16e99a3703b	189	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
57474ebdcf58f1b6f0394e11	21	Prairie mention	383.95	389.1	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
55986e49e1382390cc640d84	186	Kamoto mention			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
572cf1fccf58f13accaa0e61	59	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b78281e13823bd29ba8218	1941	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5d050f530b45c76caf8eb446	126	Magnesite Dolomite			CANTERFORD, J. H.	Magnesia—An important Industrial Mineral: A Review of Processing Options and Uses	Mineral Processing and Extractive Metallurgy Review	2	1985	Informa UK Limited	10.1080/08827508508952601
57a43018cf58f11204e17fe0	541	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57d0097ccf58f145d627bfaf	91	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5749d59dcf58f1b0821791d1	250	Prairie Evaporite Formation	385.3	397.5	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
54b4328de138239d86855ceb	16	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
578fb2c8cf58f1bdcd2df236	296	San Andres Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
550e9025e1382369a6f93e44	76	Zaragoza mention	23.03	33.9	Guerrero, Jesús et al.	Paleosubsidence and active subsidence due to evaporite dissolution in the Zaragoza area (Huerva River valley, NE Spain): processes, spatial distribution and protection measures for transport routes	Engineering Geology	72	2004	Elsevier	10.1016/j.enggeo.2003.10.002
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
56c1a95dcf58f15c72c903aa	445	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
578fb2c8cf58f1bdcd2df236	276	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5a850dffcf58f13f065e41c5	216	Lisan mention	0.01143	0.126	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55a7c745e13823757cc70251	113	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b32d74e138231cbdd6d072	341	Ely mention	273.01	323.2	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D
5682e272cf58f1479a0ab716	584	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
579f1578cf58f1168e64ad7f	64	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5682e3a8cf58f1479a0ab727	373	Salado mention	256.0278	262.2168	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
56c1a95dcf58f15c72c903aa	378	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
558eb5d6e13823109f3ee517	761	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
57a1b61ecf58f1154eb55fb9	21	Nippewalla Group	251	299	Zambito, J. J. and Benison, K. C.	Extremely high temperatures and paleoclimate trends recorded in Permian ephemeral lake halite	Geology	41	2013	Geological Society of America	10.1130/g34078.1
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5733004ccf58f1066ffdaeaa	77	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
574f1369cf58f10afd57189e	149	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
57c19e14cf58f16bf61df64c	269	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
557bfbc7e138239225f86664	129	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
58c0712ccf58f14e47a6f092	340	Serpentina Group			Oliveira, Lucilia Aparecida Ramos de et a	Nature and evolution of fluids associated with specularite-bearing Fe and Au-PGE (Jacutinga) mineralization during the Brasiliano orogeny in the eastern São Francisco Craton, Minas Gerais, Brazil	Ore Geology Reviews		2017	Elsevier	10.1016/j.oregeorev.2017.02.017
5590c428e13823109f3ef1e1	358	Rustler Formation	251	260.4	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1980	Open-File Report		1982	United States Geological Survey	
5907a8f7cf58f1a944ce7ed3	152	Westerville Limestone	303.7	306	herwood, Mark D. and Williams, Glenn	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
558ec3e3e13823109f3ee570	126	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
56c1ca03cf58f15c72c90620	244	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5682e272cf58f1479a0ab716	226	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54d0272be13823b501cdbc75	49	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
54fab87ce138239936c6cfbb	924	Prairie Evaporite Formation	385.3	397.5	Risacher, François and Fritz, Bertrand	Bromine geochemistry of salar de Uyuni and deeper salt crusts, Central Altiplano, Bolivia	Chemical Geology	3-4	2000	Elsevier	10.1016/S0009-2541(99)00251-X
54b4327de138239d868530d9	65	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
557bfbc7e138239225f86664	543	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54b4328be138239d8685580e	7	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56830ae3cf58f1479a0ab915	256	Prairie Evaporite mention	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
5590aba6e13823109f3ef147	13	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
578f2c07cf58f19aabebdf04	95	San Andres mention	150.6	154.8	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
579f1578cf58f1168e64ad7f	147	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
572ecdb4cf58f1177819e19e	35	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico C	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
57464969cf58f165ff103f08	324	Blomidon Formation	203.6	216.5	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
55bfa1b1cf58f16e99a36f42	233	Rome Formation	513	542	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
55b5b47ce1382314227cfdae	12	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5c3e6d6c1faed655488cd35a	214	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b35463e138231cbdd6d13e	2343	Wilkins Peak Member	33.9	55.8	Bradley, W.H. and Eugster, H.P.	Geochemistry and paleolimnology of the trona deposits and associated authigenic minerals of the Green River Formation of Wyoming	Professional Paper		1969	United States Geological Survey	10.3133/pp496B
5c6237091faed65548958f65	24	Soligorsk Formation	359.2	385.3	Plax, Dmitry P. et al.	A new genus of eurypterid (Chelicerata, Eurypterida) from the Upper Devonian salt deposits of Belarus	Journal of Paleontology	92	2018	Cambridge University Press (CUP)	10.1017/jpa.2018.11
54b5345de138239571b90a0d	199	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
55c0d379cf58f16e99a378b9	7	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54b4328de138239d86855c7b	67	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.902	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5c2ad1181faed655488b08a2	372	Zaragoza Gypsum Formation	5.332	23.03	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
54b4328de138239d86855ceb	275	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b6af78e1382373b63b794d	60	Calcite Dolomite			Smith, George I et al.	Studies of Quaternary saline lakes—III. Mineral, chemical, and isotopic evidence of salt solution and crystallization processes in Owens Lake, California, 1969–1971	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90095-0
5733004ccf58f1066ffdaeaa	167	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
559c3f39e138230816dad2ff	165	Salado Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
54b43288e138239d86854e95	95	Fats Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
56c1a95dcf58f15c72c903aa	389	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d4bfe13823bd29ba7dc0	1194	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c48dc6cf58f1a8110b94db	188	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
56c1a95dcf58f15c72c903aa	389	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
57a43018cf58f11204e17fe0	280	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
578b8ab6cf58f1645f54f0c6	272	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1a95dcf58f15c72c903aa	433	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
578fb2c8cf58f1bdcd2df236	193	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54d899b7e138238471e803b7	130	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55a7c745e13823757cc70251	105	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5682e3a8cf58f1479a0ab727	348	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55c01a9ecf58f16e99a37305	396	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54e733ace138237cc9150889	124	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
54b4328be138239d8685580e	216	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
550912cce138238460c4f61b	64	Berea Sandstone	353.35	362.225	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
5713034ccf58f175a32a0111	79	Carnallite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56c1d9bbcf58f15c72c9075f	262	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5503421ae1382326932d7e6d	933	Rus Fm	33.9	55.8	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
574f1369cf58f10afd57189e	4	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55c00a00cf58f16e99a3727f	672	Praire Evaporite Formation	385.3	397.5	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
54b43281e138239d86853bfd	163	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
57a43018cf58f11204e17fe0	377	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b43280e138239d8685381d	337	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
54b4327ee138239d86853305	103	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
5833ce7ecf58f1110fa956dd	191	Stratigraphic Depth Calcite Dolomite			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
572cf1fccf58f13accaa0e61	8	Red mention	324.4643	324.8857	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b7869fe13823bd29ba8231	1228	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ae138239d86855597	274	San Andres Formation	251	299	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
55ae4f4be13823763a830ada	736	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
55b6d4bfe13823bd29ba7dc0	1223	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c01a9ecf58f16e99a37305	144	Rustler mention	253.9652	256.0278	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54f9553fe138239936c6c748	111	Sorbas Member			Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
57ec17eccf58f1ac335ac1b3	421	Pinda Group	99.6	112	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55997d5ee1382390cc641332	27	Surface Dolomite			Gac, J.Y. et al.	Chemical model for origin and distribution of elements in salts and brines during evaporation of waters. Application to some saline lakes of Tibesti, Chad	Physics and Chemistry of the Earth		1979	Elsevier	10.1016/0079-1946(79)90018-1
57a43018cf58f11204e17fe0	541	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55a7c745e13823757cc70251	66	Tamarisk mention	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5590aba6e13823109f3ef147	160	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
5598d566e1382390cc640f84	191	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
568315efcf58f1479a0ab9a9	306	Grassi Lakes mention			VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
54eba4f0e138237cc9151b1e	55	Bunter Sandstone	245	251	Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579fe160cf58f15528a4466f	171	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55a43da1e13823757cc6f19a	300	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
57c1b591cf58f173fefe15b4	198	Watts Bight Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
54faf2e4e138239936c6d161	303	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
5598d566e1382390cc640f84	121	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b6d4bfe13823bd29ba7dc0	905	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5c319a241faed655488b9bcc	81	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
578fb2c8cf58f1bdcd2df236	264	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
57c91310cf58f17b7ba8638b	116	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5682e272cf58f1479a0ab716	211	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558ecdcbe13823109f3ee5af	4921	Wyoming Bed			U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
58d05105cf58f13f39efd424	236	Belayim Formation	11.608	15.97	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55c01a9ecf58f16e99a37305	496	Salado Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55933be0e138236ee2218336	88	Bunter Sandstone	245	251	Wolfgramm, M and Schmidt Mumm, A	Spatial correlation of fluid inclusion generations: reconstructing fluid flow during basin evolution	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00033-9
5d3f58060b45c76cafa2004f	280	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
559712a9e1382390cc6405c9	2	Slave Point Formation	385.3	397.5	Lonnee, Jeff and Machel, Hans G.	Mixing of halite brines with meteoric water in the Clarke Lake gas field, Canada	Journal of Geochemical Exploration	89	2006	Elsevier	10.1016/j.gexplo.2005.11.055
54b4324de138239d8684aa17	153	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56a69cadcf58f1944252e14d	30	Augusta Victoria Formation			Campos, Eduardo A. et al.	Magmatic Fluid Inclusions from the Zaldivar Deposit, Northern Chile: The Role of Early Metal-bearing Fluids in a Porphyry Copper System	Resource Geology	56	2006	Wiley-Blackwell	10.1111/j.1751-3928.2006.tb00262.x
572cf900cf58f13d86a1bdc8	1	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57d0097ccf58f145d627bfaf	5	Nongbok Formation	65.5	99.6	Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
558c6b00e13823109f3ed87c	2240	Green River mention	34.8525	58.4	robst, Donald Albert and Tucker, Jerry D	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803
54b4328ce138239d86855b7a	124	Niagara Group	416	443.7	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
55b6d4bfe13823bd29ba7dc0	1120	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c36968cf58f1a8110b9014	66	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
54b43277e138239d86851f14	140	Port mention			Azomani, Ebube et al.	Origin of Lower Ordovician dolomites in eastern Laurentia: Controls on porosity and implications from geochemistry	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.10.007
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55c2e5c8cf58f1a8110b8c08	121	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54b4324de138239d8684aa17	153	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55c0d379cf58f16e99a378b9	105	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57a43018cf58f11204e17fe0	353	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e4d444e138237cc914feb2	32	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55989b6ce1382390cc640e7d	160	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
551ddd48e138236e51a99900	17	Prairie Evaporite Formation	385.3	397.5	Hill, D.G.	Multiple log potash assay	Journal of Applied Geophysics	30	1993	Elsevier	10.1016/0926-9851(93)90037-Y
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5682e272cf58f1479a0ab716	97	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558eb5d6e13823109f3ee517	377	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55c35bc5cf58f1a8110b8fcc	95	Sedom Formation	5.332	23.03	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
579fe160cf58f15528a4466f	315	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
578aea2bcf58f13920dc7baa	53	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
57c19e14cf58f16bf61df64c	215	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
572cdf45cf58f133c4f9d591	908	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
56830b14cf58f1479a0ab918	604	Mavqi'im Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54b4328ce138239d86855aff	445	San Andres Formation	251	299	Mees, F	Textural features of Holocene perennial saline lake deposits of the Taoudenni–Agorgott basin, northern Mali	Sedimentary Geology	127	1999	Elsevier	10.1016/S0037-0738(99)00014-7
55c031c0cf58f16e99a373c0	629	Praire Evaporite Formation	385.3	397.5	Ayora, Carlos et al.	X-ray microanalysis of fluid inclusions and its application to the geochemical modeling of evaporite basins	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90444-8
55b7e8d6e13823bd29ba8447	1085	Green River Formation	33.9	55.8	Smith, G.I. and Haines, D.V.	Character and distribution of nonclastic minerals in the Searles Lake evaporite deposit, California	Bulletin		1964	United States Geological Survey	10.3133/b1181P
550e9025e1382369a6f93e44	77	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Paleosubsidence and active subsidence due to evaporite dissolution in the Zaragoza area (Huerva River valley, NE Spain): processes, spatial distribution and protection measures for transport routes	Engineering Geology	72	2004	Elsevier	10.1016/j.enggeo.2003.10.002
579f1578cf58f1168e64ad7f	413	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
572cf1fccf58f13accaa0e61	46	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
557b1abde138239225f86255	477	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
58d03bf3cf58f138516d1200	419	Maha Sarakham mention	33.9	100.5	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
574aba21cf58f133347f7fbe	207	Montmorillonite Calcite Dolomite			Birk, Dieter	Quantitative coal mineralogy of the Sydney Coalfield, Nova Scotia, Canada, by scanning electron microscopy, computerized image analysis, and energy-dispersive X-ray spectrometry	Canadian Journal of Earth Sciences	27	1990	Canadian Science Publishing	10.1139/e90-017
572e931dcf58f10aea246017	353	Shady Dolomite	501	513	Roger J. Barnaby (2) and J. Fred Read	Dolomitization of a Carbonate Platform During Late Burial: Lower to Middle Cambrian Shady Dolomite, Virginia Appalachians	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a3c-2b26-11d7-8648000102c1865d
55986e49e1382390cc640d84	223	R.S.C. Member			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
55b6d4bfe13823bd29ba7dc0	1217	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5732032ecf58f19cbcbc550f	25	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
578b54cdcf58f156f520e154	13	Salina Group	416	443.7	Cercone, Karen Rose	Evaporative sea-level drawdown in the Silurian Michigan basin	Geol	16	1988	GSA	10.1130/0091-7613(1988)016<0387:esldit>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55933fbae138236ee2218347	24	Wieliczka mention			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c0d379cf58f16e99a378b9	7	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
56830285cf58f1479a0ab8a5	23	Bunter Formation	199.6	251	SCHOENHERR, JOHANNES et al.	Halite cementation and carbonate diagenesis of intra-salt reservoirs from the Late Neoproterozoic to Early Cambrian Ara Group (South Oman Salt Basin)	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00986.x
5a850dffcf58f13f065e41c5	209	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54d899b7e138238471e803b7	64	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55b64a4de1382314227d0039	402	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5682e272cf58f1479a0ab716	207	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57c91310cf58f17b7ba8638b	5	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5c2fe60d1faed655488b6b88	410	Beitashan Formation	385.3	397.5	Chen, Huayong et al.	Iron oxide-copper-gold mineralization of the Devonian Laoshankou deposit (Xinjiang, NW China) in the Central Asian Orogenic Belt	Ore Geology Reviews	104	2019	Elsevier	10.1016/j.oregeorev.2018.11.028
5733004ccf58f1066ffdaeaa	239	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55c2e5c8cf58f1a8110b8c08	121	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55f4877fcf58f16256a22522	575	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54fb03c7e138239936c6d1e1	14	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54faf2e4e138239936c6d161	179	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
572cf1fccf58f13accaa0e61	21	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b67d1ae1382373b63b7852	1235	Petroleum Clay Formation				List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
55a0946ee1382381ff364540	142	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b7869fe13823bd29ba8231	576	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58bc5274cf58f11f30c5c827	151	Dongying Formation	23.03	33.9	Chen, Yong et al.	UV Raman spectroscopy of hydrocarbon-bearing inclusions in rock salt from the Dongying sag, eastern China	Organic Geochemistry		2016	Elsevier	10.1016/j.orggeochem.2016.08.010
57a43018cf58f11204e17fe0	582	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b43248e138239d86849e30	307	Zaragoza mention	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
55ad3126e13823763a8303a0	133	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55ccaaf9cf58f190b49048ab	181	Salina Formation	416	443.7	Al, Tom A. et al.	Geochemical evolution and residence time of porewater in low-permeability rocks of the Michigan Basin, Southwest Ontario	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.03.005
57c19e14cf58f16bf61df64c	326	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
578b8ab6cf58f1645f54f0c6	272	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550e9025e1382369a6f93e44	77	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Paleosubsidence and active subsidence due to evaporite dissolution in the Zaragoza area (Huerva River valley, NE Spain): processes, spatial distribution and protection measures for transport routes	Engineering Geology	72	2004	Elsevier	10.1016/j.enggeo.2003.10.002
54c6548ee1382389c54c5052	136	SIJES Monte Verde Member			Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
574c1c0bcf58f1957a2a36f7	50	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
558bbed5e13823109f3ed4f8	131	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54b4328ae138239d86855586	106	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
56c1effacf58f15c72c9090b	425	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
54bedb19e13823023e43d91d	141	Esterhazy mention			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55986e49e1382390cc640d84	186	Kamoto mention			El Desouky, Hamdy A. et al.	Two Cu–Co sulfide phases and contrasting fluid systems in the Katanga Copperbelt, Democratic Republic of Congo	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2009.07.003
570fe41dcf58f114a862267f	48	Platy Dolomite			Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
54b4328fe138239d86856336	273	Basin mention			García-Veigas, Javier and Helvacı, Cahit	Mineralogy and sedimentology of the Miocene Göcenoluk borate deposit, Kırka district, western Anatolia, Turkey	Sedimentary Geology		2013	Elsevier	10.1016/j.sedgeo.2013.03.006
54d4bb37e138238471e7f379	433	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
5682e272cf58f1479a0ab716	485	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55a4caf6e13823757cc6f32d	1255	Pinnacles Formation	5.333	23.03	Diggles, Michael F.	Mineral summaries; U.S. Bureau of Land Management Wilderness Study Areas in California outside the California Desert	Open-File Report		1990	United States Geological Survey	10.3133/ofr9096
558ecdcbe13823109f3ee5af	5025	Wyoming mention			U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55b6d4bfe13823bd29ba7dc0	905	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	68	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b43273e138239d86851516	136	Oaktree Formation			Tyler, Roger and Tyler, Noel	Stratigraphic and structural controls on gold mineralization in the Pilgrim's Rest goldfield, eastern Transvaal, South Africa	Precambrian Research	79	1996	Elsevier	10.1016/0301-9268(95)00092-5
58d05f41cf58f143d83df312	11	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
57c19e14cf58f16bf61df64c	230	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
564da7c8cf58f141b60ca916	314	Hl Thn Gp			Battler, Melissa M. et al.	Mineralogy of saline perennial cold springs on Axel Heiberg Island, Nunavut, Canada and implications for spring deposits on Mars	Icarus	224	2013	Elsevier	10.1016/j.icarus.2012.08.031
557b1abde138239225f86255	156	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
59065e90cf58f130f8d92aa2	175	Diopside Dioptase Dolomite			Kelly, Charles J.	Mineral Identifications	Rocks & Minerals	42	1967	Taylor and Francis	10.1080/00357529.1967.11765257
54fc8912e138239936c6dc7a	161	Castile Formation	253.8	260.4	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
55bf96d4cf58f16e99a36eea	39	Sedom Formation	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5509217ee138238460c4f689	246	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
557bfbc7e138239225f86664	129	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
572cf1fccf58f13accaa0e61	269	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
558eb5d6e13823109f3ee517	770	Culebra mention	251	299	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54fb3438e138239936c6d321	93	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
56831341cf58f1479a0ab983	283	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55ae4f4be13823763a830ada	731	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55b78281e13823bd29ba8218	1944	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
573133c3cf58f17ae858e28c	242	Supai Formation	251	299	M. A. McCaffrey et al.	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite	SEPM Journal of Sedimentary Research	Vol. 57	1987	Society for Sedimentary Geology	10.1306/212f8cab-2b24-11d7-8648000102c1865d
55c2e5c8cf58f1a8110b8c08	167	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5590aba6e13823109f3ef147	9	Honaker Trail Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
55baa3b5e1382373b63b89e7	69	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
573090ddcf58f160029e9d90	1	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
56831341cf58f1479a0ab983	651	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
57c19e14cf58f16bf61df64c	326	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5598d566e1382390cc640f84	232	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5732032ecf58f19cbcbc550f	458	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
559c3f39e138230816dad2ff	789	Rustler mention	253.9652	256.0278	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
550995fee138238460c4f997	30	Salado Formation	251	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035
580b91b8cf58f14ba918ac36	302	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and “Cline” shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
558eb5d6e13823109f3ee517	178	Bell Canyon Formation	260.4	270.6	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b4324de138239d8684aa17	293	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55f2e991cf58f16256a21a0d	256	Calcite mention			Wang, Xiao-Hu et al.	Geological, fluid inclusion and isotopic studies of the Baiyangping Pb–Zn–Cu–Ag polymetallic deposit, Lanping basin, Yunnan province, China	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.08.009
558df7d7e13823109f3ee082	345	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
579f1578cf58f1168e64ad7f	275	Forty-niner Member			Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
558bbed5e13823109f3ed4f8	201	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
56830ae3cf58f1479a0ab915	264	Leofnard mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557b1abde138239225f86255	116	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
54b4327ee138239d86853305	103	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
54b43281e138239d86853bfd	127	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
579aae1bcf58f112b1fd775d	86	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55a69d57e13823757cc6fac4	38	Gypsum Shale			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
5682e272cf58f1479a0ab716	576	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328ae138239d86855586	106	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
55989b6ce1382390cc640e7d	259	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
5749d6cacf58f1b0d4fcbc51	117	Majiagou Formation	443.7	488.3	ZHANG, Jing et al.	Controlling effects of paleo-climate and paleo-ocean on formation of carbonate reservoirs	Petroleum Exploration and Development	41	2014	Elsevier	10.1016/S1876-3804(14)60016-1
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
579aae1bcf58f112b1fd775d	86	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55541d92e138239301770a0e	226	Burns mention	23.03	33.9	West, Michael D. et al.	The geology of Australian Mars analogue sites	Planetary and Space Science	58	2010	Elsevier	10.1016/j.pss.2009.06.012
55b3641de138231cbdd6d189	3249	Pierre Shale	65.5	145.5	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
572cf900cf58f13d86a1bdc8	3	Culebra Dolomite	251	299	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55b7869fe13823bd29ba8231	2857	Nippewalla Group	251	299	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	349	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
57126f9fcf58f142fd277238	18	Salina Formation	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55baa3b5e1382373b63b89e7	4	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55afeeece138238f9de483c5	188	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
5683006acf58f1479a0ab88f	675	Prairie Evaporite Formation	385.3	397.5	KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
5682e272cf58f1479a0ab716	413	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5590d1bfe13823109f3ef23b	1335	Culebra mention	251	299	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
5c2fd6ac1faed655488b69f1	3	Qi'eshan Group	299	359.2	Chen, Huayong et al.	Overprinting mineralization in the Paleozoic Yandong porphyry copper deposit, Eastern Tianshan, NW China—Evidence from geology, fluid inclusions and geochronology	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.04.013
55c02636cf58f16e99a37363	193	Marmaton Group	305.8563	312	Wojcik, Krzysztof M. et al.	History of diagenetic fluids in a distant foreland area, Middle and Upper Pennsylvanian, Cherokee basin, Kansas, USA: Fluid inclusion evidence	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90580-0
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5731ac74cf58f18e0ffaff50	338	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
578fb2c8cf58f1bdcd2df236	289	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c0d379cf58f16e99a378b9	280	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
550995fee138238460c4f997	33	Castile Formation	253.8	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035
57126f9fcf58f142fd277238	185	Salina mention	419.675	429.4	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55b6df25e13823bd29ba7dfe	1618	Verde mention	4.1777	8.342	Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55f49f72cf58f16256a225dc	135	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
580b91b8cf58f14ba918ac36	297	Wolfcamp mention	286.225	298.9	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and “Cline” shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
5733004ccf58f1066ffdaeaa	151	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55ae4f4be13823763a830ada	300	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
56c1ca03cf58f15c72c90620	299	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5682ea89cf58f1479a0ab77c	300	Nippewalla Group	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
55b2b633e138231cbdd6cdf4	1465	Garden Gulch Member	33.9	56	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
55989b6ce1382390cc640e7d	275	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
58d05f09cf58f143d83df2a0	246	Halite Calcite mention			Acworth, R. I. and Timms, W. A.	Evidence for connected water processes through smectite-dominated clays at Breeza, New South Wales	Australian Journal of Earth Sciences	56	2009	Taylor and Francis	10.1080/08120090802541952
578179c1cf58f1a7f40f7d0f	38	Parachute Creek Member	33.9	55.8	Lundell, Leslie L. and Surdam, Ronald C.	Playa-lake deposition: Green River Formation, Piceance Creek Basin, Colorado	Geol	3	1975	GSA	10.1130/0091-7613(1975)3<493:pdgrfp>2.0.co;2
5682e3a8cf58f1479a0ab727	414	Salado Formation	251	260.4	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55b5b47ce1382314227cfdae	25	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55baa3b5e1382373b63b89e7	340	Sedom Fm.	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5682e3a8cf58f1479a0ab727	334	Salado Formation	251	260.4	ENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
58c18a99cf58f1a6ba4ea54d	61	Sedom mention	5.332	23.03	Kiro, Yael et al.	Relationships between lake-level changes and water and salt budgets in the Dead Sea during extreme aridities in the Eastern Mediterranean	Earth and Planetary Science Letters		2017	Elsevier	10.1016/j.epsl.2017.01.043
5733004ccf58f1066ffdaeaa	231	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55986cdae1382390cc640d7c	412	II mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
557bfbc7e138239225f86664	200	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55c2a9cacf58f1a8110b8a1e	164	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b59e5ee1382314227cfd59	943	Salado Formation	251	260.4	Roedder, Edwin	Fluid inclusion analysis—Prologue and epilogue	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90347-N

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43280e138239d86853889	225	Nippe Walla Group			Rahimpour-Bonab, H. and Kalantarzadeh,	Origin of secondary potash deposits; a case from Miocene evaporites of NW Central Iran	Journal of Asian Earth Sciences	25	2005	Elsevier	10.1016/j.jseaes.2004.02.004
57131885cf58f17cb0fd1f40	59	Salina Group	416	443.7	Kovalevich, V. M. et al.	Brine inclusions in halite and the origin of the Middle Devonian Prairie Evaporites of Western Canada; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.228
57320459cf58f19ced0f7bc5	201	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
54be7fc1e13823299564b0b3	169	Salado Formation	251	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55c48dc6cf58f1a8110b94db	169	Windsor mention	95.2	99.5	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55c0d379cf58f16e99a378b9	320	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
5733004ccf58f1066ffdaeaa	229	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5906dd0fcf58f15fea53aef7	198	Goliad Sandstone	2.1519	5.333	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
56833ddfcf58f1479a0abbcc	255	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55f5d3d0cf58f16256a22df9	2	Sedimentary Ore Formation			Kokh, Svetlana N. et al.	Heavy carbon travertine related to methane generation: A case study of the Big Tarkhan cold spring, Kerch Peninsula, Crimea	Sedimentary Geology		2015	Elsevier	10.1016/j.sedgeo.2015.05.005
57a43018cf58f11204e17fe0	886	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
572cf1fccf58f13accaa0e61	79	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b4328fe138239d8685635b	622	Zaragoza mention	23.03	33.9	Gil, H. et al.	Stratigraphic architecture of alluvial–aeolian systems developed on active karst terrains: An Early Pleistocene example from the Ebro Basin (NE Spain)	Sedimentary Geology		2013	Elsevier	10.1016/j.sedgeo.2013.08.009
559d924be138230816dad8a7	59	Hibr Formation			Smith, Cole L.	Brines of Wadi as Sirhan, Kingdom of Saudi Arabia	Open-File Report		1980	United States Geological Survey	10.3133/ofr801261
55bfc14ecf58f16e99a3703b	360	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55c2e5c8cf58f1a8110b8c08	211	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5c3e6d6c1faed655488cd35a	214	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55baa3b5e1382373b63b89e7	94	Halite Dolomite	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c3dfa4cf58f1a8110b91ff	473	Salina Group	416	443.7	Cicero, Andrea D and Lohmann, Kyger C	Sr/Mg variation during rock-water interaction: implications for secular changes in the elemental chemistry of ancient seawater	Geochimica et Cosmochimica Acta	65	2001	Elsevier	10.1016/S0016-7037(00)00594-9
57bedb9ccf58f13bf01999e9	357	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
58b6daf1cf58f11f2b0dde84	208	Prairie Evaporite Formation	385.3	397.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
55b6d4bfe13823bd29ba7dc0	1002	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579fe160cf58f15528a4466f	236	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55986cdae1382390cc640d7c	479	Tinggong mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
55ae0df7e13823763a830928	1357	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
559159cfe13823109f3ef54c	29	Green River Formation	33.9	55.8	Ege, John R. et al.	Site evaluation for U.S. Bureau of Mines experimental oil-shale mine, Piceance Creek basin, Rio Blanco County, Colorado	Open-File Report		1978	United States Geological Survey	10.3133/ofr78390
55b73032e13823bd29ba8000	288	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
54b4324de138239d8684aa17	158	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55c03cd3cf58f16e99a37419	40	Zaragoza Gypsum Formation	5.332	23.03	Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a2f778acf58f10a775a37f3	72	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b7869fe13823bd29ba8231	1984	Verde Formation	5.332	23.03	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578b8ab6cf58f1645f54f0c6	272	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5683006acf58f1479a0ab88f	114	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
55b6d4bfe13823bd29ba7dc0	1487	Summer Group			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579f5bc9cf58f12a53c41a24	304	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
578b8ab6cf58f1645f54f0c6	241	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b6d4bfe13823bd29ba7dc0	908	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	447	Supai mention	275.2575	313.75	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c0d379cf58f16e99a378b9	283	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
579fe160cf58f15528a4466f	158	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
57320459cf58f19ced0f7bc5	401	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
557b7daee1382390b43c774b	1	Kalahari mention	0	100.5	Mees, Florias	Salt mineral distribution patterns in soils of the Otjomongwa pan, Namibia	CATENA	54	2003	Elsevier	10.1016/S0341-8162(03)00135-8
55b6df25e13823bd29ba7dfe	226	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
54b4328de138239d86855ceb	275	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
57c1a08dcf58f16cbd62157f	210	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
54b4327fe138239d868537ad	248	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
58d05f41cf58f143d83df312	11	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
5631a8d9cf58f10c477fe6a8	6	Athabasca mention	538.8	1600	Richard, Antonin et al.	An evaporated seawater origin for the ore-forming brines in unconformity-related uranium deposits (Athabasca Basin, Canada): Cl/Br and δ37Cl analysis of fluid inclusions	Geochimica et Cosmochimica Acta	75	2011	Elsevier	10.1016/j.gca.2011.02.026
5682ea89cf58f1479a0ab77c	497	Salina Formation	416	443.7	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
54fb3438e138239936c6d321	178	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5a2b7516cf58f108104211ac	138	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
54b4328ce138239d86855aad	173	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b4328ce138239d86855aad	308	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56c1d9bbcf58f15c72c9075f	484	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324de138239d8684aa17	312	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5631bc4ccf58f10c477fe717	316	Lowlands mention	0	2.58	Pinti, Daniele L. et al.	Fossil brines preserved in the St-Lawrence Lowlands, Québec, Canada as revealed by their chemistry and noble gas isotopes	Geochimica et Cosmochimica Acta	75	2011	Elsevier	10.1016/j.gca.2011.05.006
559c3f39e138230816dad2ff	165	Salado Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5c3f07fc1faed655488ce067	358	Macigno Sandstones Formation	15.97	23.03	Salvioli Mariani	Seismically enhanced hydrothermal plume advection through the process zone of the Compione extensional Fault, Northern Apennines, Italy	GSA Bulletin		2018	Geological Society of America	10.1130/b32029.1
54b5345de138239571b90a0d	199	Marcellus mention	387.7	391.9	Engelder, Terry et al.	The fate of residual treatment water in gas shale	Journal of Unconventional Oil and Gas Resources		2014	Elsevier	10.1016/j.juogr.2014.03.002
56c1d8a6cf58f15c72c9073f	492	San Andres Formation	251	299	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
558eb5d6e13823109f3ee517	769	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54ddbfdae138238a47f968be	72	Sdom mention	-5.5012E-05	23.03	Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
572cf900cf58f13d86a1bdc8	95	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55986cdae1382390cc640d7c	569	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
55baa3b5e1382373b63b89e7	340	Sedom Fm.	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5733004ccf58f1066ffdaeaa	211	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54e733ace138237cc9150889	328	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55b30ea3e138231cbdd6cfcd	2125	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
558ecdcbe13823109f3ee5af	4901	Wilkins Peak Member	33.9	55.8	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55ae0df7e13823763a830928	3921	Saiado Formation			edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56259ba1cf58f13437de53d5	151	TEM Hematite Dolomite			Kandler, Konrad et al.	Chemical composition and complex refractive index of Saharan Mineral Dust at Izaña, Tenerife (Spain) derived by electron microscopy	Atmospheric Environment	41	2007	Elsevier	10.1016/j.atmosenv.2007.06.047
5518b748e1382394b500dcce	2	Zaragoza mention	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
57126f9fcf58f142fd277238	187	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55c2a9cacf58f1a8110b8a1e	195	Maha Sarakham mention	33.9	100.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54fc8912e138239936c6dc7a	1	Palaeozoic Carribuddy Group			Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
57126f9fcf58f142fd277238	25	Salina mention	419.675	429.4	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5a0493edcf58f1b96402aae7	174	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56833ddfcf58f1479a0abbcc	231	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b359cce138231cbdd6d15d	1524	Wilkins Peak Member	33.9	55.8	Bradley, W.H.	Geology of Green River Formation and associated Eocene rocks in southwestern Wyoming and adjacent parts of Colorado and Utah	Professional Paper		1964	United States Geological Survey	10.3133/pp496A
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54e733ace138237cc9150889	526	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5598d566e1382390cc640f84	132	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b7869fe13823bd29ba8231	1347	Salado mention	256.0278	262.2168	, Walter E. and Johnson, Kenneth Suthe	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c48dc6cf58f1a8110b94db	78	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b73032e13823bd29ba8000	145	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5799dd81cf58f19aa930e09e	40	Angarskaya Formation			Brennan, Sean T. et al.	Seawater chemistry and the advent of biocalcification	Geol	32	2004	Geological Society of America	10.1130/g20251.1
5a2b7516cf58f108104211ac	76	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55bfa1b1cf58f16e99a36f42	242	Salina Group	416	443.7	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
5710ec38cf58f171ccc3e9c8	441	Barcaliente Fm.			Gasparrini, M. et al.	Characterization of Dolomitizing Fluids in the Carboniferous of the Cantabrian Zone (NW Spain): A Fluid-Inclusion Study with Cryo-Raman Spectroscopy	Journal of Sedimentary Research	76	2006	Society for Sedimentary Geology	10.2110/jsr.2006.106
54fb3438e138239936c6d321	329	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
550901a3e138238460c4f59b	54	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55c2a9cacf58f1a8110b8a1e	159	Loeme Formation	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5a048d65cf58f1b96402a09e	252	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55a7c745e13823757cc70251	67	Magenta Dolomite	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
574f1369cf58f10afd57189e	8	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b73032e13823bd29ba8000	205	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5a850dffcf58f13f065e41c5	258	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54cc5427e138236bcc929f92	159	Yeso Formation	251	299	Böhlke, J.K. and Irwin, J.J.	Brine history indicated by argon, krypton, chlorine, bromine, and iodine analyses of fluid inclusions from the Mississippi Valley type lead-fluorite-barite deposits at Hansonburg, New Mexico	Earth and Planetary Science Letters	110	1992	Elsevier	10.1016/0012-821X(92)90038-W
558b2c2be13823109f3ed1ee	268	LMIO Sijes Fm			Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
55c00a00cf58f16e99a3727f	106	Salado Formation	251	260.4	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
558ecdcbe13823109f3ee5af	4871	Green River mention	34.8525	58.4	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56833ddfcf58f1479a0abbcc	87	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c0d379cf58f16e99a378b9	200	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43281e138239d86853bfd	174	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
5682e272cf58f1479a0ab716	179	Salado Formation	251	260.4	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578b8ab6cf58f1645f54f0c6	117	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55c2a9cacf58f1a8110b8a1e	63	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55c0d379cf58f16e99a378b9	77	Hutchinson Salt Member	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55a7c745e13823757cc70251	142	Tamarisk Member	251.902	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
57a43018cf58f11204e17fe0	582	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55afeeece138238f9de483c5	184	NaCl mention			Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
55b73032e13823bd29ba8000	111	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5d3f58060b45c76cafa2004f	111	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5c3e6d6c1faed655488cd35a	328	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5a2b7516cf58f108104211ac	417	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
54b4327fe138239d868537ad	310	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
57a43018cf58f11204e17fe0	582	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57a43018cf58f11204e17fe0	174	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b43247e138239d86849b52	266	Ipaguazu Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5a0493edcf58f1b96402aae7	89	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54b4327fe138239d868537ad	249	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55f484b0cf58f16256a2250c	258	Angara mention	513	542	Polozov, Alexander G. et al.	The basalt pipes of the Tunguska Basin (Siberia, Russia): High temperature processes and volatile degassing into the end-Permian atmosphere	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.06.035
579f5bc9cf58f12a53c41a24	265	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b43280e138239d8685381d	232	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
54b4328ce138239d86855aad	12	Middle Member			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56830285cf58f1479a0ab8a5	473	Bunter Sandstone	245	251	SCHOENHERR, JOHANNES et al.	Halite cementation and carbonate diagenesis of intra-salt reservoirs from the Late Neoproterozoic to Early Cambrian Ara Group (South Oman Salt Basin)	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00986.x
54b43250e138239d8684b46c	152	Khorat mention	33.9	237	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55b32d74e138231cbdd6d072	548	Ely mention	273.01	323.2	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4327fe138239d868537ad	117	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5682e272cf58f1479a0ab716	546	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57ec2c0ccf58f1b2e49c880d	851	Green River Formation	33.9	55.8	UU-MILKEVICIENE, KATI and FREDERICK	Evolution of an organic-rich lake basin - stratigraphy, climate and tectonics: Piceance Creek basin, Eocene Green River Formation	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2012.01324.x
54faf2e4e138239936c6d161	179	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5d3f58060b45c76cafa2004f	111	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55c0d379cf58f16e99a378b9	274	Wellington mention	279.0034	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55c2a9cacf58f1a8110b8a1e	98	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
563d5ed5cf58f18954974436	515	Chlorite Corundum Diopside Dolomite			Shaw, Brian R. and Simms, Richard	Stratigraphic analysis system: SAS	Computers & Geosciences	3	1977	Elsevier	10.1016/0098-3004(77)90017-6
550901a3e138238460c4f59b	257	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54b4327ee138239d868532b9	322	Calcite Dolomite			Xing, Lina et al.	Groundwater hydrochemical characteristics and processes along flow paths in the North China Plain	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.03.017
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55ae4f4be13823763a830ada	352	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b4328de138239d86855c7b	51	Nippewalla mention	273.01	279.7525	on, Kathleen Counter and Goldstein, Ro	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
56c1a95dcf58f15c72c903aa	476	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56833ddfcf58f1479a0abbcc	169	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
550895c3e138237a6f7391ae	135	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
574f1369cf58f10afd57189e	123	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
578b8ab6cf58f1645f54f0c6	61	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b6d6a7e13823bd29ba7dcc	8139	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57c19e14cf58f16bf61df64c	166	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55b8a244e13823bd29ba88e9	783	Wilkins Peak Member	33.9	55.8	Mullens, Marjorie C.	Bibliography of the geology of the Green River Formation, Colorado, Utah, and Wyoming, to March 1, 1977	Circular		1977	United States Geological Survey	10.3133/cir754
55b3dfb4e138231cbdd6d442	924	Pinnacle Overlook Member	324.734	327.1333	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
5ac3dd8fcf58f1bdc2a569af	163	Main Group	251	260.4	Giacalone, Alba et al.	Sequestration of organometallic compounds by natural organic matter. binding of trimethyltin(IV) by fulvic and alginic acids	Applied Organometallic Chemistry	20	2006	Wiley-Blackwell	10.1002/aoc.1128
55b365b1e138231cbdd6d18f	1217	Wilkins Peak Member	33.9	55.8	Roehler, H. W.	Eocene climates, depositional environments, and geography, greater Green River basin, Wyoming, Utah, and Colorado	Professional Paper		1993	United States Geological Survey	
55afeeece138238f9de483c5	67	Wilkins Peak Member	33.9	55.8	Higley, D. K.	Distribution of bromine in bedded halite in the Green River Formation, southwestern Wyoming	Open-File Report		1983	United States Geological Survey	
56830ae3cf58f1479a0ab915	284	Whitkow mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
558ec3e3e13823109f3ee570	105	Rustler Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b30ea3e138231cbdd6cfcd	2015	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55ad3126e13823763a8303a0	122	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5503421ae1382326932d7e6d	1425	Paradox Fm	299	318.1	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
550901a3e138238460c4f59b	40	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
559877c2e1382390cc640dba	250	Sonta Sandstone			El Desouky, Hamdy A. et al.	The sandstone-hosted stratiform copper mineralization at Mwitapile and its relation to the mineralization at Lufukwe, Lufilian foreland, Democratic Republic of Congo	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.09.004
557cd3cfe138239225f869e5	3229	Opeche Shale	251	299	cKee, Edwin Dinwiddie and Oriel, Steven	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b43249e138239d8684a19a	50	Tripoli Formation	5.332	7.246	Blanc-Valleron, M.-M et al.	Sedimentary, stable isotope and micropaleontological records of paleoceanographic change in the Messinian Tripoli Formation (Sicily, Italy)	Palaeogeography, Palaeoclimatology, Palaeoecology	185	2002	Elsevier	10.1016/S0031-0182(02)00302-4
5713034ccf58f175a32a0111	179	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
574f1369cf58f10afd57189e	123	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
56c1a95dcf58f15c72c903aa	445	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Robi	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55baa3b5e1382373b63b89e7	184	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1ea81cf58f15c72c908aa	385	Blomidon Formation	203.6	216.5	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55c2e5c8cf58f1a8110b8c08	59	Zechstein Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5c319a241faed655488b9bcc	43	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5a0493edcf58f1b96402aae7	89	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c35bc5cf58f1a8110b8fcc	116	Louann mention	145	174.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
55986cdae1382390cc640d7c	418	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
56c1effacf58f15c72c9090b	88	Mudstone Anhydrite Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55b39c73e138231cbdd6d2c1	937	Paradox mention	306	319.714	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
5713034ccf58f175a32a0111	95	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55bfc14ecf58f16e99a3703b	189	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5b6d774dcf58f1a2d3773332	90	Magnesian Limestone	251	299		Alphabetical Index	Mineralogical Magazine and Journal of the Mineralogical Society	32	1961	Mineralogical Society	10.1180/minmag.1961.032.255.08
5683349ccf58f1479a0abb4e	147	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
57c19e14cf58f16bf61df64c	365	Nippewalla Group	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
578fb2c8cf58f1bdcd2df236	311	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54fb03c7e138239936c6d1e1	336	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
579aa26fcf58f10fc4765e10	130	Prairie Formation	359.2	416	Grasby, Stephen E. and Chen, Zhouheng	Subglacial recharge into the Western Canada Sedimentary Basin—Impact of Pleistocene glaciation on basin hydrodynamics	Geol Soc America Bull	117	2005	Geological Society of America	10.1130/b25571.1
55b76f2ae1382373b63b7c6a	851	Ghareb Formation	65.5	70.6		List of contents, author index, subject index and list of referees vol. 48, 1984	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90327-2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a7c745e13823757cc70251	145	Culebra Dolomite	251	299	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1195	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
558eb5d6e13823109f3ee517	1215	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5713034ccf58f175a32a0111	202	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
558eb5d6e13823109f3ee517	430	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55541d92e138239301770a0e	226	Burns mention	23.03	33.9	West, Michael D. et al.	The geology of Australian Mars analogue sites	Planetary and Space Science	58	2010	Elsevier	10.1016/j.pss.2009.06.012
5731ac74cf58f18e0ffaff50	68	Salado mention	256.0278	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
54d899b7e138238471e803b7	64	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
550901a3e138238460c4f59b	257	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55989b6ce1382390cc640e7d	275	Type II mention			Hein, K.A.A. et al.	Linking mineral and fluid inclusion paragenetic studies: The Batman deposit, Mt. Todd (Yimuyn Manjerr) goldfield, Australia	Ore Geology Reviews	28	2006	Elsevier	10.1016/j.oregeorev.2005.05.001
55a82328e13823757cc7049a	1110	Dakota mention	98.85	119.3	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55b3f64ce138231cbdd6d4cb	6879	Green River Formation	33.9	55.8	Geological Survey (U.S.)	Geological Survey research 1971, Chapter B	Professional Paper		1971	United States Geological Survey	
574372e7cf58f13435c1c112	205	Dingyuan Formation			Weiping, Tao	The Minerogenetic Series of Nonmetallic Mineral Deposits of China	Acta Geologica Sinica - English Edition	3	1990	Wiley-Blackwell	10.1111/j.1755-6724.1990.mp3002004.x
55c2a9cacf58f1a8110b8a1e	98	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55b3e6a3e138231cbdd6d46d	3525	River mention			Edited by Vine, James David	Lithium resources and requirements by the year 2000	Professional Paper		1976	United States Geological Survey	10.3133/pp1005
558ec3e3e13823109f3ee570	48	Salado mention	256.0278	262.2168	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1217	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579f1578cf58f1168e64ad7f	147	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
558ecdcbe13823109f3ee5af	4912	Green River Formation	33.9	55.8	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
54fb3438e138239936c6d321	255	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5a2f778acf58f10a775a37f3	71	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
57e65deecf58f186b6da86bd	198	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5682e272cf58f1479a0ab716	81	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54d4bb37e138238471e7f379	2	Salado mention	256.0278	262.2168	auheim, Richard L and Roberts, Randall	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
55997d5ee1382390cc641332	27	Surface Dolomite			Gac, J.Y. et al.	Chemical model for origin and distribution of elements in salts and brines during evaporation of waters. Application to some saline lakes of Tibesti, Chad	Physics and Chemistry of the Earth		1979	Elsevier	10.1016/0079-1946(79)90018-1
5682e3a8cf58f1479a0ab727	378	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
57c19e14cf58f16bf61df64c	269	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54c04652e1382389c54c3686	83	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550901a3e138238460c4f59b	216	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
557cd410e138239225f869e6	367	Kuna Formation	299	359.2	Nokleberg, Warren J. et al.	Significant metalliferous lode deposits and placer districts of Alaska	Bulletin		1987	United States Geological Survey	10.3133/b1786
56c44114cf58f17493f8536e	104	Seven Rivers Formation	251	299	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
5732032ecf58f19cbcbc550f	1	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b89548e1382373b63b813c	55	Monterey Fm	5.332	23.03	Reitsema, Robert H.	Dolomite and nahcolite formation in organic rich sediments: isotopically heavy carbonates	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90202-1
55b6d4bfe13823bd29ba7dc0	72	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54be1b30e138233c8bc4f9d7	71	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54b4327ee138239d86853432	2	Duobaoshan Formation	460.9	471.8	Liu, Jun et al.	Re–Os sulfide (chalcopyrite, pyrite and molybdenite) systematics and fluid inclusion study of the Duobaoshan porphyry Cu (Mo) deposit, Heilongjiang Province, China	Journal of Asian Earth Sciences		2012	Elsevier	10.1016/j.jseaes.2011.10.014
5713ba73cf58f1b3715deb3b	404	San Andres Formation	251	299	Lowenstein, T. K. et al.	An Assessment of Stratigraphic Completeness in Climate-Sensitive Closed-Basin Lake Sediments: Salar de Atacama, Chile	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/061002730091
5502ed7de1382326932d7c2a	1061	Zechstein mention	251.902	273.01	Warren, John	Dolomite: occurrence, evolution and economically important associations	Earth-Science Reviews	1-3	2000	Elsevier	10.1016/S0012-8252(00)00022-2
57a43018cf58f11204e17fe0	537	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
573090ddcf58f160029e9d90	5	Salado Formation	251	260.4	)ennis W. Powers and Bruce W. Hassing	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
56c1ca03cf58f15c72c90620	144	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5c3e6d6c1faed655488cd35a	391	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
56c1d9bbcf58f15c72c9075f	79	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
578b8ab6cf58f1645f54f0c6	161	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56831341cf58f1479a0ab983	491	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55a7c745e13823757cc70251	114	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5682e272cf58f1479a0ab716	310	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5a30910ccf58f1715016597b	363	Green River Formation	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014
55a69d57e13823757cc6fac4	104	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
5a2b7516cf58f108104211ac	417	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
5732032ecf58f19cbcbc550f	13	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b5b47ce1382314227cfdae	68	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54d899b7e138238471e803b7	130	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
572ea708cf58f10f9db0ebad	386	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
578fb2c8cf58f1bdcd2df236	193	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
558bbed5e13823109f3ed4f8	108	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	53	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5c19917c1faed65548891586	720	K-feldspar Calcite Dolomite			The Shipboard Scientific Party	Site 374: Messina Abyssal Plain	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.105.1978
5579c265e138231c7c52c464	346	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54b4324ae138239d8684a487	617	Tonggur Formation			Sun, Xiangjun and Wang, Pinxian	How old is the Asian monsoon system?—Palaeobotanical records from China	Palaeogeography, Palaeoclimatology, Palaeoecology	222	2005	Elsevier	10.1016/j.palaeo.2005.03.005
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
56833ddfcf58f1479a0abbcc	20	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
578fb2c8cf58f1bdcd2df236	410	San Andres Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54b43280e138239d8685381d	232	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
558eb5d6e13823109f3ee517	762	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
579f1578cf58f1168e64ad7f	288	Tamarisk mention	251.902	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5743e12ccf58f15a87556580	117	Douposi Fm			Mianping, ZHENG et al.	Regional Distribution and Prospects of Potash in China	Acta Geologica Sinica - English Edition	85	2011	Wiley-Blackwell	10.1111/j.1755-6724.2011.00376.x
54b4328ce138239d86855b7a	108	Salina Group	416	443.7	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
574c1c0bcf58f1957a2a36f7	50	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
55c031c0cf58f16e99a373c0	629	Praire Evaporite Formation	385.3	397.5	Ayora, Carlos et al.	X-ray microanalysis of fluid inclusions and its application to the geochemical modeling of evaporite basins	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90444-8
55bfc14ecf58f16e99a3703b	122	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
550895c3e138237a6f7391ae	160	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
57309914cf58f1615003f490	87	Paradox mention	306	319.714	Omer B. Raup and Beth M. Madsen	Danburite in Evaporites of the Paradox Basin, Utah	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f88d2-2b24-11d7-8648000102c1865d
58d05105cf58f13f39efd424	196	San Andres Formation	251	299	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55c2e5c8cf58f1a8110b8c08	121	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5a2f778acf58f10a775a37f3	84	Longares Formation			Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
54b4324de138239d8684aa17	182	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5c3e6d6c1faed655488cd35a	131	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
558eb5d6e13823109f3ee517	287	Unnamed Member	359.2	416	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b78281e13823bd29ba8218	1941	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58b7df47cf58f18af629a04c	110	Besalu mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328be138239d86855814	136	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A
5674a234cf58f12215607647	313	Nippewalla Group	251	299	Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c2e5c8cf58f1a8110b8c08	167	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
56c1b6a3cf58f15c72c904b4	277	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
54b4327ee138239d86853305	41	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
57c91310cf58f17b7ba8638b	149	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55b6ecebe1382373b63b7a4e	315	Smackover Formation	145.5	161.2	toessell, Ronald K and Carpenter, Alden	Stoichiometric saturation tests of NaCl1−xBrx and KCl1−xBrx	Geochimica et Cosmochimica Acta	50	1986	Elsevier	10.1016/0016-7037(86)90320-0
572cf1fccf58f13accaa0e61	72	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54e7c15ae138237cc9150ae2	74	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5503421ae1382326932d7e6d	1410	Salado Fm	251	299	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
56c1d9bbcf58f15c72c9075f	80	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5682d639cf58f1479a0ab68d	3	Evaporite mention			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
55b3641de138231cbdd6d189	1568	Morehouse Formation	261.1855	343.5	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
5682ea89cf58f1479a0ab77c	381	Opeche Shale	251	299	IECKI, ELLIOT A. and BENISON, KATHLE	Criteria for the recognition of acid-precipitated halite	Sedimentology	57	2010	Wiley-Blackwell	10.1111/j.1365-3091.2009.01112.x
56833ddfcf58f1479a0abbcc	215	Zechstein mention	251.902	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
572cf1fccf58f13accaa0e61	328	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
555274cce13823930177030c	200	Gravel Sand Basalt Conglomerate			Ori, Gian Gabriele et al.	Martian paleolacustrine environments and their geological constrains on drilling operations for exobiological research	Planetary and Space Science	48	2000	Elsevier	10.1016/S0032-0633(00)00076-3
55c2e5c8cf58f1a8110b8c08	528	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5c3185b21faed655488b9982	12	Jialingjiang Formation	245	251	ZHONG, Jia'ai et al.	The Discovery of Deep Potassium and Lithium Resources in the Huangjinkou Anticline, Northeast of Sichuan	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13615
54be90c7e13823299564b137	459	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
5a2b7516cf58f108104211ac	332	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55c01a9ecf58f16e99a37305	297	Rustler Formation	251	260.4	iegel, Malcolm D. and Anderholm, Scot	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
579fe160cf58f15528a4466f	171	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55a7c745e13823757cc70251	144	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
57e65deecf58f186b6da86bd	158	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5d3f58060b45c76cafa2004f	116	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55baa3b5e1382373b63b89e7	99	Dead Sea mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
54b43288e138239d86854e95	1	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
579fe160cf58f15528a4466f	13	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55986cdae1382390cc640d7c	376	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
54d2216be13823302d02428b	24	SherwoodSandstoneGroup Bold-ManchesterMarl Formation			Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
57c91310cf58f17b7ba8638b	149	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55b6d6a7e13823bd29ba7dcc	8136	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
572cf900cf58f13d86a1bdc8	154	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
557bfbc7e138239225f86664	611	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
578fb2c8cf58f1bdcd2df236	33	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
56c1a95dcf58f15c72c903aa	365	Nippewalla Group	251	299	on, Kathleen Counter and Goldstein, Rob	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b2b633e138231cbdd6cdf4	719	Uinta mention	36.7575	46.15	Taylor, O. James	Oil shale, water resources, and valuable minerals of the Piceance Basin, Colorado; the challenge and choices of development	Professional Paper		1987	United States Geological Survey	10.3133/pp1310
57126f9fcf58f142fd277238	2	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5c3e6d6c1faed655488cd35a	271	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5732032ecf58f19cbcbc550f	218	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55c0d379cf58f16e99a378b9	250	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
578fb2c8cf58f1bdcd2df236	398	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b78281e13823bd29ba8218	1941	Salado mention	256.0278	262.2168	rtsch-Winkler, Susan B. and Donatich, A	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58b6daf1cf58f11f2b0dde84	235	Salado mention	256.0278	262.2168	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
550895c3e138237a6f7391ae	10	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
54b4328de138239d86855ceb	275	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b2c402e138231cbdd6ce3e	202	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5682e3a8cf58f1479a0ab727	309	Salado mention	256.0278	262.2168	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
572cf1fccf58f13accaa0e61	72	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5682e3a8cf58f1479a0ab727	414	Salado Formation	251	260.4	VENSTEIN, TIM K. and HARDIE, LAWREN	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55af1c5ce13823763a830fe9	146	Salado Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5682e272cf58f1479a0ab716	471	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4327fe138239d868537ad	1	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
557f7360e13823bc80ba26f4	1982	Carmel Formation	161.2	175.6	Robson, Stanley G. and Banta, Edward R	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
55a7c745e13823757cc70251	103	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4328fe138239d868563a5	265	Rome Formation	513	542	Rychliński, Tomasz et al.	Unusually well preserved casts of halite crystals: A case from the Upper Frasnian of northern Lithuania	Sedimentary Geology		2014	Elsevier	10.1016/j.sedgeo.2014.05.005
56f2f98bcf58f1892b30205d	146	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ry	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
57c1b591cf58f173fefe15b4	198	Watts Bight Formation	471.8	488.3	CONLIFFE, J. et al.	Fluids associated with hydrothermal dolomitization in St. George Group, western Newfoundland, Canada	Geofluids	10	2010	Wiley	10.1111/j.1468-8123.2010.00295.x
558eb5d6e13823109f3ee517	762	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
57c8716ccf58f1429a42896c	197	TES mention			Glotch, Timothy D. et al.	Constraints on the composition and particle size of chloride salt-bearing deposits on Mars	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004921
54b4328fe138239d868563a5	362	Evaporite Group			Rychliński, Tomasz et al.	Unusually well preserved casts of halite crystals: A case from the Upper Frasnian of northern Lithuania	Sedimentary Geology		2014	Elsevier	10.1016/j.sedgeo.2014.05.005
54d25bffe138235369fe011c	93	Aragonite Bloedite Calcite Dolomite			Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
55b32d74e138231cbdd6d072	548	Ely mention	273.01	323.2	Nash, J. Thomas	Fluid-Inclusion Petrology - Data from Porphyry Copper Deposits and Applications to Exploration	Professional Paper		1976	United States Geological Survey	10.3133/pp907D
559147b8e138236ee2217b0d	44	Rock mention			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
55a7cdbce13823757cc7027b	161	Paradox mention	306	319.714	Roedder, Edwin	Final report on a study of fluid inclusions in core from Gibson Dome No. 1 bore, Paradox Basin, Utah	Open-File Report		1984	United States Geological Survey	
54b4328de138239d86855ceb	81	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b6df25e13823bd29ba7dfe	1618	Verde mention	4.1777	8.342	Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
5508c83fe138238460c4f3ef	180	Sedom mention	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
5d3f58060b45c76cafa2004f	204	Rotliegend mention	251	299	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
577c41d6cf58f188cebdd1fb	84	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
579aae1bcf58f112b1fd775d	33	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
5a850dffcf58f13f065e41c5	243	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
558cdbe6e13823109f3edaf4	4509	Green River Formation	33.9	55.8	compiled by Erickson, Ralph L.	Characteristics of mineral deposit occurrences	Open-File Report		1982	United States Geological Survey	10.3133/ofr82795
54bf8d69e13823023e43de91	60	Salado Formation	251	260.4	Philippe, S. and Haack, U.	Rb-Sr study on langbeinite and other salt minerals from a Zechstein diapir in Northern Germany	Chemical Geology	123	1995	Elsevier	10.1016/0009-2541(95)00054-P
579fe160cf58f15528a4466f	18	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54b4328ce138239d86855aad	442	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5907a1e5cf58f1a696dd7cce	155	Boulby Halite mention	251	260.4	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
5503421ae1382326932d7e6d	782	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57c2e060cf58f104ae4b2f6f	54	Sanhekou Group	359.2	416	Chen, Y.J. et al.	Indosinian tectonics and mineral systems in China: an introduction	Geological Journal	49	2014	Wiley	10.1002/gj.2619

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56b4ebb3cf58f14c238d308e	138	Bedrock Sandstone			Watchman, Alan et al.	Spatial and compositional variations within finely laminated mineral crusts at Carpenter's Gap, an archaeological site in tropical Australia	Geoarchaeology	16	2001	Wiley-Blackwell	10.1002/gea.1021
55ae4f4be13823763a830ada	289	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cbb8ae138239225f8697d	1968	Verde Formation	5.332	23.03	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
55b3d511e138231cbdd6d40e	286	Tabular mention			Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
58cd1a59cf58f1aa1f369152	173	Dibdibah Formation			Grealish, Gerard et al.	Assisting Non-Soil Experts to Identify Soil Types for Land Management to Support Restoration of Arid Rangeland Native Vegetation in Kuwait	Arid Land Research and Management	29	2015	Taylor and Francis	10.1080/15324982.2014.973620
55baa3b5e1382373b63b89e7	227	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b83d31e13823bd29ba865c	6609	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	236	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b75a36e13823bd29ba8116	1867	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
54d0272be13823b501cdbc75	134	Bear Rock mention	391.9	408.4	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
56831341cf58f1479a0ab983	313	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b83d31e13823bd29ba865c	2460	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	5033	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	2036	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ce138239d8684a8ac	233	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
55b83d31e13823bd29ba865c	131	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c302c581faed655488b7345	508	Fengcheng Formation	251	299	Cao, Yingchang et al.	Geochemical characteristics and origin of sodium carbonates in a closed alkaline basin: The Lower Permian Fengcheng Formation in the Mahu Sag, northwestern Junggar Basin, China	Palaeogeography, Palaeoclimatology, Palaeoecology	511	2018	Elsevier	10.1016/j.palaeo.2018.09.015
55b78281e13823bd29ba8218	3351	Bliss mention	477.7	497.85	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
584aa62ccf58f19d6a5f583e	77	Gypsum Formation			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57760111cf58f134d11ea726	802	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
54b4328de138239d86855c34	774	Belayim Formation	11.608	15.97	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b3dfb4e138231cbdd6d442	1733	Ervay mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
55b83d31e13823bd29ba865c	6911	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
550ab33ee138238460c4fe4c	302	Oseberg mention	161.2	175.6	Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3
57bedb9ccf58f13bf01999e9	299	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
54b7e5cfe138230a74d15b25	674	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
54b4324ce138239d8684a8ac	72	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
575c4f4ecf58f16b97cc4df6	1	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54f9553fe138239936c6c748	90	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b7c404e13823bd29ba8379	324	Green River mention	34.8525	58.4	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
55b3e6a3e138231cbdd6d46d	3950	Horse Spring mention	11.63	17.095	Edited by Vine, James David	Lithium resources and requirements by the year 2000	Professional Paper		1976	United States Geological Survey	10.3133/pp1005
579f5bc9cf58f12a53c41a24	42	Tripoli Fm	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1b69acf58f15c72c904b3	199	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
5733004ccf58f1066ffdaeaa	114	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
559e58a2e138230816dadbe2	757	Verde mention	4.1777	8.342	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54b4325ae138239d8684cec7	745	Mt Gp			Tadesse, Solomon et al.	Geology and mineral potential of Ethiopia: a note on geology and mineral map of Ethiopia	Journal of African Earth Sciences	36	2003	Elsevier	10.1016/S0899-5362(03)00048-4
55a7bdc9e13823757cc7020e	1605	Colorado mention	90.825	95.55	Collins, Donley S. et al.	Bibliography for update and revision of U.S.G.S. Bulletin 1114, Minerals of Colorado -- a 100 year record, by Edwin B. Eckel, Part A - Paper copy --Bibliography data file disks	Open-File Report		1989	United States Geological Survey	10.3133/ofr89206A
56831341cf58f1479a0ab983	102	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
559ce2b4e138230816dad59a	533	Rock Type Formation			Glanzman, Richard K. and Meier, Allen L.	Preliminary report on samples collected during lithium reconnaissance studies in Utah and Idaho	Open-File Report		1979	United States Geological Survey	10.3133/ofr79279
56830b14cf58f1479a0ab918	512	Tripoli Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5906cf0dcf58f15ad9553b8a	214	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b83d31e13823bd29ba865c	7734	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	377	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
584aa62ccf58f19d6a5f583e	55	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b6df25e13823bd29ba7dfe	226	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
54d3bc73e13823811a06902d	137	DISSOLVE Siderite Dolomite			Eckstein, Yoram and Hau, Joseph A.	Modeling the neutralizing processes of acid precipitation in soils and glacial sediments of northern Ohio	Journal of Hydrology	131	1992	Elsevier	10.1016/0022-1694(92)90226-L
55baa3b5e1382373b63b89e7	40	Dead Sea mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55f48ec1cf58f16256a22559	416	Burano Formation	237	251	Lugli, Stefano et al.	The deep record of the Messinian salinity crisis: Evidence of a non-desiccated Mediterranean Sea	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.05.017
55b7869fe13823bd29ba8231	2383	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	1620	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	237	Newark mention	192.9	237	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
558cbceae13823109f3eda41	125	Coconino Sandstone	251	299	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
5c3540ea1faed655488c1248	165	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
5506a9ebe1382326932d924e	54	Ze'elim Formation	-5.5012E-05	0.01143	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55b7869fe13823bd29ba8231	3038	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57137c20cf58f19e81b7e3e7	220	Culebra Formation	251	299	RETALLACK, G. J. and KIRBY, M. X.	MIDDLE MIOCENE GLOBAL CHANGE AND PALEOGEOGRAPHY OF PANAMA	PALAIOS	22	2007	Society for Sedimentary Geology	10.2110/palo.2006.p06-130r
58b8f161cf58f13c4631a064	42	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
54b4324de138239d8684aba6	344	Gesso mention			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
55b83d31e13823bd29ba865c	1150	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf3328e13823023e43dbcf	17	Caspe Formation			Birnbaum, Stuart J. and Coleman, Max	Source of sulphur in the Ebro Basin (northern Spain) Tertiary nonmarine evaporite deposits as evidenced by sulphur isotopes	Chemical Geology	25	1979	Elsevier	10.1016/0009-2541(79)90091-3
55b83d31e13823bd29ba865c	6677	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1cb24cf58f15c72c90642	198	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7995	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
579f5bc9cf58f12a53c41a24	134	Facies mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
56b99311cf58f14c238d4bdc	145	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
55831c90e1382390b43c96be	77	Huai Luang mention			Ward, Colin R.	Mineral matter in low-rank coals and associated strata of the Mae Moh basin, northern Thailand	International Journal of Coal Geology	17	1991	Elsevier	10.1016/0166-5162(91)90005-4
54b43247e138239d86849b52	331	El Molino Fm	61.6	70.1938	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54b4327fe138239d868537ad	266	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54b4327fe138239d86853736	191	Basin mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
54b43245e138239d8684952a	173	Antalo Limestone			Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
579f5bc9cf58f12a53c41a24	83	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56ac2964cf58f19442534c5c	199	Bear Rock Formation	359.2	416	Krawczyk, Wiesława Ewa and Ford, Derek C.	Correlating specific conductivity with total hardness in gypsum karst waters	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1409
54b4328ee138239d86855f3a	159	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55b7277de13823bd29ba7fc3	1223	State Bridge mention	247.2	269.2975	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
55b83d31e13823bd29ba865c	3750	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c635bee1382389c54c4fc8	277	Santana Formation	99.6	112	Beurlen, H.	The mineral resources of the Borborema Province in Northeastern Brazil and its sedimentary cover: a review	Journal of South American Earth Sciences	8	1995	Elsevier	10.1016/0895-9811(95)00020-G
55b83d31e13823bd29ba865c	3830	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54f9553fe138239936c6c748	55	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b7869fe13823bd29ba8231	2076	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	495	Blaine Formation	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56c1b69acf58f15c72c904b3	141	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55ae0df7e13823763a830928	2356	Todilto Formation	145.5	199.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55f2d67dcf58f16256a219a7	136	Cameli Formation			Budakoglu, Murat et al.	The rare earth element geochemistry on surface sediments, shallow cores and lithological units of Lake Acıgöl basin, Denizli, Turkey	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.05.016
55b75a36e13823bd29ba8116	2208	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
584aa62ccf58f19d6a5f583e	53	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	3083	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fa710e13823109f3eeaeb	1039	Idaho mention			Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
54b4328de138239d86855dfa	463	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5733f2e2cf58f12e47457e00	33	Madison mention	332.345	358.9	Joyce M. Budai et al.	Burial Dedolomite in the Mississippian Madison Limestone, Wyoming and Utah Thrust Belt	SEPM Journal of Sedimentary Research	Vol. 54	1984	Society for Sedimentary Geology	10.1306/212f83ff-2b24-11d7-8648000102c1865d
550995fee138238460c4f997	30	Salado Formation	251	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035
55b83d31e13823bd29ba865c	3669	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2508	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57613d6fcf58f138292ba937	67	Bozkır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
5a3b865dcf58f103a802eed2	240	Karacaören Formation			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
54e7a556e138237cc9150a6b	305	Floral Formation			Van Stempvoort, Dale R. et al.	Sources and dynamics of sulfur in weathered till, Western Glaciated Plains of North America	Chemical Geology	1-4	1994	Elsevier	10.1016/0009-2541(94)90081-7
5c3185b21faed655488b9982	12	Jialingjiang Formation	245	251	ZHONG, Jia'ai et al.	The Discovery of Deep Potassium and Lithium Resources in the Huangjinkou Anticline, Northeast of Sichuan	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13615
54b7e5cfe138230a74d15b25	264	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
558eebcee13823109f3ee65c	1548	River mention			Stearns, Norah D. et al.	Thermal springs in the United States	Water Supply Paper		1937	United States Geological Survey	10.3133/wsp679B
55b7869fe13823bd29ba8231	622	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5731caeecf58f192f36c5766	233	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
580e3bc6cf58f172dd1b8676	86	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c4044881faed655488cfe1e	560	Fatha Formation	11.608	15.97	Soriano, María Asunción et al.	Some evolutionary patterns of palaeokarst developed in Pleistocene deposits (Ebro Basin, NE Spain): Improving geohazard awareness in present-day karst	Geological Journal			Wiley	10.1002/gj.3181
574822d9cf58f13411b192a3	279	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
58bc3655cf58f1147fed76f7	414	Garedu Formation	145.5	199.6	Azaraien, Hassan et al.	Metallogenesis of the sediment-hosted stratiform Cu deposits of the Ravar Copper Belt (RCB), Central Iran	Ore Geology Reviews	81	2017	Elsevier	10.1016/j.oregeorev.2016.09.035
5579c265e138231c7c52c464	168	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	2323	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	572	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8048	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55f2ced1cf58f16256a21973	182	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
584aa62ccf58f19d6a5f583e	55	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
574372e7cf58f13435c1c112	204	Dingyuan mention			Weiping, Tao	The Minerogenetic Series of Nonmetallic Mineral Deposits of China	Acta Geologica Sinica - English Edition	3	1990	Wiley-Blackwell	10.1111/j.1755-6724.1990.mp3002004.x
558d7897e13823109f3edde2	1425	FORMATION mention			Rogers, G.S.	Helium-bearing natural gas	Professional Paper		1921	United States Geological Survey	10.3133/pp121
558d206fe13823109f3edc62	993	Moenkopi Formation	199.6	251	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
56c44114cf58f17493f8536e	217	Salado Formation	251	260.4	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd3cfe138239225f869e5	1989	Dog Creek Shale	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b83d31e13823bd29ba865c	793	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b72e35e13823bd29ba7ff1	2210	Eed Bed			Weeks, Fred Boughton	Bibliography and index of North American geology, paleontology, petrology, and mineralogy, for the year 1901	Bulletin		1902	United States Geological Survey	10.3133/b203
5ce2f9b20b45c76caf8ae21e	321	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
579f5bc9cf58f12a53c41a24	320	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b7869fe13823bd29ba8231	2352	Maccrady Formation	340.525	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b6d6a7e13823bd29ba7dcc	4707	Socorro mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55a63780e13823757cc6f933	1784	Clay Plagioclase MicroclineCalcite Dolomite			Geological Survey (U.S.)	Geochemical survey of the western energy regions: fifth anual progress report, July 1978	Open-File Report		1978	United States Geological Survey	
57177ecdcf58f1637fb099ed	73	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
5900d92bcf58f169295f6afb	147	Guanzhuang Formation			Tan, H-B. et al.	Fractionation of hydrogen and oxygen isotopes of gypsum hydration water and assessment of its geochemical indications	Australian Journal of Earth Sciences	61	2014	Taylor and Francis	10.1080/08120099.2014.921242
54b4324de138239d8684aa17	284	Serrata Fm			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
557b5a2ae138239225f86399	426	Calcite Dolomite			Sutley, S.J. et al.	Mineralogy and chemistry of oxidized ores from the Upper Silesia Mississippi Valley-type zinc-lead deposits, Poland	Open-File Report		1999	United States Geological Survey	10.3133/ofr99394
5582e346e1382390b43c9589	77	Kimir Formation			Querol, X. et al.	Geological controls on the mineralogy and geochemistry of the Beypazari lignite, central Anatolia, Turkey	International Journal of Coal Geology	33	1997	Elsevier	10.1016/S0166-5162(96)00044-4
58d05105cf58f13f39efd424	588	Belayim Formation	11.608	15.97	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
578cff68cf58f101e2dda387	142	Monongahela Formation	299	318.1	Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
54b4328ce138239d86855b3a	45	Kohat mention	37.2	48.6	Saleemi, Akhtar Ali and Ahmed, Zulfiqar	Mineral and chemical composition of Karak mudstone, Kohat Plateau, Pakistan: implications for smectite-illitization and provenance	Sedimentary Geology	130	2000	Elsevier	10.1016/S0037-0738(99)00113-X
54e9af58e138237cc91512f7	76	Deer Bay Formation	65.5	145.5	Shearman, D.J. and Smith, A.J.	Ikaite, the parent mineral of jarrowite-type pseudomorphs	Proceedings of the Geologists' Association	96	1985	Elsevier	10.1016/S0016-7878(85)80019-5
55b6d6a7e13823bd29ba7dcc	1992	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b7e5cfe138230a74d15b25	674	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
54e865c7e138237cc9150d7f	380	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
54b4328de138239d86855dfa	45	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
54b4328ae138239d8685557f	79	Raisby Formation	251.902	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
54c0c25fe1382389c54c390a	86	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55ae0df7e13823763a830928	3174	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
57177ecdcf58f1637fb099ed	462	Wellington mention	279.0034	282	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
557cdb22e138239225f86a07	3592	Feet mention			Dane, C.H.	Geology of the Salt Valley anticline and adjacent areas, Grand County, Utah	Bulletin		1935	United States Geological Survey	10.3133/b863
54b4328de138239d86855c34	154	Cßayirhan mention			Orţ, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
557d054ce138239225f86ab6	2630	Indiana mention			Smith, George Otis	Thirty-ninth annual report of the Director of the United States Geological Survey	Annual Report		1918	United States Geological Survey	10.3133/ar39

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
574372e7cf58f13435c1c112	204	Dingyuan Formation			Weiping, Tao	The Minerogenetic Series of Nonmetallic Mineral Deposits of China	Acta Geologica Sinica - English Edition	3	1990	Wiley-Blackwell	10.1111/j.1755-6724.1990.mp3002004.x
57a43018cf58f11204e17fe0	279	LAKE MEAD REGION Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b83b40e1382373b63b7fe6	4	Geoscience Group			Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
54f9553fe138239936c6c748	165	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
5b6d936dcf58f1a92c2d33b5	69	Daisy Bed	470	485.4	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
55b83d31e13823bd29ba865c	7438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
56831341cf58f1479a0ab983	45	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
558eb5d6e13823109f3ee517	268	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
55b83d31e13823bd29ba865c	3726	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fda65e13823109f3eec30	1390	Halgaito Shale	294.675	298.9	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
557cd3cfe138239225f869e5	6557	Capitan mention	259.51	273.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5c4005801faed655488cf82c	642	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
55b78281e13823bd29ba8218	2001	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55c04787cf58f16e99a3746f	237	Green River mention	34.8525	58.4	Tuttle, Michele L. and Goldhaber, Martin B.	Sedimentary sulfur geochemistry of the Paleogene Green River Formation, western USA: Implications for interpreting depositional and diagenetic processes in saline alkaline lakes	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90291-4
5579e2a0e138232a625d7143	7050	Magnesite mention			Hewett, D.F. et al.	Mineral resources of the region around Boulder Dam	Bulletin		1936	United States Geological Survey	10.3133/b871
55039ef9e1382326932d8114	528	Gypsum Marlstone Limestone			Knaust, Dirk	The ichnogenus Rhizocorallium: Classification, trace makers, palaeoenvironments and evolution	Earth-Science Reviews		2013	Elsevier	10.1016/j.earscirev.2013.04.007
54b4324ce138239d8684a8ac	240	Claret Conglomerate			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
557cbb8ae138239225f8697d	2899	Verde Formation	5.332	23.03	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
56831341cf58f1479a0ab983	56	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4328ee138239d86856168	58	Tripoli Formation	5.332	7.246	Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
59069dcecf58f1491d1b327e	79	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
558e3447e13823109f3ee1ef	131	Salado Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
59081969cf58f116699a134d	87	Summerville Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
5906dd0fcf58f15fea53aef7	90	Yegua mention	37.71	38.5825	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
557cbb8ae138239225f8697d	1262	Verde mention	4.1777	8.342	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
55b83d31e13823bd29ba865c	1432	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	4532	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54e7c7dae138237cc9150b09	10	Precipice Sandstone	145.5	199.6	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2014.10.028
5597e2c3e1382390cc640a6d	144	Cu mention			García-Lorenzo, M.L. et al.	Trace elements contamination in an abandoned mining site in a semiarid zone	Journal of Geochemical Exploration		2012	Elsevier	10.1016/j.gexplo.2011.07.001
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b2f6c2e138231cbdd6cf45	4298	Morrison Formation	145.5	161.2	Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology, hydrology, and topography; Articles 1-59	Professional Paper		1962	United States Geological Survey	
580e3bc6cf58f172dd1b8676	27	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
558e0a16e13823109f3ee0f8	1743	Gila Conglomerate	2.835	4.0333	Marsh, S.P. and Gough, L.P.	4th International Symposium on Environmental Geochemistry; program with abstracts	Open-File Report		1997	United States Geological Survey	10.3133/ofr97496
55a7c745e13823757cc70251	103	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56946510cf58f1377d598b28	161	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
55b83d31e13823bd29ba865c	6609	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a2b7516cf58f108104211ac	713	Zaragoza Gypsum Formation	5.332	23.03	Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
54b4327fe138239d868537ad	314	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
558b2c2be13823109f3ed1ee	452	Horse Spring Fm	5.332	23.03	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	8158	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58c1de9acf58f1094097ba52	93	Beacon Group	65.5	251	Gibson, G. W.	Geological Investigations in Southern Victoria Land, Antarctica	New Zealand Journal of Geology and Geophysics	5	1962	Taylor and Francis	10.1080/00288306.1962.10420093
54b4328de138239d86855c34	565	Gypsiferous Claystone Member			Orta, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55ae0df7e13823763a830928	1405	Dewey Lake Formation	251.902	253.9652	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55a7c745e13823757cc70251	114	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5712f1aacf58f16fb4cc921a	78	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b6d6a7e13823bd29ba7dcc	4321	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5511d58ee1382394b500bff1	274	Great Group			Boyadgiev, T.G. and Verheye, W.H.	Contribution to a utilitarian classification of gypsiferous soil	Geoderma	74	1996	Elsevier	10.1016/S0016-7061(96)00074-2
580e3bc6cf58f172dd1b8676	56	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b83d31e13823bd29ba865c	5899	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	206	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55f2d67dcf58f16256a219a7	136	Cameli Formation			Budakoglu, Murat et al.	The rare earth element geochemistry on surface sediments, shallow cores and lithological units of Lake Acıgöl basin, Denizli, Turkey	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.05.016
57ec17eccf58f1ac335ac1b3	23	Loeme Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
56e353e7cf58f16de8a2e1bf	385	Minas Viejas Formation			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
54b43290e138239d86856473	41	Windsor Group	318.1	359.2	Vargas-Meleza, Liliana et al.	Exploring the relative contribution of mineralogy and CPO to the seismic velocity anisotropy of evaporites	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2014.11.001
55b83d31e13823bd29ba865c	4004	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
572ee8a5cf58f11bb5bc1a43	273	Yates Formation	251	299	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	572	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	81	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b43246e138239d868499119	693	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b6d6a7e13823bd29ba7dcc	5155	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55d16099cf58f1b3b25e36c3	36	Zaragoza Fm	5.332	23.03	Pueyo Anchuela, Ó. et al.	Three dimensional characterization of complex mantled karst structures. Decision making and engineering solutions applied to a road overlying evaporite rocks in the Ebro Basin (Spain)	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2015.04.022
54b43247e138239d86849b52	186	Cayara Fm	45.6	53.95	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b83d31e13823bd29ba865c	2460	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	193	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
57a43018cf58f11204e17fe0	647	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b83d31e13823bd29ba865c	6809	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4588	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5518b748e1382394b500dcce	59	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
558ec3e3e13823109f3ee570	107	Magenta Dolomite	251.902	273.01	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
58b7df47cf58f18af629a04c	555	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
57c86f1bcf58f141c6f7b1f8	441	Burns Formation	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
5506a9ebe1382326932d924e	321	Samra Fm			Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
57beed05cf58f1419cfbd6b3	188	Honggou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
55b6d6a7e13823bd29ba7dcc	7561	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b7f931e138230a74d15b86	172	Purbeck Shale	145.5	161.2	Milner, Henry B.	The geology of the country around Heathfield, Sussex With report of excursion to heathfield, brightling, netherfield and robertsbridge. Saturday, June 4th, 1921	Proceedings of the Geologists' Association	33	1922	Elsevier	10.1016/S0016-7878(22)80003-1
55f5da87cf58f16256a22e2c	437	Spring Formation			Rossi, Carlos et al.	The Messinian marine to nonmarine gypsums of Jumilla (Northern Betic Cordillera, SE Spain): Isotopic and Sr concentration constraints on the origin of parent brines	Sedimentary Geology		2015	Elsevier	10.1016/j.sedgeo.2015.08.007
54b43288e138239d86854e95	71	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
561c20bfcf58f184cc075c66	212	Quartz Dolomite			Díaz-Hernández, J.L. et al.	Quantitative analysis of mineral phases in atmospheric dust deposited in the south-eastern Iberian Peninsula	Atmospheric Environment	45	2011	Elsevier	10.1016/j.atmosenv.2011.03.024
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54bfef15e1382330560e0801	230	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
54b4324ee138239d8684ae63	4	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
557cd3cfe138239225f869e5	7882	Haystack Gypsum Member	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54f98125e138239936c6c811	114	Brasso Formation	5.332	23.03	Wilson, Brent	A lagoonal interlude with occasional hypersalinity in the deposition of the Early–Middle Miocene Brasso Formation of Trinidad	Journal of South American Earth Sciences	29	2010	Elsevier	10.1016/j.jsames.2009.10.003
55c48dc6cf58f1a8110b94db	191	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b6d6a7e13823bd29ba7dcc	7568	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
550f21dce1382369a6f940aa	443	Zaragoza Gypsum Formation	5.332	23.03	Guinea, Ander et al.	Geoelectrical prospecting of glauberite deposits in the Ebro basin (Spain)	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.03.007

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b2cdb4e138231cbdd6ce74	561	Castile Formation	253.8	260.4	Brown, C. Erwin	Determination of rock properties by borehole-geophysical and physical-testing techniques and ground-water quality and movement in the Durham Triassic basin, North Carolina	Professional Paper		1988	United States Geological Survey	10.3133/pp1432
54b4328be138239d86855631	303	Observatory Hill Formation	511	538.8	İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57321f4dcf58f1a130ea0d1f	507	Mineral Formation	65.5	251	R.D. Cody	Organo-crystalline Interactions in Evaporite Systems: The Effects of Crystallization Inhibition	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42677b7-2b26-11d7-8648000102c1865d
5502c2cae1382326932d7ae8	128	Salina Formation	416	443.7	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
578cff68cf58f101e2dda387	68	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
54e7c15ae138237cc9150ae2	157	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
559cd25ee138230816dad548	392	Verde mention	4.1777	8.342	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	572	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55990e4de1382390cc6410c3	501	Sp mention			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
56c1ea81cf58f15c72c908aa	250	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5c19917d1faed655488915d3	239	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
57321bc8cf58f1a0ac39199e	140	Ebhadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
58c8ed8ccf58f1a71217fb6b	158	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b4328de138239d86855dfa	430	Al Nakhsh Member	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
57c2e2adcf58f105aaed24f4	133	Gachsaran Formation	5.332	23.03	Mirnejad, H. et al.	Major, minor element chemistry and oxygen and hydrogen isotopic compositions of Marun oil-field brines, SW Iran: Source history and economic potential	Geological Journal	46	2011	Wiley	10.1002/gj.1226
54d85d11e138238471e802b4	55	Bellerophon Formation	251	299	Longinelli, Antonio and Flora, Onelio	Isotopic composition of gypsum samples of Permian and Triassic age from the north-eastern Italian Alps: Palaeoenvironmental implications	Chemical Geology	245	2007	Elsevier	10.1016/j.chemgeo.2007.08.009
55b83d31e13823bd29ba865c	6157	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1cb24cf58f15c72c90642	342	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
575c4f4ecf58f16b97cc4df6	468	Mineral Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b7869fe13823bd29ba8231	3052	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	576	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43246e138239d86849872	334	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
5c19917c1faed65548891586	141	II Dolomite			The Shipboard Scientific Party	Site 374: Messina Abyssal Plain	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.105.1978
559c3f39e138230816dad2ff	494	Rustler Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55917250e13823109f3ef5b1	1656	Khorat Group	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
54b43276e138239d86851d3b	224	Terravecchia Formation	7.246	11.608	Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
55b83d31e13823bd29ba865c	698	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2857	Nippewalla Group	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c0c25fe1382389c54c390a	60	Burano Fm.	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
54b4328ee138239d86855fe9	91	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
5945b493cf58f195edc28b3a	173	Ammonítico Rosso Fm			Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559c3f39e138230816dad2ff	833	Dockum mention	206.725	238.25	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55b78281e13823bd29ba8218	2018	Rustler mention	253.9652	256.0278	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
56c1ca03cf58f15c72c90620	161	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
579fe160cf58f15528a4466f	258	Salado mention	256.0278	262.2168	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
5d1527e70b45c76caf9053a2	22	Francis Group	305.425	305.7125	Dal Molin, Sulian Junkes et al.	Polyhalite as a potassium and multinutrient source for plant nutrition	Archives of Agronomy and Soil Science			Informa UK Limited	10.1080/03650340.2019.1631451
557b93d0e138239225f864a3	1672	Feet mention			Longwell, Chester R.	Geology of the Muddy Mountains, Nevada, with a section through the Virgin Range to the Grand Wash Cliffs, Arizona	Bulletin		1928	United States Geological Survey	10.3133/b798
55b2bc12e138231cbdd6ce12	2709	Maha Sarakam Formation	65.5	145.5	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
55b2c402e138231cbdd6ce3e	706	Eagle mention	80.725	83.6	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
57a43018cf58f11204e17fe0	647	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
584aa62ccf58f19d6a5f583e	53	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5897de3fcf58f1081e8c64e1	442	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	6399	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
58cd1a59cf58f1aa1f369152	173	Dibdibah Formation			Grealish, Gerard et al.	Assisting Non-Soil Experts to Identify Soil Types for Land Management to Support Restoration of Arid Rangeland Native Vegetation in Kuwait	Arid Land Research and Management	29	2015	Taylor and Francis	10.1080/15324982.2014.973620
55b7869fe13823bd29ba8231	1145	Johnson Shale	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328fe138239d868561aa	167	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
558df7d7e13823109f3ee082	668	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4324de138239d8684aba6	75	Gessoso Solfifera Formation	5.332	7.246	Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
5c3e6d6c1faed655488cd35a	76	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b83d31e13823bd29ba865c	7094	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55af1c5ce13823763a830fe9	745	MInnelusa mention			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
56c1d9bbcf58f15c72c9075f	484	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5683349ccf58f1479a0abb4e	133	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55f2ced1cf58f16256a21973	266	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
54b4324ce138239d8684a8ac	71	Esplugafreda mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
55f4877fcf58f16256a22522	68	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55b83d31e13823bd29ba865c	5919	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1699	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57ec1ab3cf58f1acfab96941	182	Zaragoza Gypsum Formation	5.332	23.03	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572ea708cf58f10f9db0ebad	275	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
56831341cf58f1479a0ab983	25	Falces Gypsum Fm			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
58b8ce49cf58f12dec1f62bf	74	Na Cl Celestine Dolomite			Jensen, Gavin K.S.	Weyburn oilfield core assessment investigating cores from pre and post CO2 injection: Determining the impact of CO2 on the reservoir	International Journal of Greenhouse Gas Control	54	2016	Elsevier	10.1016/j.ijggc.2016.09.003
57177ecdcf58f1637fb099ed	140	Wellington Group	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55a82328e13823757cc7049a	1139	Spring Formation			Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
5554ccdbe138239301770ced	70	Segui Formation			Barbieri, Roberto et al.	Microbial signatures in sabkha evaporite deposits of Chott el Gharsa (Tunisia) and their astrobiological implications	Planetary and Space Science	54	2006	Elsevier	10.1016/j.pss.2006.04.003
579ab9d5cf58f115a1cd5759	24	Lapilli Sandstone			Park, Lisa E. and Downing, Kevin F.	Paleoecology of an Exceptionally Preserved Arthropod Fauna from Lake Deposits of the Miocene Barstow Formation, Southern California, U.S.A.	PALAIOS	16	2001	SEPM	10.2307/3515529
550b2b52e1382369a6f92fe2	221	Anhydrite Aragonite Calcite Dolomite			Ma, Jinzhu et al.	Groundwater recharge and evolution in the Dunhuang Basin, northwestern China	Applied Geochemistry		2013	Elsevier	10.1016/j.apgeochem.2012.10.007
5907a8f7cf58f1a944ce7ed3	557	Spergen Limestone	345.5	351.5	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
54b4324de138239d8684aba6	197	Gesso Formation			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
54e9f64ee138237cc9151412	339	Great Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
54b43288e138239d86854e95	56	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
5906abfccf58f14e27a40de0	31	Lockport Dolomite	416	443.7		24th Rochester Mineralogical Symposium	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603035
55b78281e13823bd29ba8218	1941	Salado mention	256.0278	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55988f24e1382390cc640e38	301	Baizuo Formation	299	359.2	Han, Run-Sheng et al.	Geological features and origin of the Huize carbonate-hosted Zn–Pb–(Ag) District, Yunnan, South China	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2006.03.003
55ae0df7e13823763a830928	328	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324de138239d8684aba6	37	Gesso Fm			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
55b2e020e138231cbdd6ced3	152	Muddy Creek Formation	5.332	23.03	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
54b43247e138239d86849b52	246	Chaunaca Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55ae0df7e13823763a830928	3192	Bliss mention	477.7	497.85	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5682dd16cf58f1479a0ab6de	399	Laga mention			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
54f9553fe138239936c6c748	180	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b7c404e13823bd29ba8379	324	Green River mention	34.8525	58.4	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
57760111cf58f134d11ea726	896	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
55ae0df7e13823763a830928	904	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54b43270e138239d86850df6	79	Schisto-Calcaire Subgroup			Préat, Alain et al.	A peritidal evaporite environment in the Neoproterozoic of South Gabon (Schisto-Calcaire Subgroup, Nyanga Basin)	Precambrian Research	177	2010	Elsevier	10.1016/j.precamres.2009.12.003
5902e1c9cf58f15a8ad96613	19	Francis Group	305.425	305.7125	Hashemi, Mir Amid et al.	Experimental characterisation of clay-sand mixtures treated with lime	European Journal of Environmental and Civil Engineering		2016	Taylor and Francis	10.1080/19648189.2016.1229228

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57ec17eccf58f1ac335ac1b3	79	Bambata mention	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
579f5bc9cf58f12a53c41a24	175	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	8529	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2025	Kaibab Formation	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
590762a7cf58f18fc090d7b2	311	Salem Limestone	337.5	339	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
55917e77e13823109f3ef5e3	155	Mancos Shale	65.5	145.5	Presser, T.S. et al.	Geologic sources, mobilization, and transport of selenium from the California Coast Ranges to the western San Joaquin Valley; a reconnaissance study	Water-Resources Investigations Report		1990	United States Geological Survey	10.3133/wri904070
56c1cb24cf58f15c72c90642	401	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55b83d31e13823bd29ba865c	1459	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1a95dcf58f15c72c903aa	477	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5c31af5a1faed655488b9e89	35	Jialingjiang Formation	245	251	XU, Zhengqi et al.	Geological and geochemical evolution of forming of kalium-rich brine in Sichuan Basin	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13226
55b6d6a7e13823bd29ba7dcc	7560	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54e8ae2de138237cc9150ec9	314	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
54b4328be138239d86855631	367	Sarlyar Limestone			İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
57ec17eccf58f1ac335ac1b3	645	Burano Formation	237	251	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5518b748e1382394b500dcce	59	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
5599341be1382390cc641189	2	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
5906dd0fcf58f15fea53aef7	235	Eagle Ford Shale	65.5	99.6	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b83d31e13823bd29ba865c	6103	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2779	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5506a9ebe1382326932d924e	778	Lisan mention	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
57c19e14cf58f16bf61df64c	171	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55b889bfe13823bd29ba8838	73	Todilto Limestone	161.2	175.6	Edited by Carter, Lorna M. H. et al.	USGS research on mineral resources, 1994; Part A, Program and abstracts	Circular		1994	United States Geological Survey	
55b83d31e13823bd29ba865c	3083	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328be138239d8685580e	7	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
55b83d31e13823bd29ba865c	6241	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58d2816dcf58f121bb50088d	86	Otero Formation	0.01143	0.126	Lockley, Martin G. and Rodríguez-de la Rosa, Rubén A.	Preservation of Human Tracks in Arid Environments	Ichnos	16	2009	Taylor and Francis	10.1080/10420940802470920
57ec1479cf58f1ab19b2dd9d	241	Lisan Formation	0.01143	0.126	Schreiber, B. Charlotte and Tabakh, Mohamed El	Deposition and early alteration of evaporites	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00002.x
55b388d6e138231cbdd6d25d	1114	Gamma Member			Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
558e75aae13823109f3ee377	347	MISCELLANEOUS SEDIMENTS Limestone			Butler, Arthur Pierce	The Geological Survey's work on the geology of uranium and thorium deposits	Trace Elements Investigations		1952	United States Geological Survey	10.3133/tei207
57a43018cf58f11204e17fe0	880	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b83d31e13823bd29ba865c	3441	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8143	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578cff68cf58f101e2dda387	140	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b6d6a7e13823bd29ba7dcc	7560	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558df7d7e13823109f3ee082	235	Castile mention	259	259.51	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
574822d9cf58f13411b192a3	300	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55a7c745e13823757cc70251	127	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5712f1aacf58f16fb4cc921a	191	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
56c1cb24cf58f15c72c90642	92	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
59af56bfcf58f10a7f9725cd	3	Kyiv Consulting Group			Verkhovodov, Petro O.	Routine x-ray fluorescence analysis of powder materials using the'VERBA-XRF' mode	X-Ray Spectrometry	33	2004	Wiley-Blackwell	10.1002/xrs.720
56ac24facf58f19442534c08	78	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
59080b6ccf58f111237d82af	71	Glen Rose mention	100.5	113	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463
579f5bc9cf58f12a53c41a24	214	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
578aea2bcf58f13920dc7baa	97	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
575c4f4ecf58f16b97cc4df6	41	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b30ea3e138231cbdd6cfcd	481	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56e353e7cf58f16de8a2e1bf	61	Difunta Group	33.9	55.8	Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
55b7869fe13823bd29ba8231	732	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	1202	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559e58a2e138230816dadbe2	717	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b6d6a7e13823bd29ba7dcc	9049	Feet mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56734967cf58f1b1878a8921	174	Calcite Dolomite			Deng, Chunmiao et al.	Characterization of mineral composition and its influence on microstructure and sorption capacity of coal	Journal of Natural Gas Science and Engineering		2015	Elsevier	10.1016/j.jngse.2015.04.034
54b43246e138239d86849872	289	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
5682dd16cf58f1479a0ab6de	590	Belayim Formation	11.608	15.97	MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
5b18df21cf58f1049eab0bc8	53	Bayport mention			Blaske, Allan R.	History, Geology, and Mineralogy of the Bayport Limestone Quarries, Bellevue, Eaton County, Michigan	Rocks & Minerals	93	2018	Informa UK Limited	10.1080/00357529.2018.1428860
58d05105cf58f13f39efd424	431	Pillara Formation			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
58b95b1bcf58f166c35f1298	109	Zebbag Formation			Dhahri, Ferid and Boukadi, Noureddine	Triassic salt sheets of Mezzouna, Central Tunisia: New comments on Late Cretaceous halokinesis and geodynamic evolution of the northern African margin	Journal of African Earth Sciences		2017	Elsevier	10.1016/j.jafrearsci.2017.01.016
54f9553fe138239936c6c748	66	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
58c1de9acf58f1094097ba52	93	Beacon Group	65.5	251	Gibson, G. W.	Geological Investigations in Southern Victoria Land, Antarctica	New Zealand Journal of Geology and Geophysics	5	1962	Taylor and Francis	10.1080/00288306.1962.10420093
56c1ca03cf58f15c72c90620	180	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43246e138239d86849919	757	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b7869fe13823bd29ba8231	2508	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c1a08dcf58f16cbd62157f	220	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
5906dd0fcf58f15fea53aef7	136	Pen Shale	83.6	87.175	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b83d31e13823bd29ba865c	6282	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55ae0df7e13823763a830928	1719	San Andres Limestone	269.635	279.0034	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	4960	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1211	Canas Member	278.404	279.303	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557c738ee138239225f8685b	1141	Capitan Limestone	251	299	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
5a3b865dcf58f103a802eed2	79	Hafik Formation			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
56ac4662cf58f19442534e9e	52	Mancos Shale	65.5	145.5	Laronne, Jonathan B.	Mangos shale-associated alluvium	Earth Surface Processes and Landforms	6	1981	Wiley-Blackwell	10.1002/esp.3290060604
557b4c6fe138239225f86356	114	Salt mention	251	260.4	Leith, William	Geologic and engineering constraints on the feasibility of clandestine nuclear testing by decoupling in large underground cavities	Open-File Report		2000	United States Geological Survey	10.3133/ofr0128
54b4328ee138239d868561688	108	Base mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
578cff68cf58f101e2dda387	121	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
579f5bc9cf58f12a53c41a24	42	Tripoli Fm	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	5999	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2894	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558eb5d6e13823109f3ee517	353	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5734b312cf58f14dbc2c579f	496	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
57ec17eccf58f1ac335ac1b3	399	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55f2ced1cf58f16256a21973	182	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b83d31e13823bd29ba865c	1432	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43246e138239d86849919	736	Passaic Formation	199.6	228	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
558b28aae13823109f3ed1df	299	lCoipato Group			U.S. Geological Survey	Geological Survey research 1964, Chapter C	Professional Paper		1964	United States Geological Survey	10.3133/pp501C
579f5bc9cf58f12a53c41a24	60	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
58b7df47cf58f18af629a04c	349	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55ae0df7e13823763a830928	1402	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55b83d31e13823bd29ba865c	8347	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	93	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56830b14cf58f1479a0ab918	226	Basal Limestone	488.3	542	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b3dfb4e138231cbdd6d442	1617	Medicine Member			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
5503421ae1382326932d7e6d	559	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b30ea3e138231cbdd6cfcd	916	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57613d6fcf58f138292ba937	187	Bozkır Fm			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
5734b312cf58f14dbc2c579f	49	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
550912cce138238460c4f61b	459	Long mention			Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
5d3db22b0b45c76cafa1b455	24	Francis Group	305.425	305.7125	Alejandre, F.J. et al.	Study of the Influence of Limewash on the Conservation of Islamic Plasterworks through Weathering Tests	International Journal of Architectural Heritage			Informa UK Limited	10.1080/15583058.2019.1632393
54b4328ee138239d86855f01	304	Colombacci mention	5.332	7.246	Rouchy, Jean Marie and Caruso, Antonio	The Messinian salinity crisis in the Mediterranean basin: A reassessment of the data and an integrated scenario	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.02.005
54b4328ce138239d86855b5a	74	Tripoli Formation	5.332	7.246	Taberner, C. et al.	The use of environmental markers to distinguish marine vs. continental deposition and to quantify the significance of recycling in evaporite basins	Sedimentary Geology	137	2000	Elsevier	10.1016/S0037-0738(00)00105-6
54b7e5cfe138230a74d15b25	270	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
54beddace13823023e43d931	207	Calcite Dolomite			Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
55b83d31e13823bd29ba865c	8807	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328be138239d868556631	367	Sarlyar Limestone			İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
55b83d31e13823bd29ba865c	7998	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43246e138239d86849872	309	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
5734b312cf58f14dbc2c579f	101	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
5897de3fcf58f1081e8c64e1	1	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
580e3bc6cf58f172dd1b8676	245	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55a7bdc9e13823757cc7020e	2129	Colorado mention	90.825	95.55	Collins, Donley S. et al.	Bibliography for update and revision of U.S.G.S. Bulletin 1114, Minerals of Colorado -- a 100 year record, by Edwin B. Eckel, Part A - Paper copy --Bibliography data file disks	Open-File Report		1989	United States Geological Survey	10.3133/ofr89206A
55b83d31e13823bd29ba865c	6703	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54df4a35e138238a47f96f37	560	Burano Formation	237	251	Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
55ae0df7e13823763a830928	506	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55f38765cf58f16256a21e5e	28	Zaragoza Gypsum Formation	5.332	23.03	Moret-Fernández, D. and Herrero, J.	Effect of gypsum content on soil water retention	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.06.030
579f5bc9cf58f12a53c41a24	248	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5517568be1382394b500d6fd	207	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
5734b312cf58f14dbc2c579f	373	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
54f9553fe138239936c6c748	39	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b6d6a7e13823bd29ba7dcc	5863	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	623	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	9117	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	4715	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b8b8e9e13823bd29ba8989	382	PRINCIPAL SOURCES Limestone			Severson, R.C. and Shacklette, Hansford T.	Essential elements and soil amendments for plants; sources and use for agriculture	Circular		1988	United States Geological Survey	10.3133/cir1017

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5ce2f9b20b45c76caf8ae21e	506	Grzybowo Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4328ae138239d8685544	223	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
54c04652e1382389c54c3686	199	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
5503421ae1382326932d7e6d	2167	Sijes Formation	1.806	65.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56830b14cf58f1479a0ab918	769	Tripoli Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b83d31e13823bd29ba865c	5059	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	419	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
577ef8c7cf58f1ac737005ec	40	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
55b2c402e138231cbdd6ce3e	203	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
54b4328de138239d86855c34	41	Gypsiferous Claystone Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b7869fe13823bd29ba8231	2052	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b78281e13823bd29ba8218	1965	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
572ecdb4cf58f1177819e19e	276	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
54b4328de138239d86855c34	168	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
579ed180cf58f1030df9c51e	289	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
54b4327fe138239d86853736	257	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
5a2d0619cf58f19f7117d37a	44	Base mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
55b83d31e13823bd29ba865c	3390	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	2016	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b75a36e13823bd29ba8116	1704	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b7869fe13823bd29ba8231	1454	Gypsum Spring Formation	168.65	174.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55974402e1382390cc640708	121	Shahejie Formation	33.9	55.8	Li, R. and Parnell, J.	In situ microanalysis of petroleum fluid inclusions by Time of Flight-Secondary Ion Mass Spectrometry as an indicator of evolving oil chemistry: a pilot study in the Bohai Basin, China	Journal of Geochemical Exploration		2003	Elsevier	10.1016/S0375-6742(03)00025-6
559cd25ee138230816dad548	332	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
54b43276e138239d86851d3b	112	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
57c9f7a1cf58f1bbcffcfdff	348	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
5681ea4acf58f1ba274d4b51	40	Meenymore Formation	323.2	358.9	MASON, THOMAS R.	Formation and diagenesis of Visean trace fossils from Ireland	Lethaia	13	1980	Wiley-Blackwell	10.1111/j.1502-3931.1980.tb00636.x
580e3bc6cf58f172dd1b8676	81	Gypsum Bambata Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
57126a16cf58f140fa5c33f2	177	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b83d31e13823bd29ba865c	7995	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	10	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55ae0df7e13823763a830928	1405	Dewey Lake Formation	251.902	253.9652	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5712f1aacf58f16fb4cc921a	220	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
59082e7dcf58f11e5bbbf050	293	Leadville Dolomite	318.1	359.2	Warren, William J. and Pedersen, Ed	Minerals of the Gilman District and Eagle Mine: Eagle County, Colorado	Rocks & Minerals	78	2003	Taylor and Francis	10.1080/00357529.2003.9926740
54b43288e138239d86854e95	112	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
54c0c25fe1382389c54c390a	86	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
56c61f5ccf58f17493f87854	77	Feldspar Dolomite			Naftz, David L.	PREDICTIVE CAPABILITIES OF BATCH-EXTRACT EXPERIMENTS USING WATER FROM A COAL MINE	Journal of the American Water Resources Association	24	1988	Wiley-Blackwell	10.1111/j.1752-1688.1988.tb00939.x
559e58a2e138230816dadbe2	714	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54b43276e138239d86851d3b	270	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
55b6d6a7e13823bd29ba7dcc	8077	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ce138239d86855bed	57	Furnace Creek Formation	1.806	5.332	Tanner, Lawrence H	Borate formation in a perennial lacustrine setting: Miocene–Pliocene Furnace Creek Formation, Death Valley, California, USA	Sedimentary Geology	148	2002	Elsevier	10.1016/S0037-0738(01)00221-4
566b32efcf58f10a31736c53	277	Maokou Formation	260.4	270.6	Dai, Shifeng et al.	Mineralogical and geochemical compositions of Late Permian coals and host rocks from the Guxu Coalfield, Sichuan Province, China, with emphasis on enrichment of rare metals	International Journal of Coal Geology		2015	Elsevier	10.1016/j.coal.2015.12.004
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4328ee138239d86855fe9	66	Baza Fm			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
5503421ae1382326932d7e6d	503	Rodeo Fm			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
58b7df47cf58f18af629a04c	288	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
580e3bc6cf58f172dd1b8676	245	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b83d31e13823bd29ba865c	4826	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	25	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4325ae138239d8684cec7	295	Antalo Limestone			Tadesse, Solomon et al.	Geology and mineral potential of Ethiopia: a note on geology and mineral map of Ethiopia	Journal of African Earth Sciences	36	2003	Elsevier	10.1016/S0899-5362(03)00048-4
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b43247e138239d86849b52	226	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b83d31e13823bd29ba865c	1250	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	668	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54b43246e138239d86849872	124	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55b83d31e13823bd29ba865c	6284	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557cd3cfe138239225f869e5	1313	Castile mention	259	259.51	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
54b4328ae138239d86855525	37	Hagif Formation			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
557cc6e1e138239225f869b5	714	Ogallala Formation	-5.5012E-05	23.03	Boettcher, Arnold J. and Horr, C. Albert	Geology and ground-water resources in eastern Cheyenne and Kiowa Counties, Colorado	Water Supply Paper		1964	United States Geological Survey	10.3133/wsp1779N

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579f5bc9cf58f12a53c41a24	95	Trubi Formation	1.806	5.332	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5734b312cf58f14dbc2c579f	413	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
54b4328ae138239d86855525	6	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
58d05f04cf58f143d83df298	225	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55c01a9ecf58f16e99a37305	11	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55f28e79cf58f16256a217ad	115	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
572ecdb4cf58f1177819e19e	358	Zechstein mention	251.902	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
5731caeecf58f192f36c5766	61	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
56c1c32bcf58f15c72c9059b	229	Bellerophon mention	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
557cdb22e138239225f86a07	3197	Feet mention			Dane, C.H.	Geology of the Salt Valley anticline and adjacent areas, Grand County, Utah	Bulletin		1935	United States Geological Survey	10.3133/b863
58b8f161cf58f13c4631a064	41	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
54b4324ce138239d8684a8ac	72	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
55b83d31e13823bd29ba865c	7998	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6739	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1463	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57c87d1dcf58f1470e996667	274	ND mention			Lynch, Kennda L. et al.	Near-infrared spectroscopy of lacustrine sediments in the Great Salt Lake Desert: An analog study for Martian paleolake basins	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004707
574822d9cf58f13411b192a3	174	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
5503421ae1382326932d7e6d	959	Castile Fm	253.8	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54b43247e138239d86849b52	247	Molino Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
558d206fe13823109f3edc62	3029	Furnace Creek Formation	1.806	5.332	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
58b7df47cf58f18af629a04c	301	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
5599341be1382390cc641189	316	Beuda Gypsum Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b6d6a7e13823bd29ba7dcc	5181	Figure mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5c2b5da21faed655488b16ed	271	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
57de579ecf58f11956b3e520	146	Goethite Quartz Dolomite			Hunter, Hazel M.A. et al.	Examining Ni-laterite leach mineralogy & chemistry – a holistic multi-scale approach	Minerals Engineering		2013	Elsevier	10.1016/j.mineng.2013.05.002
54b4328ae138239d8685544	223	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d6a7e13823bd29ba7dcc	9047	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
572cf900cf58f13d86a1bdc8	237	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55b6d6a7e13823bd29ba7dcc	9051	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5c3540ea1faed655488c1248	131	Gypsum mention			Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
55b83d31e13823bd29ba865c	3157	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	284	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
558fe155e13823109f3eec57	257	Lamar Limestone	259.51	262.21	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b83d31e13823bd29ba865c	5910	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e736c1e138237cc915089d	325	Mirage Point Formation	359.2	416	Bottomley, D.J. et al.	The origin and evolution of Canadian Shield brines: evaporation or freezing of seawater? New lithium isotope and geochemical evidence from the Slave craton	Chemical Geology	155	1999	Elsevier	10.1016/S0009-2541(98)00166-1
558fa710e13823109f3eeaeb	4845	Arapien Shale	145.5	199.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
558c8afce13823109f3ed928	361	Minnelusa Formation	251	299	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
584aa62ccf58f19d6a5f583e	81	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
58b95b1bcf58f166c35f1298	46	Zebbag mention			Dhahri, Ferid and Boukadi, Noureddine	Triassic salt sheets of Mezzouna, Central Tunisia: New comments on Late Cretaceous halokinesis and geodynamic evolution of the northern African margin	Journal of African Earth Sciences		2017	Elsevier	10.1016/j.jafrearsci.2017.01.016
55b7869fe13823bd29ba8231	1234	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5712f1aacf58f16fb4cc921a	287	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
56c1d607cf58f15c72c9071a	409	Tansill Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55b83d31e13823bd29ba865c	232	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b83d31e13823bd29ba865c	6152	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b70da8e13823bd29ba7f11	3955	MINERAL RESOURCES mention			Davis, Robert E.	Magnesium resources of the United States--a geologic summary and annotated bibliography to 1953	Bulletin		1957	United States Geological Survey	10.3133/b1019E
57464969cf58f165ff103f08	12	Blomidon Formation	203.6	216.5	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
54f98125e138239936c6c811	133	Brasso Formation	5.332	23.03	Wilson, Brent	A lagoonal interlude with occasional hypersalinity in the deposition of the Early–Middle Miocene Brasso Formation of Trinidad	Journal of South American Earth Sciences	29	2010	Elsevier	10.1016/j.jsames.2009.10.003
54b4328ee138239d86855f3a	789	Belayim Formation	11.608	15.97	Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
5906dd0fcf58f15fea53aef7	133	Santa Elena Limestone	65.5	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
59073182cf58f17e24d9c0bb	995	Bearpaw Shale	70.575	75.9333	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
572ee8a5cf58f11bb5bc1a43	276	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54e865c7e138237cc9150d7f	240	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
5ce2f9b20b45c76caf8ae21e	286	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4328fe138239d868561aa	121	Vakıflı Formation			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b83d31e13823bd29ba865c	3830	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b31f28e138231cbdd6d027	5813	Funeral Formation	1.806	5.332	Hunt, Charles Butler and Mabey, Don R.	Stratigraphy and structure, Death Valley, California	Professional Paper		1966	United States Geological Survey	10.3133/pp494A
54bf7e39e13823023e43de1a	145	Bellerophon mention	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55973e40e1382390cc6406e7	47	Otto Fiord mention	307.5	320.4	Grasby, Stephen E. et al.	Biogeochemical sulphur cycle in an extreme environment—lifebeneath a high arctic glacier, Nunavut, Canada	Journal of Geochemical Exploration		2003	Elsevier	10.1016/S0375-6742(03)00026-8
58c8ed8ccf58f1a71217fb6b	9	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5599341be1382390cc641189	2	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
579f5bc9cf58f12a53c41a24	277	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
559e58a2e138230816dadbe2	667	Kaibab Formation	270.6	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54c15752e1382389c54c3b8f	242	Bunter Sandstone	245	251	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
5c29b7d41faed655488ae938	220	Luocheng mention			Ji, Dongping et al.	Mississippian anthracites in Guangxi Province, southern China: Petrological, mineralogical, and rare earth element evidence for high-temperature solutions	International Journal of Coal Geology	197	2018	Elsevier	10.1016/j.coal.2018.08.006
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55f4877fcf58f16256a22522	72	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b83d31e13823bd29ba865c	1295	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b7f931e138230a74d15b86	155	Purbeck mention	139.8	149.2	Milner, Henry B.	The geology of the country around Heathfield, Sussex With report of excursion to heathfield, brightling, netherfield and robertsbridge. Saturday, June 4th, 1921	Proceedings of the Geologists' Association	33	1922	Elsevier	10.1016/S0016-7878(22)80003-1
55f4877fcf58f16256a22522	432	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54bf7e39e13823023e43de1a	224	Reichenhall Formation	199.6	251	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
54b43247e138239d86849b52	242	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	2069	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56830b14cf58f1479a0ab918	227	Tripoli Member	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54b4328ee138239d86855fe9	348	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
58bb7f59cf58f1878850d92a	260	Anhydrite mention			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
5c2b5da21faed655488b16ed	137	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
55b3055ce138231cbdd6cf97	3292	Ghanam mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55f2ced1cf58f16256a21973	83	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b5b47ce1382314227cfdae	183	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
572ea708cf58f10f9db0ebad	275	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
58b8f161cf58f13c4631a064	41	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
57ec17eccf58f1ac335ac1b3	92	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e4d444e138237cc914feb2	121	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55b30ea3e138231cbdd6cfcd	207	Gypsum Spring Formation	168.65	174.7	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5a2f778acf58f10a775a37f3	842	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55185d29e1382394b500db56	40	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
55b3d009e138231cbdd6d3f1	3408	Park City mention	264.28	282	Geological Survey (U.S.)	Geological Survey research 1972, Chapter D	Professional Paper		1972	United States Geological Survey	10.3133/pp800D
56c1b69acf58f15c72c904b3	141	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b7869fe13823bd29ba8231	3062	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5599341be1382390cc641189	266	Beuda Gypsum Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
559147b8e138236ee2217b0d	131	Rock Group			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
55a751cee13823757cc6ff3c	884	Tansill Formation	260.4	270.6	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54b43247e138239d86849b52	113	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b83d31e13823bd29ba865c	3180	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6df25e13823bd29ba7dfe	1766	Verde Formation	5.332	23.03	Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
54b4328be138239d8685567e	349	Rus mention	33.9	55.8	Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
557cc6e1e138239225f869b5	714	Ogallala Formation	-5.5012E-05	23.03	Boettcher, Arnold J. and Horr, C. Albert	Geology and ground-water resources in eastern Cheyenne and Kiowa Counties, Colorado	Water Supply Paper		1964	United States Geological Survey	10.3133/wsp1779N
55ad3126e13823763a8303a0	265	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55185d29e1382394b500db56	40	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
54b4328de138239d86855c34	80	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	5462	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	664	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c458a5cf58f17493f85551	164	Calcite Dolomite			Luzón, A. et al.	Evolution from a freshwater to saline lake: a climatic or hydrogeological change? The case of Gallocanta Lake (northeast Spain)	Hydrological Processes	21	2007	Wiley-Blackwell	10.1002/hyp.6243
54b7e5cfe138230a74d15b25	264	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
54b4328de138239d86855dfa	180	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b83d31e13823bd29ba865c	3786	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54f9553fe138239936c6c748	154	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
59119a48cf58f19721e2ab5f	199	Calcite Dolomite			Slížková, Zuzana et al.	Soils and Earthen Building Materials Used for the Buddhist Temple Complex	International Journal of Architectural Heritage	10	2014	Taylor and Francis	10.1080/15583058.2014.991460
5c3540ea1faed655488c1248	131	Gypsum mention			Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
56c1ea81cf58f15c72c908aa	217	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	2190	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a751cee13823757cc6ff3c	632	Rustler Formation	251	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55990e4de1382390cc6410c3	461	Sp mention			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
55b7869fe13823bd29ba8231	2087	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c0d9d1cf58f16e99a378ec	62	Nesquehonite mention			Velbel, Michael A. et al.	Terrestrial weathering of Antarctic stone meteorites: Formation of Mg-carbonates on ordinary chondrites	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90400-Y
55b6d6a7e13823bd29ba7dcc	7769	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57126a16cf58f140fa5c33f2	181	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54b4328ee138239d86856168	62	Tripoli Formation	5.332	7.246	Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
5897de3fcf58f1081e8c64e1	306	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54b4328ae138239d86855525	6	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55b7869fe13823bd29ba8231	629	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b75a36e13823bd29ba8116	2171	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b3055ce138231cbdd6cf97	1424	Marada Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b3055ce138231cbdd6cf97	5159	Abld Limestone			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b83d31e13823bd29ba865c	6656	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558d206fe13823109f3edc62	3879	Furnace Creek Formation	1.806	5.332	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55b83d31e13823bd29ba865c	3181	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d8685544	221	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
55b83d31e13823bd29ba865c	5917	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ee138239d86855fe9	513	Baza Fm			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
55b7869fe13823bd29ba8231	258	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c3540ea1faed655488c1248	121	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
55c171fbcf58f1a8110b8064	388	Burns mention	23.03	33.9		Goldschmidt Abstracts 2008- M	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.016
55b83d31e13823bd29ba865c	8176	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c03cd3cf58f16e99a37419	35	Semta Formation			Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K
5598f6b0e1382390cc64103f	181	Daye Formation	245	251	Xie, Guiqing et al.	Geochemical constraints on Cu–Fe and Fe skarn deposits in the Edong district, Middle–Lower Yangtze River metallogenic belt, China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.08.005
563d5ed5cf58f18954974436	515	Chlorite Corundum Diopside Dolomite			Shaw, Brian R. and Simms, Richard	Stratigraphic analysis system: SAS	Computers & Geosciences	3	1977	Elsevier	10.1016/0098-3004(77)90017-6
54b4328de138239d86855c34	154	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54e8207fe138237cc9150c61	93	Bulldog Shale	65.5	145.5	Costelloe, Justin F. et al.	Identifying fluvial recharge and artesian upwards leakage contributions to arid zone shallow, unconfined groundwater	Chemical Geology		2012	Elsevier	10.1016/j.chemgeo.2012.08.014
557ff66ee13823bc80ba2925	1309	Lance Formation	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
54b4328ee138239d86855f3a	235	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55c01a9ecf58f16e99a37305	298	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b7869fe13823bd29ba8231	478	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7c404e13823bd29ba8379	317	Green River Formation	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
580e3bc6cf58f172dd1b8676	81	Gypsum Bambata Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55c01a9ecf58f16e99a37305	1043	Rustler Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
584aa62ccf58f19d6a5f583e	131	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5a2f778acf58f10a775a37f3	2	Zaragoza mention	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b83d31e13823bd29ba865c	6275	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	171	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54e7c15ae138237cc9150ae2	70	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
56c1ca16cf58f15c72c90624	159	Zaragoza Formation	23.03	33.9	Valero-GarcÉs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
557f199ce13823bc80ba25a0	1978	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
56c1b6a3cf58f15c72c904b4	56	Pasquasia mention			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
55b6d6a7e13823bd29ba7dcc	9109	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56faac60cf58f15186bf46cd	167	Calcite Dolomite			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
558df7d7e13823109f3ee082	1009	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55ae0df7e13823763a830928	620	Morrison Formation	145.5	161.2	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55af1c5ce13823763a830fe9	745	MInnelusa mention			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54b60355e138230a74d1533f	3	Abstract Shale			Jordan, Peter and Nüesch, Rolf	Deformational behavior of shale interlayers in evaporite detachment horizons, jura overthrust, Switzerland	Journal of Structural Geology	11	1989	Elsevier	10.1016/0191-8141(89)90103-X
55b6d6a7e13823bd29ba7dcc	6618	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5c2fe60d1faed655488b6bad	198	Kumugelimu Formation			Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55ae0df7e13823763a830928	1400	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
57c86f1bcf58f141c6f7b1f8	461	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55a6f648e13823757cc6fcd7	485	Horse Spring Formation	5.332	23.03	Vine, James David and Dooley, J.R.	Where on Earth is all the lithium?; with a section on uranium isotope studies	Open-File Report		1980	United States Geological Survey	10.3133/ofr801234
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550f21dce1382369a6f940aa	78	Zaragoza Gypsum Formation	5.332	23.03	Guinea, Ander et al.	Geoelectrical prospecting of glauberite deposits in the Ebro basin (Spain)	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.03.007
579f5bc9cf58f12a53c41a24	372	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
590785cdcf58f19bf342565e	51	Mississippian-age Warsaw Formation			Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
5514907ce1382394b500cb75	183	Dibdibba Formation			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
55f4877fcf58f16256a22522	8	Sulphur Limestone			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550af900e1382369a6f92edb	293	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from cretaceous black shale: II. Effect of geology, weathering, climate, and land use on salinity and selenium cycling, Mancos Shale landscapes, southwestern United States	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.011
565f6ebfcf58f148c57ec29d	1	Tunisian Chemical Group			Boumnijel, Ibtissem et al.	Effect of calcinated and activated perlite on improving efficiency of dihydrate process for phosphoric acid	International Journal of Mineral Processing		2013	Elsevier	10.1016/j.minpro.2013.10.005
57c52b80cf58f1bae6fd57e1	39	Cucaracha Formation	5.332	23.03	Retallack, G. J. and Huang, C.	Depth to gypsic horizon as a proxy for paleoprecipitation in paleosols of sedimentary environments	Geology	38	2010	GSA	10.1130/g30514.1
55b83d31e13823bd29ba865c	419	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	230	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
56c1b69acf58f15c72c904b3	5	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
59073883cf58f180c26e3666	78	Niobrara Formation	65.5	145.5	Degraw, Harold M. and Pabian, Roger K.	Collecting in Nebraska's Cretaceous Strata	Rocks & Minerals	55	1980	Taylor and Francis	10.1080/00357529.1980.11764638
55b8484be13823bd29ba869d	173	Moenkopi Formation	199.6	251	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
5b6f081fcf58f1539ffa6761	192	Yapılar Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
5906dd0fcf58f15fea53aef7	446	Jackson mention	10.08	11.04	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54b4328ae138239d8685557f	261	Ford Formation	66	100.5	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
55b6d6a7e13823bd29ba7dcc	6000	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ee138239d86856168	78	Base mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
54b4328ce138239d86855a68	45	Alcubierre Formation			Arenas, C et al.	Dedolomitization and other early diagenetic processes in Miocene lacustrine deposits, Ebro Basin (Spain)	Sedimentary Geology	125	1999	Elsevier	10.1016/S0037-0738(98)00146-8
55b83d31e13823bd29ba865c	7402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5990	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	241	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	3803	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558d206fe13823109f3edc62	2601	Muddy Creek Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
57613d6fcf58f138292ba937	449	Bayındır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
55b83d31e13823bd29ba865c	3715	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	844	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55093459e138238460c4f715	144	Lincolnshire Limestone	145.5	199.6	Samborska, Katarzyna and Halas, Stanislaw	34S and 18O in dissolved sulfate as tracers of hydrogeochemical evolution of the Triassic carbonate aquifer exposed to intense groundwater exploitation (Olkusz–Zawiercie region, southern Poland)	Applied Geochemistry	25	2010	Elsevier	10.1016/j.apgeochem.2010.06.010
55b83d31e13823bd29ba865c	4598	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55917e77e13823109f3ef5e3	151	Mancos Shale	65.5	145.5	Presser, T.S. et al.	Geologic sources, mobilization, and transport of selenium from the California Coast Ranges to the western San Joaquin Valley; a reconnaissance study	Water-Resources Investigations Report		1990	United States Geological Survey	10.3133/wri904070
55b83d31e13823bd29ba865c	3083	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558e4538e13823109f3ee24f	2563	Wilcox mention	33.9	56	Pettijohn, R. A.	Geochemistry of ground water in the Gulf Coast Aquifer systems, south-central United States	Water-Resources Investigations Report		1996	United States Geological Survey	10.3133/wri964107
55b7869fe13823bd29ba8231	1098	Kirschberg Evaporite Member	100.5	113	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b30ea3e138231cbdd6cfcd	1086	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558eb5d6e13823109f3ee517	350	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
558d206fe13823109f3edc62	2238	Muddy Creek Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55f2ced1cf58f16256a21973	261	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
584aa62ccf58f19d6a5f583e	87	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4328ee138239d86855fe9	348	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
54b4328ae138239d868553d8	221	Gebel El Rusas Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
550e9025e1382369a6f93e44	69	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Paleosubsidence and active subsidence due to evaporite dissolution in the Zaragoza area (Huerva River valley, NE Spain): processes, spatial distribution and protection measures for transport routes	Engineering Geology	72	2004	Elsevier	10.1016/j.enggeo.2003.10.002
54b43246e138239d86849872	130	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55b78281e13823bd29ba8218	667	Artesia mention	259.51	273.01	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54b43247e138239d86849b52	331	El Molino Fm	61.6	70.1938	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
578fb2c8cf58f1bdcd2df236	412	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
558fda65e13823109f3eec30	1169	Paradox Member	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
56c1ea81cf58f15c72c908aa	385	Blomidon Formation	203.6	216.5	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b78281e13823bd29ba8218	2003	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
584aa178cf58f19c3c0fb294	156	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b6d6a7e13823bd29ba7dcc	5358	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57a43018cf58f11204e17fe0	537	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
550c651ce1382369a6f9352b	400	Magnesian Limestone	251	299	BELL, F.G.	Chapter 12 Construction Materials	Engineering Geology and Geotechnics		1980	Elsevier	10.1016/B978-0-408-00355-1.50015-1
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
557f7360e13823bc80ba26f4	2051	Yeso Formation	251	299	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55b6d6a7e13823bd29ba7dcc	1982	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57c9f7a1cf58f1bbcffcfdff	348	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
54e8ae2de138237cc9150ec9	375	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
55b389aae138231cbdd6d262	4190	Khewra mention	488.3	542	U.S. Geological Survey	Geological Survey research 1970, Chapter D	Professional Paper		1970	United States Geological Survey	10.3133/pp700D
55ae0df7e13823763a830928	328	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5502e189e1382326932d7bd2	305	Dolostones Chert			Melezhik, Victor A. et al.	Extreme 13Ccarb enrichment in ca. 2.0 Ga magnesite–stromatolite–dolomite–`red beds' association in a global context: a case for the world-wide signal enhanced by a local environment	Earth-Science Reviews	1-2	1999	Elsevier	10.1016/S0012-8252(99)00044-6
5582f1b1e1382390b43c95d9	156	Mequinenza mention			Querol, X. et al.	Geological controls on the coal quality of the Mequinenza subbituminous coal deposit, northeast Spain	International Journal of Coal Geology	29	1996	Elsevier	10.1016/0166-5162(95)00009-7
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
584aa62ccf58f19d6a5f583e	53	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55f4877fcf58f16256a22522	216	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56c1b6a3cf58f15c72c904b4	250	Cattolica mention			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
55b83d31e13823bd29ba865c	7386	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f28a1bcf58f16256a2178c	66	Messiouta Formation			Jellalia, Dalila et al.	Hydro-geophysical and geochemical investigation of shallow and deep Neogene aquifer systems in Hajeb Layoun-Jilma-Ouled Asker area, Central Tunisia	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.06.016
54b4328ee138239d86855f3a	217	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
54b4328ae138239d868553bb	34	Age Formation	251	542	Qiuyuan, Lao and Wenxue, Gao	The characteristics of cenozoic sedimentary basins in the North China platform	Sedimentary Geology	40	1984	Elsevier	10.1016/0037-0738(84)90041-1
55b83d31e13823bd29ba865c	6262	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	467	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55b83d31e13823bd29ba865c	4200	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	25	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	5108	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d8685544	219	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
55ae0df7e13823763a830928	328	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	4581	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	8072	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58b7df47cf58f18af629a04c	590	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b6d6a7e13823bd29ba7dcc	4010	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5897de3fcf58f1081e8c64e1	28	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b7869fe13823bd29ba8231	1999	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	4509	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8416	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c061c1e1382389c54c375d	213	Carillon Formation	460.9	471.8	Dix, George R. and Robinson, George W.	The geochemical record of hydrothermal mineralization and tectonism inboard of the Appalachian Orogen: the Ottawa Embayment	Chemical Geology	197	2003	Elsevier	10.1016/S0009-2541(02)00245-0
5ce2f9b20b45c76caf8ae21e	567	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4328fe138239d868561aa	155	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b75a36e13823bd29ba8116	1505	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b83d31e13823bd29ba865c	4543	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	6779	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	97	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7999	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4324de138239d8684aa17	229	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b83d31e13823bd29ba865c	472	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572ecdb4cf58f1177819e19e	312	Zechstein mention	251.902	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
55ae0df7e13823763a830928	1595	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5ab90b76cf58f15ad7d7cedf	501	Saint-Ouen Limestone			Lettéron, Alexandre et al.	Reconstruction of a saline, lacustrine carbonate system (Priabonian, St-Chaptes Basin, SE France): Depositional models, paleogeographic and paleoclimatic implications	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2017.12.023
55b6d6a7e13823bd29ba7dcc	6618	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558d206fe13823109f3edc62	2894	Pantano Formation	23.8283	37.71	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
54b4324de138239d8684aa17	190	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b83d31e13823bd29ba865c	2861	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5945b493cf58f195edc28b3a	299	Zamoranos Formation	199.6	228	Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
55b33375e138231cbdd6d08f	1107	Lisan Formation	0.01143	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
55b78281e13823bd29ba8218	2018	Rustler mention	253.9652	256.0278	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5598dfe1e1382390cc640fbc	178	Huanglong Formation	299	359.2	Du, Yilun et al.	Petrology and geochemistry of Silurian–Triassic sedimentary rocks in the Tongling region of Eastern China: Their roles in the genesis of large stratabound skarn ore deposits	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.11.021
55b83d31e13823bd29ba865c	5447	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55a82328e13823757cc7049a	1138	Gypsum Spring Formation	168.65	174.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
54b4324fe138239d8684b1dd	260	Monte Carrubba Formation			Pedley, Martyn et al.	The Monte Carrubba Formation (Messinian, Sicily) and its correlatives: New light on basin-wide processes controlling sediment and biota distributions during the Palaeomediterranean–Mediterranean transition	Palaeogeography, Palaeoclimatology, Palaeoecology	253	2007	Elsevier	10.1016/j.palaeo.2007.06.009
5aba3998cf58f110658059ec	117	Location Calcite Dolomite			Walter, Benjamin F. et al.	Multi-reservoir fluid mixing processes in rift-related hydrothermal veins, Schwarzwald, SW-Germany	Journal of Geochemical Exploration	186	2018	Elsevier	10.1016/j.gexplo.2017.12.004
55b83d31e13823bd29ba865c	6399	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b83d31e13823bd29ba865c	3664	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3055ce138231cbdd6cf97	1225	Yafran Marl Member			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
58bf0a5acf58f17947438723	6	Hontomín mention			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
57177ecdcf58f1637fb099ed	447	Otoe Member	298.9	307	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
54d0272be13823b501cdbc75	272	Bear Rock Formation	359.2	416	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
559e58a2e138230816dadbe2	667	Kaibab Formation	270.6	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
56c1d9bbcf58f15c72c9075f	370	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
57a43018cf58f11204e17fe0	25	Lake Inflow Gypsum Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4327fe138239d868536c9	220	Middle Salwa Member			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
55b83d31e13823bd29ba865c	3809	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
59081969cf58f116699a134d	76	Curtis Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
59069dcecf58f1491d1b327d	69	Lexington mention	450	455.5	Coskren, Dennis	Minerals of Kentucky	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767295
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54b43246e138239d86849721	212	Sanford Formation	208.5	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5907a8f7cf58f1a944ce7ed3	174	Burlington Limestone	342.65	351.5	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
54b4328ce138239d86855aad	505	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
578b8ab6cf58f1645f54f0c6	61	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b83d31e13823bd29ba865c	6116	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c3540ea1faed655488c1248	120	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
55b83d31e13823bd29ba865c	7160	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2460	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	8061	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
572ce192cf58f134a3e8d070	436	Gyp mention			Johnson, Ronald C. et al.	Geology of tight oil and potential tight oil reservoirs in the lower part of the Green River Formation, Uinta, Piceance, and Greater Green River Basins, Utah, Colorado, and Wyoming	Scientific Investigations Report		2016	USGS	10.3133/sir20165008
55f4877fcf58f16256a22522	42	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5b6d3f1ecf58f193bb367046	65	Magnesian Limestone	251	299	Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
55c03cd3cf58f16e99a37419	40	Zaragoza Gypsum Formation	5.332	23.03	Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K
57a3dceccf58f1b8b5b032b5	264	Castile Formation	253.8	260.4	Kiro, Yael et al.	Environmental implications of salt facies in the Dead Sea	Geological Society of America Bulletin	128	2015	Geological Society of America	10.1130/b31357.1
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54bdcd82e138233c8bc4f7a2	222	Lias mention	170.9	208.5	Wignall, P.B.	Sedimentology of the Triassic-Jurassic boundary beds in Pinhay Bay (Devon, SW England)	Proceedings of the Geologists' Association	112	2001	Elsevier	10.1016/S0016-7878(01)80014-6
5907affacf58f1abf7d551aa	222	Lockport mention	424.1	428.9		Twenty-Fifth Rochester Mineralogical Symposium: Contributed Papers in Specimen Mineralogy	Rocks & Minerals	74	1999	Taylor and Francis	10.1080/00357529909602537
55b83d31e13823bd29ba865c	3646	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3181	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328be138239d8685567e	400	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
58d05f04cf58f143d83df298	225	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
5514907ce1382394b500cb75	222	Kuwait mention			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
54b43247e138239d86849b52	180	Santa-Lucia Formation			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b83d31e13823bd29ba865c	1202	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5906dd0fcf58f15fea53aef7	328	Oakville Sandstone	5.332	23.03	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b83d31e13823bd29ba865c	4004	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	568	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5c19917d1faed655488915d3	242	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
56c1d8a6cf58f15c72c9073f	197	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5c29ccf21faed655488aebf0	130	Unweighted Pair Group			Meslier, Victoria et al.	Fundamental drivers for endolithic microbial community assemblies in the hyperarid Atacama Desert	Environmental Microbiology	20	2018	Wiley	10.1111/1462-2920.14106
5906dd0fcf58f15fea53aef7	442	Glen Rose Limestone	65.5	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55c30f66cf58f1a8110b8d5d	50	Madison Limestone	318.1	359.2		Theme 4: The earth's surface Session 4:3: Rates and mechanisms of biogeochemical processes	Geochimica et Cosmochimica Acta	68	2004	Elsevier	10.1016/j.gca.2004.05.009
5734b312cf58f14dbc2c579f	462	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5bf90c4dcf58f1a9c3124ad5	87	Calcite Dolomite			Giustetto, Roberto et al.	Deterioration of building materials and artworks in the 'Santa Maria della Stella' church, Saluzzo (Italy): Causes of decay and possible remedies	Studies in Conservation	62	2017	Informa UK Limited	10.1080/00393630.2016.1217694
55b83d31e13823bd29ba865c	4606	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca16cf58f15c72c90624	67	Units Limestone			Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
54bf26f8e13823023e43db6f	603	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b690a7e138238e2d05483f	3790	Moreno Formation	65.5	99.6	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
54b43246e138239d86849872	319	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
56c1b69acf58f15c72c904b3	62	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
578b8ab6cf58f1645f54f0c6	68	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b83d31e13823bd29ba865c	5939	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559c3f39e138230816dad2ff	192	Tamarisk Member	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5908208bcf58f118fc585758	92	Roubidoux Formation	479.625	483.475	Prior, Harold L. and Williams, Glenn A.	Some Mines & Minerals of Morgan County, Missouri	Rocks & Minerals	71	1996	Taylor and Francis	10.1080/00357529.1996.9926859
578cff68cf58f101e2dda387	124	Gypsum Formation			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
578cff68cf58f101e2dda387	119	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
54b4328ae138239d868555 25	130	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55b7869fe13823bd29ba8231	2041	Carmel Formation	161.2	175.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b39c73e138231cbdd6d2c1	1166	Todilto mention	158.1835	162.45	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
5a3b865dcf58f103a802eed2	132	Karaman mention			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b3f64ce138231cbdd6d4cb	9181	Ro mention			Geological Survey (U.S.)	Geological Survey research 1971, Chapter B	Professional Paper		1971	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b83d31e13823bd29ba865c	5586	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	623	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
580e3bc6cf58f172dd1b8676	81	Gypsum Bambata Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
584aa62ccf58f19d6a5f583e	134	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57ec17eccf58f1ac335ac1b3	121	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
574372e7cf58f13435c1c112	204	Dingyuan Formation			Weiping, Tao	The Minerogenetic Series of Nonmetallic Mineral Deposits of China	Acta Geologica Sinica - English Edition	3	1990	Wiley-Blackwell	10.1111/j.1755-6724.1990.mp3002004.x
580e3bc6cf58f172dd1b8676	81	Gypsum Bambata Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b388d6e138231cbdd6d25d	1084	Gamma Member			Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
56c1c976cf58f15c72c9061b	31	Groden Formation	251	299	SPOTL, CHRISTOPH and BURNS, STEPHEN J.	Magnesite diagenesis in redbeds: a case study from the Permian of the Northern Calcareous Alps (Tyrol, Austria)	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb02010.x
5a2d0619cf58f19f7117d37a	101	CdB mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c86f1bcf58f141c6f7b1f8	441	Burns Formation	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
57516912cf58f129ff61ef40	57	Stewiacke mention			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
55988dfce1382390cc640e32	60	Palaeocene Yunlong Formation			Xue, Chunji et al.	Geologic, fluid inclusion and isotopic characteristics of the Jinding Zn–Pb deposit, western Yunnan, South China: A review	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2005.04.007
559dcd1ae138230816dad9be	6451	Burro Canyon Formation	99.6	145.5	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
559e58a2e138230816dadbe2	667	Kaibab Formation	270.6	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
57beed05cf58f1419cfbd6b3	118	Honggou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
54b4327fe138239d86853736	459	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
54b4328de138239d86855dfa	9	Dam Formation	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
550af900e1382369a6f92edb	167	Niobrara mention	83.6	97.233	Tuttle, Michele L.W. et al.	Contaminants from cretaceous black shale: II. Effect of geology, weathering, climate, and land use on salinity and selenium cycling, Mancos Shale landscapes, southwestern United States	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.011
558c6b00e13823109f3ed87c	1893	Creek mention			Brobst, Donald Albert and Tucker, Jerry D.	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803
54b4328ee138239d86855f3a	273	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
57beed05cf58f1419cfbd6b3	39	Xining Group	1.806	65.5	Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
572ee8a5cf58f11bb5bc1a43	448	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
56c1ea81cf58f15c72c908aa	250	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b83d31e13823bd29ba865c	7160	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2e020e138231cbdd6ced3	1524	Muddy Creek Formation	5.332	23.03	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
584aa62ccf58f19d6a5f583e	53	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5906cf0dcf58f15ad9553b8a	159	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
54b4328de138239d86855dfa	529	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
54b43250e138239d8684b46c	49	Mengyejing mention	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55b83d31e13823bd29ba865c	8084	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
59080b6ecf58f111237d82b7	203	Galena Group	460.9	471.8	Smith, Arthur E.	Illinois Mineral Locality Index	Rocks & Minerals	85	2010	Taylor and Francis	10.1080/00357521003727199
58b7df47cf58f18af629a04c	390	Beuda mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
56c1ca16cf58f15c72c90624	162	Zaragoza Formation	23.03	33.9	Valero-GarcÉs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
56830b14cf58f1479a0ab918	508	Tripoli Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54fb51c0e138239936c6d400	480	Sijes Formation	1.806	65.5	García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
55917250e13823109f3ef5b1	1639	Khorat Group	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
54e9f64ee138237cc9151412	418	Great Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324de138239d8684aa17	167	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57a39568cf58f1a4dc1b1106	91	Valley mention			Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
57c2e2adcf58f105aaed24f4	133	Gachsaran Formation	5.332	23.03	Mirnejad, H. et al.	Major, minor element chemistry and oxygen and hydrogen isotopic compositions of Marun oil-field brines, SW Iran: Source history and economic potential	Geological Journal	46	2011	Wiley	10.1002/gj.1226
55b6d6a7e13823bd29ba7dcc	7950	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	414	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b78281e13823bd29ba8218	4657	GPSM mention			Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5897de3fcf58f1081e8c64e1	570	Murray mention	0.0117	0.774	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
572ce093cf58f1342d44a0ff	323	Furnace Creek Formation	1.806	5.332	Calzia, J.P. et al.	Geology of the Greenwater Range, and the Dawn of Death Valley, California	Open-File Report		2016	USGS	10.3133/ofr20161064
5509217ee138238460c4f689	331	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56c1b69acf58f15c72c904b3	179	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	410	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
54b43247e138239d86849b52	84	Aroifilla Formation			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5514907ce1382394b500cb75	183	Dibdibba Formation			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
579f5bc9cf58f12a53c41a24	374	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	297	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e75c56e138237cc9150930	292	Marls Formation	199.6	228	Tritlla, J. and Cardellach, E.	Fluid inclusions in pre-ore minerals from the carbonate-hosted mercury deposits in the Espadán Ranges (eastern Spain)	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00158-1
559cd25ee138230816dad548	392	Verde mention	4.1777	8.342	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
5743f3cacf58f16102c3d8df	41	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
55b83d31e13823bd29ba865c	3157	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	425	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5732d749cf58f1be482cdc3e	202	Lisan Formation	0.01143	0.126	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
558d206fe13823109f3edc62	993	Moenkopi Formation	199.6	251	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
558cbceae13823109f3eda41	173	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
58c8ed8ccf58f1a71217fb6b	9	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b83d31e13823bd29ba865c	430	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55185d29e1382394b500db56	40	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
56c1ca16cf58f15c72c90624	159	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
558e4538e13823109f3ee24f	1546	Oakville Sandstone	5.332	23.03	Pettijohn, R. A.	Geochemistry of ground water in the Gulf Coast Aquifer systems, south-central United States	Water-Resources Investigations Report		1996	United States Geological Survey	10.3133/wri964107

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550dedb5e1382369a6f93ba1	493	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
55b83d31e13823bd29ba865c	1779	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	2010	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58b7df47cf58f18af629a04c	322	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
56c1b69acf58f15c72c904b3	104	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54d0272be13823b501cdbc75	242	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
55b83d31e13823bd29ba865c	3840	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	31	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b6d6a7e13823bd29ba7dcc	7169	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55af1c5ce13823763a830fe9	852	Salado mention	256.0278	262.2168	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54b4328fe138239d868561aa	155	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
559dcd1ae138230816dad9be	2190	Mancos Shale	65.5	145.5	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
557f199ce13823bc80ba25a0	1794	Salado mention	256.0278	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
572cdf45cf58f133c4f9d591	826	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
54b43246e138239d86849721	198	Culpeper mention	184.2	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
55b78281e13823bd29ba8218	848	Fourmile Draw Member	273.01	282	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	116	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55b6d6a7e13823bd29ba7dcc	8161	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328de138239d86855dfa	507	Abu Samrah Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b83d31e13823bd29ba865c	7352	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b8484be13823bd29ba869d	398	Chinle Formation	245	251	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
57ec17eccf58f1ac335ac1b3	22	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b7869fe13823bd29ba8231	2034	Arapien Formation	161.5	165.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58bf0a5acf58f17947438723	1	Hydrogeology Group			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
55b6d6a7e13823bd29ba7dcc	4080	Shale.brown Gypsum Sandstone			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	6612	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	6612	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
590769c6cf58f191e58edf9d	237	Boone Chert	318.1	359.2	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2433	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
59073182cf58f17e24d9c0bb	1099	Bearpaw Shale	70.575	75.9333	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
56c1b69acf58f15c72c904b3	104	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55f4877fcf58f16256a22522	108	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b3dfb4e138231cbdd6d442	1750	Dinwoody Formation	250.4	251	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
55b7869fe13823bd29ba8231	733	Warsaw Limestone	339	341	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56ac24facf58f19442534c08	60	Zaragoza Gypsum Formation	5.332	23.03	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
5c19917d1faed655488915e2	283	Tripoli Formation	5.332	7.246	Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
55b83d31e13823bd29ba865c	6609	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5aba3998cf58f110658059ec	118	Location Calcite Dolomite			Walter, Benjamin F. et al.	Multi-reservoir fluid mixing processes in rift-related hydrothermal veins, Schwarzwald, SW-Germany	Journal of Geochemical Exploration	186	2018	Elsevier	10.1016/j.gexplo.2017.12.004
55a3df0fe13823757cc6f032	520	Uinta Formation	33.9	55.8	Robson, Stanley G. and Saulnier, George J.	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8072
56c61f5ccf58f17493f87854	77	Feldspar Dolomite			Naftz, David L.	PREDICTIVE CAPABILITIES OF BATCH-EXTRACT EXPERIMENTS USING WATER FROM A COAL MINE	Journal of the American Water Resources Association	24	1988	Wiley-Blackwell	10.1111/j.1752-1688.1988.tb00939.x
55b83d31e13823bd29ba865c	7244	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	46	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
557cd3cfe138239225f869e5	2535	Blaine Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
579f5bc9cf58f12a53c41a24	90	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b6df25e13823bd29ba7dfe	221	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
57a39568cf58f1a4dc1b1106	93	Paradox mention	306	319.714	Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
580d82a3cf58f132b679c9de	9	Barite mention			González-Sánchez, Francisco et al.	Geological setting and genesis of stratabound barite deposits at Múzquiz, Coahuila in northeastern Mexico	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.10.008
55b83d31e13823bd29ba865c	4015	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54ddbfdae138238a47f968be	371	Hashepela Group			Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
54b43290e138239d86856489	27	Bellerophon mention	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55a751cee13823757cc6ff3c	548	Castile mention	259	259.51	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55b83d31e13823bd29ba865c	1298	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55917250e13823109f3ef5b1	841	Khok Kruat Formation	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
55b83d31e13823bd29ba865c	5586	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5514907ce1382394b500cb75	183	Dibdibba Formation			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
55b83d31e13823bd29ba865c	7352	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558eb5d6e13823109f3ee517	351	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b83d31e13823bd29ba865c	8508	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b83d31e13823bd29ba865c	6721	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e64c66e138237cc91504d3	81	Rustler mention	253.9652	256.0278	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b83d31e13823bd29ba865c	2709	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43254e138239d8684be46	82	Yunlong Formation	55.8	65.5	Tang, Yong-Yong et al.	Microscale sulfur isotopic compositions of sulfide minerals from the Jinding Zn–Pb deposit, Yunnan Province, Southwest China	Gondwana Research	26	2014	Elsevier	10.1016/j.gr.2013.07.021
55b83d31e13823bd29ba865c	4826	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5598a2d6e1382390cc640ea8	202	Salitre Formation			Misi, Aroldo et al.	Sediment hosted lead–zinc deposits of the Neoproterozoic Bambuí Group and correlative sequences, São Francisco Craton, Brazil: A review and a possible metallogenic evolution model	Ore Geology Reviews	26	2005	Elsevier	10.1016/j.oregeorev.2004.12.004
56c1cb24cf58f15c72c90642	59	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
557cd3cfe138239225f869e5	1994	Flowerpot Shale	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
557f199ce13823bc80ba25a0	474	IIIII Sandstone			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57760111cf58f134d11ea726	927	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
54d2216be13823302d02428b	475	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
580d82a3cf58f132b679c9de	23	Cupido Formation	112	125	González-Sánchez, Francisco et al.	Geological setting and genesis of stratabound barite deposits at Múzquiz, Coahuila in northeastern Mexico	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.10.008
54d8fa70e138238471e80530	444	Castile Formation	253.8	260.4	Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
54b4328de138239d86855c34	163	Cßayirhan mention			Orß, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
584aa62ccf58f19d6a5f583e	490	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	3786	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	134	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
584aa62ccf58f19d6a5f583e	131	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b43246e138239d86849919	757	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
584aa62ccf58f19d6a5f583e	393	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
56c1b69acf58f15c72c904b3	150	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55917250e13823109f3ef5b1	1639	Khorat Group	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	92	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
57760111cf58f134d11ea726	925	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
55b83d31e13823bd29ba865c	4736	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1b6a3cf58f15c72c904b4	135	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
5731caeecf58f192f36c5766	275	Karstryggen Fm	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5a2d0619cf58f19f7117d37a	53	CdB mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
5906dd0fcf58f15fea53aef7	89	Yegua Formation	33.9	55.8	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
57484ab3cf58f13effae7ac5	261	Mabou Group	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf900cf58f13d86a1bdc8	294	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b83d31e13823bd29ba865c	8331	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b31f28e138231cbdd6d027	3021	Funeral Formation	1.806	5.332	Hunt, Charles Butler and Mabey, Don R.	Stratigraphy and structure, Death Valley, California	Professional Paper		1966	United States Geological Survey	10.3133/pp494A
54b43247e138239d86849b52	208	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b83d31e13823bd29ba865c	5527	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1591	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57516912cf58f129ff61ef40	46	Watering Brook Formation			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
584aa178cf58f19c3c0fb294	182	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
57501d73cf58f16a9feeb329	207	Sainte-Foy mention	531.85	586.9	Bérubé, Marc-André et al.	Black shale heaving at Sainte-Foy, Quebec, Canada	Canadian Journal of Earth Sciences	23	1986	Canadian Science Publishing	10.1139/e86-163
56de7f80cf58f18eca0d2b65	229	End-Member Librarya Group			Baldridge, Alice M.	Mars remote-sensing analog studies in the Badwater Basin, Death Valley, California	Journal of Geophysical Research	109	2004	Wiley-Blackwell	10.1029/2004JE002315
558cbceae13823109f3eda41	167	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b7869fe13823bd29ba8231	2008	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55f38765cf58f16256a21e5e	52	Zaragoza Gypsum Formation	5.332	23.03	Moret-Fernández, D. and Herrero, J.	Effect of gypsum content on soil water retention	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.06.030
55b83d31e13823bd29ba865c	7146	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b8484be13823bd29ba869d	396	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
5731caeecf58f192f36c5766	143	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
56c1cb24cf58f15c72c90642	56	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55b6dc28e13823bd29ba7dec	15668	See mention			Schrader, Frank Charles et al.	Useful minerals of the United States	Bulletin		1917	United States Geological Survey	10.3133/b624
57131885cf58f17cb0fd1f40	10	Belayin Formation			Kovalevich, V. M. et al.	Brine inclusions in halite and the origin of the Middle Devonian Prairie Evaporites of Western Canada; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.228
57760111cf58f134d11ea726	153	Chugwater mention	201.4	247.2	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
57ec17eccf58f1ac335ac1b3	11	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
575c4f4ecf58f16b97cc4df6	261	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b2e020e138231cbdd6ced3	136	Thumb Member	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
5734b312cf58f14dbc2c579f	496	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b6d6a7e13823bd29ba7dcc	5713	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b3055ce138231cbdd6cf97	3273	Mizda mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b6d6a7e13823bd29ba7dcc	10270	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ae138239d8685557f	391	Raisby Formation	251.902	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57321bc8cf58f1a0ac39199e	51	Ehbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	3669	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
590769c6cf58f191e58edf9d	40	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
55b2c402e138231cbdd6ce3e	606	Molas Formation	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55b83d31e13823bd29ba865c	835	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f49f72cf58f16256a225dc	133	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55c01a9ecf58f16e99a37305	577	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55990e4de1382390cc6410c3	501	Sp mention			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
54b4328fe138239d868561aa	167	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b83d31e13823bd29ba865c	409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55a8145ce13823757cc70446	1187	Castile Formation	253.8	260.4	Bain, G. L. and Brown, C. E.	Evaluation of the Durham Triassic basin of North Carolina and techniques used to characterize its waste-storage potential	Open-File Report		1981	United States Geological Survey	
5897de3fcf58f1081e8c64e1	306	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
56c458a5cf58f17493f85551	164	Calcite Dolomite			Luzón, A. et al.	Evolution from a freshwater to saline lake: a climatic or hydrogeological change? The case of Gallocanta Lake (northeast Spain)	Hydrological Processes	21	2007	Wiley-Blackwell	10.1002/hyp.6243
58bf0a5acf58f17947438723	1	Hydrogeology Group			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
5907affacf58f1abf7d551aa	155	Rondout Formation	417.1	420.15		Twenty-Fifth Rochester Mineralogical Symposium: Contributed Papers in Specimen Mineralogy	Rocks & Minerals	74	1999	Taylor and Francis	10.1080/00357529909602537
5a2d0619cf58f19f7117d37a	112	CdB mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
56c1cb24cf58f15c72c90642	56	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54b4327ee138239d86853305	78	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
5749d6cacf58f1b0d4fcbc51	117	Majiagou Formation	443.7	488.3	ZHANG, Jing et al.	Controlling effects of paleo-climate and paleo-ocean on formation of carbonate reservoirs	Petroleum Exploration and Development	41	2014	Elsevier	10.1016/S1876-3804(14)60016-1
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5ce2f9b20b45c76caf8ae21e	430	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5d35e56c0b45c76caf93f034	1038	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
57beed05cf58f1419cfbd6b3	188	Honggou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
55b83d31e13823bd29ba865c	381	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558c4ae2e13823109f3ed7ce	2767	Belden mention	307.5	323.2	U.S. Geological Survey	Geological Survey research 1968, Chapter C	Professional Paper		1968	United States Geological Survey	10.3133/pp600C
558cbceae13823109f3eda41	168	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
54b4324fe138239d8684b1dd	334	Monte Carrubba Formation			Pedley, Martyn et al.	The Monte Carrubba Formation (Messinian, Sicily) and its correlatives: New light on basin-wide processes controlling sediment and biota distributions during the Palaeomediterranean–Mediterranean transition	Palaeogeography, Palaeoclimatology, Palaeoecology	253	2007	Elsevier	10.1016/j.palaeo.2007.06.009
5c2b5da21faed655488b16ed	391	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
54b4328de138239d86855c34	152	Kirmir Formation	5.332	23.03	Orta, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
557f7e9ee13823bc80ba2712	745	Muddy Creek Formation	5.332	23.03	Bachman, George Odell and Machette, Michael N.	Calcic soils and calcretes in the southwestern United States	Open-File Report		1977	United States Geological Survey	
5681b377cf58f1ba274d4854	217	Qom Formation	5.332	23.03	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b83d31e13823bd29ba865c	3181	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b67f4fe1382373b63b7864	158	Magnesian Limestone	251	299	Bath, A.H et al.	18O16O and 2H1H changes during progressive hydration of a Zechstein anhydrite formation	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90122-0
5732d749cf58f1be482cdc3e	202	Lisan Formation	0.01143	0.126	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	2300	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e97acfe138237cc915120b	121	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b7869fe13823bd29ba8231	2003	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a751cee13823757cc6ff3c	577	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
5906dd0fcf58f15fea53aef7	54	Switch Sandstone			Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5c2bea2e1faed655488b221b	107	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
558e3447e13823109f3ee1ef	178	Castile Formation	253.8	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	6099	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	9182	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	4647	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58d05105cf58f13f39efd424	647	Kirschberg Evaporite Member	100.5	113	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
56c1b6a3cf58f15c72c904b4	250	Cattolica mention			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
5c2b5da21faed655488b16ed	271	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
572cdf45cf58f133c4f9d591	831	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b2c402e138231cbdd6ce3e	648	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
56830b14cf58f1479a0ab918	24	Gessoso Solfifera Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b83d31e13823bd29ba865c	3562	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57ec2895cf58f1b1c442edb0	420	Clear Fork Formation	270.6	299	Simon, Sharane S.T. and Gibling, Martin R.	Fine-grained meandering systems of the Lower Permian Clear Fork Formation of north-central Texas, USA: Lateral and oblique accretion on an arid plain	Sedimentology		2016	Wiley	10.1111/sed.12322
55b83d31e13823bd29ba865c	8584	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1b69acf58f15c72c904b3	196	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
5d150bd20b45c76caf904e78	66	Otto Fjord Formation	299	359.2	Harrington, Elise M. et al.	A Polarimetric SAR and Multispectral Remote Sensing Approach for Mapping Salt Diapirs: Axel Heiberg Island, NU, Canada	Canadian Journal of Remote Sensing	45	2019	Informa UK Limited	10.1080/07038992.2019.1610656
578cff68cf58f101e2dda387	58	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	3364	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55baa3b5e1382373b63b89e7	359	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
58b95b1bcf58f166c35f1298	68	Jebs Formation			Dhahri, Ferid and Boukadi, Noureddine	Triassic salt sheets of Mezzouna, Central Tunisia: New comments on Late Cretaceous halokinesis and geodynamic evolution of the northern African margin	Journal of African Earth Sciences		2017	Elsevier	10.1016/j.jafrearsci.2017.01.016
55b6d6a7e13823bd29ba7dcc	7587	Roswell mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54e9f64ee138237cc9151412	378	Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
557cd3cfe138239225f869e5	268	Fort Dodge Formation	145.5	199.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c86f1bcf58f141c6f7b1f8	445	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55b7869fe13823bd29ba8231	3038	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e272cf58f1479a0ab716	593	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
579ed180cf58f1030df9c51e	304	Minas Viejas Formation			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
58d03bf3cf58f138516d1200	1491	Kirschberg Evaporite Member	100.5	113	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5517568be1382394b500d6fd	207	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
578cff68cf58f101e2dda387	124	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
5731caeecf58f192f36c5766	233	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5734b312cf58f14dbc2c579f	101	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b6d6a7e13823bd29ba7dcc	7423	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58d05f04cf58f143d83df298	221	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
54b4324ee138239d8684ae63	313	Palaeogene Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
572cdf45cf58f133c4f9d591	739	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b83d31e13823bd29ba865c	1449	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	184	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
55a7c745e13823757cc70251	17	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4328fe138239d868561aa	125	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
57ec17eccf58f1ac335ac1b3	23	Loeme Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b4328ee138239d86855f3a	163	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
57550804cf58f1be554fdfa8	147	Billings mention	33.9	37.71	Penner, E. et al.	Investigation of heave in Billings shale by mineralogical and iogeochemical methods	Canadian Geotechnical Journal	7	1970	Canadian Science Publishing	10.1139/t70-040
55b83d31e13823bd29ba865c	8402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
578cff68cf58f101e2dda387	124	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	8799	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43246e138239d86849721	353	Newark Supergroup	65.5	251	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
579f5bc9cf58f12a53c41a24	189	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	2694	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bfef15e1382330560e0801	235	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
55b83d31e13823bd29ba865c	6257	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557ff66ee13823bc80ba2925	1038	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
559e58a2e138230816dadbe2	672	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54b4328ee138239d868561688	285	Calcite Dolomite			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
55b83d31e13823bd29ba865c	8799	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6107	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ce138239d86855b3a	45	Kohat mention	37.2	48.6	Saleemi, Akhtar Ali and Ahmed, Zulfiqar	Mineral and chemical composition of Karak mudstone, Kohat Plateau, Pakistan: implications for smectite-illitization and provenance	Sedimentary Geology	130	2000	Elsevier	10.1016/S0037-0738(99)00113-X
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55b300e5e138231cbdd6cf7b	6215	Ag Millerite Dolomite			Heyl, Allen V. et al.	The Geology of the Upper Mississippi Valley Zinc-Lead District	Professional Paper		1959	United States Geological Survey	10.3133/pp309
55baa3b5e1382373b63b89e7	338	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b83d31e13823bd29ba865c	7998	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6646	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	841	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
580e3bc6cf58f172dd1b8676	291	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
579f5bc9cf58f12a53c41a24	306	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b6d6a7e13823bd29ba7dcc	10617	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55c01a9ecf58f16e99a37305	34	Tamarisk Member	251.902	273.01	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
590785cdcf58f19bf342565e	359	Silurian-age Niagarian Dolomite			Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
59af7305cf58f113fee1a3a0	328	Yesares Member	5.332	7.246	Gázquez, Fernando et al.	Simultaneous analysis of 17 O/ 16 O, 18 O/ 16 O and 2 H/ 1 H of gypsum hydration water by cavity ring-down laser spectroscopy	Rapid Communications in Mass Spectrometry	29	2015	Wiley-Blackwell	10.1002/rcm.7312
55b67f4fe1382373b63b7864	90	Seaham Formation	251.902	273.01	Bath, A.H et al.	18O16O and 2H1H changes during progressive hydration of a Zechstein anhydrite formation	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90122-0
58c8ed8ccf58f1a71217fb6b	182	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55baa3b5e1382373b63b89e7	338	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5897de3fcf58f1081e8c64e1	306	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55c2ce13cf58f1a8110b8b48	403	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
557cd3cfe138239225f869e5	4050	Cedar Mesa Member	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d6a7e13823bd29ba7dcc	7359	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1cb24cf58f15c72c90642	342	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54c04652e1382389c54c3686	210	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
59069dcecf58f1491d1b327e	78	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
5734b312cf58f14dbc2c579f	373	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58b7df47cf58f18af629a04c	283	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	324	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	8762	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
584aa62ccf58f19d6a5f583e	170	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4324de138239d8684aa17	98	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
590785cdcf58f19bf342565e	51	Mississippian-age Warsaw Formation			Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
55b6d6a7e13823bd29ba7dcc	3616	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5506a9ebe1382326932d924e	316	Samra Formation			Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55b78281e13823bd29ba8218	910	Artesia mention	259.51	273.01	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54b4328ce138239d86855a1e	468	Puente La Reina Formation			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
5518b748e1382394b500dcce	2	Zaragoza mention	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
57dff9fccf58f1a8e0d13cbe	55	Expanded Granular Sludge Bed			Kijjanapanich, Pimluck et al.	Biological sulfate removal from gypsum contaminated construction and demolition debris	Journal of Environmental Management		2013	Elsevier	10.1016/j.jenvman.2013.09.025
55b83d31e13823bd29ba865c	259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c01a9ecf58f16e99a37305	34	Magenta Dolomite	251.902	273.01	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
56c1c976cf58f15c72c9061b	380	Groden Formation	251	299	SPOTL, CHRISTOPH and BURNS, STEPHEN J.	Magnesite diagenesis in redbeds: a case study from the Permian of the Northern Calcareous Alps (Tyrol, Austria)	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb02010.x
55b83d31e13823bd29ba865c	6142	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557cdb22e138239225f86a07	3592	Feet mention			Dane, C.H.	Geology of the Salt Valley anticline and adjacent areas, Grand County, Utah	Bulletin		1935	United States Geological Survey	10.3133/b863
5506a9ebe1382326932d924e	357	Lisan Fm	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
574372e7cf58f13435c1c112	204	Dingyuan Formation			Weiping, Tao	The Minerogenetic Series of Nonmetallic Mineral Deposits of China	Acta Geologica Sinica - English Edition	3	1990	Wiley-Blackwell	10.1111/j.1755-6724.1990.mp3002004.x
590769c6cf58f191e58edf9d	145	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
55c01a9ecf58f16e99a37305	316	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54b43245e138239d8684952a	214	Carmel Formation	161.2	175.6	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
55b83d31e13823bd29ba865c	4646	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57115a80cf58f199e340c7d5	63	Malm Formation			Hanor, J. S.	A Model for the Origin of Large Carbonate- and Evaporite-Hosted Celestine (SrSO4) Deposits	Journal of Sedimentary Research	74	2004	Society for Sedimentary Geology	10.1306/092203740168
575c4f4ecf58f16b97cc4df6	468	Mineral Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
579b56dacf58f13d24f0d7ef	73	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5509217ee138238460c4f689	122	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c01a9ecf58f16e99a37305	300	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55ae0df7e13823763a830928	1393	Artesia Group	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
590785cdcf58f19bf342565e	246	Gower Dolomite	423	433.4	Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
55b83d31e13823bd29ba865c	394	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5731caeecf58f192f36c5766	67	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
5598f6b0e1382390cc64103f	181	Daye Formation	245	251	Xie, Guiqing et al.	Geochemical constraints on Cu–Fe and Fe skarn deposits in the Edong district, Middle–Lower Yangtze River metallogenic belt, China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.08.005
55b83d31e13823bd29ba865c	8658	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43246e138239d86849919	757	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b83d31e13823bd29ba865c	2709	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58cddf34cf58f1260c03638e	2	Francis Group	305.425	305.7125	Raven, John A. and Knoll, Andrew H.	Non-Skeletal Biomineralization by Eukaryotes: Matters of Moment and Gravity	Geomicrobiology Journal	27	2010	Taylor and Francis	10.1080/01490451003702990
55f4877fcf58f16256a22522	49	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5a2f778acf58f10a775a37f3	220	Longares Formation			Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b83d31e13823bd29ba865c	381	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e97acfe138237cc915120b	34	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b83d31e13823bd29ba865c	5472	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca03cf58f15c72c90620	144	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54b43246e138239d86849919	581	Blomidon Formation	203.6	216.5	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
54b4327ee138239d868533ae	98	Calcite Aragonite Dolomite			Xiao, Jun et al.	Geochemistry and solute sources of surface waters of the Tarim River Basin in the extreme arid region, NW Tibetan Plateau	Journal of Asian Earth Sciences		2012	Elsevier	10.1016/j.jseaes.2012.04.009
54c04652e1382389c54c3686	228	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
57a43018cf58f11204e17fe0	25	Lake Inflow Gypsum Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55c121fdcf58f1a8110b7ddc	29	Lisan mention	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
559d4d6ee138230816dad784	60	Castile Formation	253.8	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
55b7869fe13823bd29ba8231	629	Michigan mention	342.0833	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54cc5427e138236bcc929f92	28	Yeso Formation	251	299	Böhlke, J.K. and Irwin, J.J.	Brine history indicated by argon, krypton, chlorine, bromine, and iodine analyses of fluid inclusions from the Mississippi Valley type lead-fluorite-barite deposits at Hansonburg, New Mexico	Earth and Planetary Science Letters	110	1992	Elsevier	10.1016/0012-821X(92)90038-W
55f28e79cf58f16256a217ad	115	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
55b83d31e13823bd29ba865c	3809	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5734b312cf58f14dbc2c579f	451	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55c35bc5cf58f1a8110b8fcc	95	Sedom Formation	5.332	23.03	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
580e3bc6cf58f172dd1b8676	81	Gypsum Bambata Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
57beed05cf58f1419cfbd6b3	159	Qijiachuan Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
55af1c5ce13823763a830fe9	742	Mlnnelusa Formation			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
584aa62ccf58f19d6a5f583e	53	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
557cd3cfe138239225f869e5	863	Pease River Group	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5522d17be138236e51a9adb4	27	Zaragoza Formation	23.03	33.9	Sancho, C. et al.	Palaeoenvironmental interpretation of Late Pleistocene–Holocene morphosedimentary record in the Valsalada saline wetlands (Central Ebro Basin, NE Spain)	Journal of Arid Environments	75	2011	Elsevier	10.1016/j.jaridenv.2011.02.006
55b83d31e13823bd29ba865c	7352	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1d607cf58f15c72c9071a	230	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55b6d6a7e13823bd29ba7dcc	1427	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55c121fdcf58f1a8110b7ddc	120	Lisan Formation	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
54f9553fe138239936c6c748	38	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
558ecdcbe13823109f3ee5af	321	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
56c1ea81cf58f15c72c908aa	352	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	2032	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559c3f39e138230816dad2ff	498	Rustler Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55f5d3d0cf58f16256a22df9	95	Maikop Fm			Kokh, Svetlana N. et al.	Heavy carbon travertine related to methane generation: A case study of the Big Tarkhan cold spring, Kerch Peninsula, Crimea	Sedimentary Geology		2015	Elsevier	10.1016/j.sedgeo.2015.05.005
55067531e1382326932d9171	68	Baza mention			García-Aguilar, José Manuel et al.	A reassessment of the evidence for hydrothermal activity in the Neogene-Quaternary lacustrine environments of the Baza basin (Betic Cordillera, SE Spain) and its paleoecological implications	Quaternary Science Reviews		2015	Elsevier	10.1016/j.quascirev.2015.02.001
56c1cb24cf58f15c72c90642	150	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54b43247e138239d86849b52	155	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5509217ee138238460c4f689	179	Castile Formation	253.8	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5a39ee95cf58f1314cf12808	331	Lisan Formation	0.01143	0.126	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
56c1c32bcf58f15c72c9059b	74	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
55b6d6a7e13823bd29ba7dcc	1992	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
557c7a3ae138239225f8687b	193	Radhuma Limestone			Roberts, Ralph Jackson et al.	Mineral deposits in western Saudi Arabia; a preliminary report	Open-File Report		1975	United States Geological Survey	
54b4328de138239d86855dfa	161	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b83d31e13823bd29ba865c	428	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c3e6d6c1faed655488cd35a	365	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b83d31e13823bd29ba865c	3439	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	2900	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
550afe00e1382369a6f92ef4	28	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
579f5bc9cf58f12a53c41a24	245	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b75a36e13823bd29ba8116	2159	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
58bf0a5acf58f17947438723	6	Hontomín mention			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
57a43018cf58f11204e17fe0	693	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b2e020e138231cbdd6ced3	1203	Lovell Wash mention	11.995	12.36	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
54b43247e138239d86849b52	180	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
58c8ed8ccf58f1a71217fb6b	150	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
57a43018cf58f11204e17fe0	647	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55917250e13823109f3ef5b1	1634	Ratburi Group	251	299	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b78281e13823bd29ba8218	898	Queen mention	261.1975	264.91	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5c2ad1181faed655488b08a2	89	Marl Dozahir mention	33.9	55.8	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
558cbceae13823109f3eda41	168	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
54b4328ae138239d868553d8	221	Gebel El Rusas Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
5731caeecf58f192f36c5766	67	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
54b4328ee138239d86855f3a	273	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55b83d31e13823bd29ba865c	153	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55a7c745e13823757cc70251	17	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	1966	Muddy Creek Formation	5.332	23.03	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54f9553fe138239936c6c748	60	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b6d6a7e13823bd29ba7dcc	9681	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7562	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b3055ce138231cbdd6cf97	1056	Tiji Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
56c1cb24cf58f15c72c90642	92	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
559e58a2e138230816dadbe2	574	Verde mention	4.1777	8.342	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b78281e13823bd29ba8218	2841	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
57321bc8cf58f1a0ac39199e	32	Portland Sandstone	175.6	199.6	D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
54b4328ee138239d86855f3a	232	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
56c1b69acf58f15c72c904b3	60	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b7869fe13823bd29ba8231	2052	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b83d31e13823bd29ba865c	6004	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1730	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3441	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5833ce7ecf58f1110fa956dd	191	Stratigraphic Depth Calcite Dolomite			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
550a102ae138238460c4fb93	282	Sherridon mention			Moncur, M.C. et al.	Release, transport and attenuation of metals from an old tailings impoundment	Applied Geochemistry	20	2005	Elsevier	10.1016/j.apgeochem.2004.09.019
5515012fe1382394b500cd4d	68	Calcite Gypsum Dolomite			Badía, David et al.	Influence of slope and parent rock on soil genesis and classification in semiarid mountainous environments	Geoderma		2013	Elsevier	10.1016/j.geoderma.2012.10.020
5a850dffcf58f13f065e41c5	61	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
54c029e6e1382389c54c35a6	4	Lisan Formation	0.01143	0.126	Möller, P. et al.	Hydrochemical processes in the lower Jordan valley and in the Dead Sea area	Chemical Geology	239	2007	Elsevier	10.1016/j.chemgeo.2006.12.004
54c04652e1382389c54c3686	62	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54e66657e138237cc915052a	20	Cathedral Limestone	382.7	407.6	Yonge, C.J. and Krouse, H. Roy	The origin of sulphates in Castleguard Cave, Columbia Icefields, Canada	Chemical Geology: Isotope Geoscience section	65	1987	Elsevier	10.1016/0168-9622(87)90018-2
5897de3fcf58f1081e8c64e1	306	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54b4328ce138239d86855a1e	367	Zaragoza mention	23.03	33.9	Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
5c19917d1faed655488915d3	300	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
57ec17eccf58f1ac335ac1b3	108	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
550dedb5e1382369a6f93ba1	58	Calatayud Gypsum Formation			Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
57a43018cf58f11204e17fe0	754	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	5074	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	1717	Moenkopi Formations Cutler Formation			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
59080b6ecf58f111237d82b7	271	Stewart mention			Smith, Arthur E.	Illinois Mineral Locality Index	Rocks & Minerals	85	2010	Taylor and Francis	10.1080/00357521003727199
5a2f778acf58f10a775a37f3	363	Castile Formation	253.8	260.4	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
584aa62ccf58f19d6a5f583e	87	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
557cc6e1e138239225f869b5	714	Ogallala Formation	-5.5012E-05	23.03	Boettcher, Arnold J. and Horr, C. Albert	Geology and ground-water resources in eastern Cheyenne and Kiowa Counties, Colorado	Water Supply Paper		1964	United States Geological Survey	10.3133/wsp1779N
54b43249e138239d8684a19a	481	Tripoli mention	5.332	7.246	Blanc-Valleron, M.-M et al.	Sedimentary, stable isotope and micropaleontological records of paleoceanographic change in the Messinian Tripoli Formation (Sicily, Italy)	Palaeogeography, Palaeoclimatology, Palaeoecology	185	2002	Elsevier	10.1016/S0031-0182(02)00302-4
55a82328e13823757cc7049a	1321	Gypsum Spring Formation	168.65	174.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55b83d31e13823bd29ba865c	3885	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6257	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54fb51c0e138239936c6d400	303	Monte Amarillo Member			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
55b83d31e13823bd29ba865c	6113	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4327fe138239d868536c9	187	Kalavassos mention			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5c2fe60d1faed655488b6bad	225	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b83d31e13823bd29ba865c	396	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	8985	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ee138239d86855fe9	348	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
5906dd0fcf58f15fea53aef7	198	Goliad Sandstone	2.1519	5.333	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54e9f64ee138237cc9151412	202	Great Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
55b78281e13823bd29ba8218	855	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
579f5bc9cf58f12a53c41a24	85	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b75a36e13823bd29ba8116	2172	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b7869fe13823bd29ba8231	1566	Creek mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
584aa62ccf58f19d6a5f583e	244	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	7039	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b7869fe13823bd29ba8231	1725	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3672	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5990	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5731caeecf58f192f36c5766	275	Karstryggen Fm	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
54bf26f8e13823023e43db6f	587	Carmel Formation	161.2	175.6	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55739462e13823980c49121c	86	Callovian-Oxfordian Clay Formation				Contents	Procedia Earth and Planetary Science		2013	Elsevier	10.1016/S1878-5220(13)00316-0
579f5bc9cf58f12a53c41a24	216	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b4328ae138239d86855525	40	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
56831341cf58f1479a0ab983	334	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5900379ecf58f12ec2d28d28	156	Rock Formation				World News on Mineral Occurrences	Rocks & Minerals	25	1950	Taylor and Francis	10.1080/00357529.1950.11768350
57ec1479cf58f1ab19b2dd9d	885	Sijes Formation	1.806	65.5	Schreiber, B. Charlotte and Tabakh, Mohamed El	Deposition and early alteration of evaporites	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00002.x
5506a9ebe1382326932d924e	357	Lisan Fm	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55b83d31e13823bd29ba865c	6656	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2e020e138231cbdd6ced3	886	Thumb Member	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
55b6d6a7e13823bd29ba7dcc	3228	Alamogordo mention	351.5	358.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	3984	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558c8afce13823109f3ed928	139	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
56c1c32bcf58f15c72c9059b	64	Gardena Sandstone	260.4	270.6	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579f5bc9cf58f12a53c41a24	154	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	4186	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fa710e13823109f3eeaeb	961	James Hardie Gypsum mention			Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7984	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b43246e138239d86849919	696	Blomidon Formation	203.6	216.5	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
558d4970e13823109f3edd1b	284	Kalataer Formation			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
578fb2c8cf58f1bdcd2df236	412	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b7869fe13823bd29ba8231	2025	Kaibab Formation	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55f28e79cf58f16256a217ad	115	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
55b83d31e13823bd29ba865c	7999	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	366	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	6407	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f2130cf58f119c9de4679	235	Lead Limestone			Valero, Antonio et al.	How to account for mineral depletion. The exergy and economic mineral balance of Spain as a case study	Ecological Indicators		2014	Elsevier	10.1016/j.ecolind.2014.07.021
572ecdb4cf58f1177819e19e	3	Zechstein mention	251.902	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b7869fe13823bd29ba8231	460	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56831341cf58f1479a0ab983	118	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
56830b14cf58f1479a0ab918	443	Rosetta Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5897de3fcf58f1081e8c64e1	171	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54e9f64ee138237cc9151412	459	Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
55b83d31e13823bd29ba865c	3801	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	316	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5c3540ea1faed655488c1248	168	Arenazzolo mention	5.332	7.246	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
55a82328e13823757cc7049a	1203	Picard Shale	161.5	201.4	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
558e3447e13823109f3ee1ef	426	Culebra Dolomite	251	299	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
55b83d31e13823bd29ba865c	4200	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c19917d1faed655488915e2	283	Tripoli Formation	5.332	7.246	Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
55f2d67dcf58f16256a219a7	136	Cameli Formation			Budakoglu, Murat et al.	The rare earth element geochemistry on surface sediments, shallow cores and lithological units of Lake Acıgöl basin, Denizli, Turkey	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.05.016
5590c038e13823109f3ef1c7	85	Magenta Dolomite	251.902	273.01	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
558e077de13823109f3ee0e7	1945	Ricardo Formation	5.333	23.03	Manger, George Edward	Porosity and bulk density of sedimentary rocks	Bulletin		1963	United States Geological Survey	
5b6f081fcf58f1539ffa6761	266	Germik Formation			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2260	Maccrady Formation	340.525	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fa710e13823109f3eeaeb	500	Carmel Formation	161.2	175.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	2062	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ee138239d8684ae63	247	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
55b83d31e13823bd29ba865c	7402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54b4328ae138239d86855525	6	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55b75a36e13823bd29ba8116	2159	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b6d6a7e13823bd29ba7dcc	7571	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
579f5bc9cf58f12a53c41a24	402	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55a82328e13823757cc7049a	1154	Saude mention	145	251.902	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
57436148cf58f12dd96016ef	28	Sanhedong mention	199.6	228	GAO, Lan et al.	New Progress in Study of the Ore-bearing Black Limestone of Jinding Giant Zn-Pb Deposit, Yunnan, Southwest China	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12368_6
580e3bc6cf58f172dd1b8676	965	Fredericksburg mention	100.5	104.6666	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b83d31e13823bd29ba865c	2553	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559c3f39e138230816dad2ff	147	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5599341be1382390cc641189	190	Gypsum Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
56830b14cf58f1479a0ab918	266	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5598dfe1e1382390cc640fbc	88	Huanglong mention	299	359.2	Du, Yilun et al.	Petrology and geochemistry of Silurian–Triassic sedimentary rocks in the Tongling region of Eastern China: Their roles in the genesis of large stratabound skarn ore deposits	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.11.021
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5731caeecf58f192f36c5766	233	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b6d6a7e13823bd29ba7dcc	4321	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5906dd0fcf58f15fea53aef7	286	Loma Plata Limestone	99.6	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55ae5088e13823763a830ae1	953	Newark mention	192.9	237	Bain, George L.	Feasibility study of East Coast Triassic basins for waste storage	Open-File Report		1972	United States Geological Survey	10.3133/ofr7315
54fb51c0e138239936c6d400	265	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
55a751cee13823757cc6ff3c	983	Seven Rivers Fm	251	299	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55b6d6a7e13823bd29ba7dcc	1427	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
550b221de1382369a6f92fa8	140	Calcite Dolomite			Re, V. et al.	Processes affecting groundwater quality in arid zones: The case of the Bou-Areg coastal aquifer (North Morocco)	Applied Geochemistry		2013	Elsevier	10.1016/j.apgeochem.2013.03.011
54b4325ae138239d8684d019	1268	Grudja Formation	65.5	145.5		11TH International Conference of the Geological Society of Africa Earth Resources for Africa Edited by H.E. Frimmel	Journal of African Earth Sciences	28	1999	Elsevier	10.1016/S0899-5362(99)00028-7
5c2fe60d1faed655488b6bad	241	Altash Formation			Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559e58a2e138230816dadbe2	706	Verde mention	4.1777	8.342	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56c1c32bcf58f15c72c9059b	34	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55f4877fcf58f16256a22522	556	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54b4324ee138239d8684ae63	247	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
55c319eacf58f1a8110b8db1	34	Sedom Fm	5.332	23.03	Klein-BenDavid, Ofra et al.	The evolution of marine evaporitic brines in inland basins: The Jordan-Dead Sea Rift valley	Geochimica et Cosmochimica Acta	68	2004	Elsevier	10.1016/j.gca.2003.08.002
584aa62ccf58f19d6a5f583e	55	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
557ff66ee13823bc80ba2925	1259	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
54b43245e138239d8684952a	214	Carmel Formation	161.2	175.6	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
5b6f081fcf58f1539ffa6761	266	Germik Formation			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
54e52d30e138237cc9150011	223	Todilto Formation	145.5	199.6	Szynkiewicz, Anna et al.	Efflorescence as a source of hydrated sulfate minerals in valley settings on Mars	Earth and Planetary Science Letters		2014	Elsevier	10.1016/j.epsl.2014.02.035
55800703e13823bc80ba297d	1399	Paradise Formation	26.6225	32.38	Cecil, C. B. and Edgar, N. Terence.	Predictive stratigraphic analysis; concept and application	Bulletin		1994	United States Geological Survey	
54b4328de138239d86855dfa	526	Al Nakhsh Member	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
54b43276e138239d86851d3b	144	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
559d924be138230816dad8a7	59	Hibr Formation			Smith, Cole L.	Brines of Wadi as Sirhan, Kingdom of Saudi Arabia	Open-File Report		1980	United States Geological Survey	10.3133/ofr801261
57a43018cf58f11204e17fe0	880	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56c1c32bcf58f15c72c9059b	2	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b4328ae138239d86855393	110	Dibdibba Formation			Khalaf, Fikry I. et al.	Mineralogical composition and potential sources of dust fallout deposits in Kuwait, Northern Arabian Gulf	Sedimentary Geology	42	1985	Elsevier	10.1016/0037-0738(85)90047-8
55f4877fcf58f16256a22522	49	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54b43246e138239d86849872	132	Mirikata Formation	5.332	23.03	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
584aa62ccf58f19d6a5f583e	207	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57a43018cf58f11204e17fe0	296	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b68616e138230a74d1556c	87	Tromen Group			de la Vega, Matias et al.	Quaternary volcanic–sedimentary sequences and evolution of the Llancanelo Lake region (Southern Mendoza, Western Argentina) evidenced from geoelectric methods	Journal of South American Earth Sciences		2012	Elsevier	10.1016/j.jsames.2012.08.002
5ab92ea3cf58f16811edda29	264	Cl mention			Jones, Samantha Elsie et al.	A multi-proxy approach to understanding complex responses of salt-lake catchments to climate variability and human pressure: A Late Quaternary case study from south-eastern, Spain	Quaternary Science Reviews	184	2018	Elsevier	10.1016/j.quascirev.2017.12.015

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58b7df47cf58f18af629a04c	142	Banyoles Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
56c1c32bcf58f15c72c9059b	45	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
55b7869fe13823bd29ba8231	3048	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	240	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
57131acecf58f17d8d881dcb	82	Belayim Formation	11.608	15.97	Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
57dff9fccf58f1a8e0d13cbe	55	Expanded Granular Sludge Bed			Kijjanapanich, Pimluck et al.	Biological sulfate removal from gypsum contaminated construction and demolition debris	Journal of Environmental Management		2013	Elsevier	10.1016/j.jenvman.2013.09.025
584aa62ccf58f19d6a5f583e	76	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5734b312cf58f14dbc2c579f	543	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55a82328e13823757cc7049a	1214	Piper Formation	149.2	161.5	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55b78281e13823bd29ba8218	799	Yeso mention	275.2575	286.225	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
558df7d7e13823109f3ee082	668	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5743f3cacf58f16102c3d8df	137	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
57c86f1bcf58f141c6f7b1f8	9	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
56c1c32bcf58f15c72c9059b	74	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
5c2fe60d1faed655488b6bad	166	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55c85be2cf58f1a8110ba4b2	167	KCl Limestone			Pickard, William F.	Geochemical constraints on sustainable development: Can an advanced global economy achieve long-term stability?	Global and Planetary Change	61	2008	Elsevier	10.1016/j.gloplacha.2007.10.005
55b83d31e13823bd29ba865c	2069	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3dfb4e138231cbdd6d442	1733	Ervay mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
54c04652e1382389c54c3686	127	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55b6d6a7e13823bd29ba7dcc	7525	Pecos mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
584aa62ccf58f19d6a5f583e	53	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
558df7d7e13823109f3ee082	1009	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
578cff68cf58f101e2dda387	121	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
57c87288cf58f142fe30b3f7	360	Shoemaker Formation			Dixon, Emily M. et al.	Assessing hydrodynamic effects on jarosite dissolution rates, reaction products, and preservation on Mars	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004779
5783caf0cf58f13fb21dfa1a	42	Hisarcık mention	11.608	15.97	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
57613d6fcf58f138292ba937	482	Bozkır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
55b83d31e13823bd29ba865c	2855	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1b69acf58f15c72c904b3	104	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
5733f2e2cf58f12e47457e00	74	Brazer Dolomite	318.1	359.2	Joyce M. Budai et al.	Burial Dedolomite in the Mississippian Madison Limestone, Wyoming and Utah Thrust Belt	SEPM Journal of Sedimentary Research	Vol. 54	1984	Society for Sedimentary Geology	10.1306/212f83ff-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	8502	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57464969cf58f165ff103f08	324	Blomidon Formation	203.6	216.5	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
55b83d31e13823bd29ba865c	8586	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3390	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c0d379cf58f16e99a378b9	41	Castile Formation	253.8	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57ec17eccf58f1ac335ac1b3	109	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b4328be138239d86855631	243	Zaviye Member			İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
54b4328ae138239d8685544	15	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
54b43246e138239d86849919	581	Blomidon Formation	203.6	216.5	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b7869fe13823bd29ba8231	629	Michigan mention	342.0833	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ada974e13823763a830682	449	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
54bfef15e1382330560e0801	254	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
5a2d0619cf58f19f7117d37a	171	CdB Formation			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
54f98125e138239936c6c811	121	Brasso Formation	5.332	23.03	Wilson, Brent	A lagoonal interlude with occasional hypersalinity in the deposition of the Early–Middle Miocene Brasso Formation of Trinidad	Journal of South American Earth Sciences	29	2010	Elsevier	10.1016/j.jsames.2009.10.003
54b4327ce138239d86852db0	25	Argana mention			Hafid, M.	Triassic–early Liassic extensional systems and their Tertiary inversion, Essaouira Basin (Morocco)	Marine and Petroleum Geology	17	2000	Elsevier	10.1016/S0264-8172(98)00081-6
59073182cf58f17e24d9c0bb	1107	Colorado Shale	93.9	100.5	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
558b4ac1e13823109f3ed293	1595	Coal mention	251	260.4	Zimmerman, Everett Alfred and Collier, K. R.	Ground-water data, Green River basin, Wyoming	Open-File Report		1985	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	6067	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b3055ce138231cbdd6cf97	1082	Nubian Sandstone	65.5	145.5	Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b83d31e13823bd29ba865c	1502	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5743f3cacf58f16102c3d8df	53	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
54b4327fe138239d86853736	257	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
54beddace13823023e43d931	81	Furnace Creek Formation	1.806	5.332	Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
55b67f4fe1382373b63b7864	158	Magnesian Limestone	251	299	Bath, A.H et al.	18O16O and 2H1H changes during progressive hydration of a Zechstein anhydrite formation	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90122-0
55b6d4bfe13823bd29ba7dc0	335	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5506a9ebe1382326932d924e	369	Middle Member			Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
5c19917d1faed655488915d3	929	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b83d31e13823bd29ba865c	401	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5743f3cacf58f16102c3d8df	68	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
56c1c976cf58f15c72c9061b	335	Groden Formation	251	299	SPOTL, CHRISTOPH and BURNS, STEPHEN J.	Magnesite diagenesis in redbeds: a case study from the Permian of the Northern Calcareous Alps (Tyrol, Austria)	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb02010.x
54f9553fe138239936c6c748	177	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
54b4328de138239d86855dfa	46	Dam Formation	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
56ac2bfdcf58f19442534c89	51	Zaragoza Formation	23.03	33.9	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d6a7e13823bd29ba7dcc	10348	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	2541	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54d3e320e138238471e7efcd	392	Serra Geral Formation	121.4	137.4	Bonotto, Daniel Marcos	Hydro(radio)chemical relationships in the giant Guarani aquifer, Brazil	Journal of Hydrology	323	2006	Elsevier	10.1016/j.jhydrol.2005.09.007
55b83d31e13823bd29ba865c	2957	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	144	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b7277de13823bd29ba7fc3	2468	Leadville Limestone	318.1	359.2	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	1971	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7557	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	2023	Curtis Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
585b656bcf58f1a722daaf49	612	Zaragoza Gypsum Formation	5.332	23.03	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
56a40443cf58f1944252b0ad	447	Planum Boreum mention			Murchie, Scott L. et al.	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2009JE003342
55b83d31e13823bd29ba865c	199	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5897de3fcf58f1081e8c64e1	435	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5ce2f9b20b45c76caf8ae21e	505	Engihoul Formation			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	5438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	712	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ae138239d8685544	223	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
55b33375e138231cbdd6d08f	1125	Lisan Formation	0.01143	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
59065e90cf58f130f8d92aa2	175	Diopside Dioptase Dolomite			Kelly, Charles J.	Mineral Identifications	Rocks & Minerals	42	1967	Taylor and Francis	10.1080/00357529.1967.11765257
54b4328ae138239d86855525	13	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
54b4328be138239d8685567e	462	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
57c19e14cf58f16bf61df64c	326	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
56e2c03acf58f11c57ad6fd2	122	Calcite Dolomite			McDowell, Meryl L. and Hamilton, Victoria E.	Seeking phyllosilicates in thermal infrared data: A laboratory and Martian data case study	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2008JE003317
572ce192cf58f134a3e8d070	555	Gyp mention			Johnson, Ronald C. et al.	Geology of tight oil and potential tight oil reservoirs in the lower part of the Green River Formation, Uinta, Piceance, and Greater Green River Basins, Utah, Colorado, and Wyoming	Scientific Investigations Report		2016	USGS	10.3133/sir20165008
55b83d31e13823bd29ba865c	3672	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6398	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ce138239d86855b5a	39	Hondo Formation			Taberner, C. et al.	The use of environmental markers to distinguish marine vs. continental deposition and to quantify the significance of recycling in evaporite basins	Sedimentary Geology	137	2000	Elsevier	10.1016/S0037-0738(00)00105-6
5731caeecf58f192f36c5766	275	Karstryggen Fm	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b6d6a7e13823bd29ba7dcc	8769	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5a39ee95cf58f1314cf12808	334	Amora Member	0.01143	1.806	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
572ecdb4cf58f1177819e19e	312	Zechstein mention	251.902	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55087dc1e138237a6f73910e	55	Mancos Shale	65.5	145.5	Presser, Theresa S. and Swain, Walter C.	Geochemical evidence for Se mobilization by the weathering of pyritic shale, San Joaquin Valley, California, U.S.A.	Applied Geochemistry	5	1990	Elsevier	10.1016/0883-2927(90)90066-E
55f2d67dcf58f16256a219a7	136	Cameli Formation			Budakoglu, Murat et al.	The rare earth element geochemistry on surface sediments, shallow cores and lithological units of Lake Acıgöl basin, Denizli, Turkey	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.05.016
55b7869fe13823bd29ba8231	631	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7bdc9e13823757cc7020e	218	Colorado mention	90.825	95.55	Collins, Donley S. et al.	Bibliography for update and revision of U.S.G.S. Bulletin 1114, Minerals of Colorado -- a 100 year record, by Edwin B. Eckel, Part A - Paper copy --Bibliography data file disks	Open-File Report		1989	United States Geological Survey	10.3133/ofr89206A
5ce2f9b20b45c76caf8ae21e	455	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b83d31e13823bd29ba865c	6438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
572cdf45cf58f133c4f9d591	257	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b7277de13823bd29ba7fc3	2468	Leadville Limestone	318.1	359.2	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
579402adcf58f19c7e2e0966	97	St. Sebastià Gypsum Formation			Taberner, C. et al.	Basin infill architecture and evolution from magnetostratigraphic cross-basin correlations in the southeastern Pyrenean foreland basin	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1155:biaaef>2.3.co;2
57a43018cf58f11204e17fe0	604	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
558c8afce13823109f3ed928	355	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
54b4328ae138239d86855525	14	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
584aa62ccf58f19d6a5f583e	133	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5907a8f7cf58f1a944ce7ed3	26	Cheltenham Formation	306	319	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
55b83d31e13823bd29ba865c	5002	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b86c42cf58f1055db5c6fa	312	Burano Formation	237	251	Marion, G.M. et al.	Modeling calcium sulfate chemistries with applications to Mars	Icarus		2016	Elsevier	10.1016/j.icarus.2016.05.016
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
557f7360e13823bc80ba26f4	1151	River mention			Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	2722	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5682dd16cf58f1479a0ab6de	399	Laga mention			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
55b73032e13823bd29ba8000	379	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55b83d31e13823bd29ba865c	4398	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7562	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	8807	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5907be14cf58f1b18607fd22	59	XS Dolomite			Geyne, A. R. et al.	The Pachuca-Real Del Monte Mining District	Rocks & Minerals	45	1970	Taylor and Francis	10.1080/00357529.1970.11763776
55a751cee13823757cc6ff3c	968	Seven Rivers Formation	251	299	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
5775c2fecf58f123560e8b05	991	Red Bed	100.5	145	Le Roy Fairchild, H.	Proceedings of the Thirteenth Annual Meeting, held at Albany, New York, December 27, 28, and 29, 1900, including Proceedings of the Second Annual Meeting of the Cordilleran Section, held at San Francisco, December 28 and 29, 1900	Geological Society of America Bulletin	12	1901	Geological Society of America	10.1130/gsab-12-445
578cff68cf58f101e2dda387	21	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
59069dcecf58f1491d1b327e	79	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
5907a8f7cf58f1a944ce7ed3	28	Loutre Formation	307	315.2	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
5c2b5da21faed655488b16ed	271	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
55087dc1e138237a6f73910e	145	Moreno Formation	65.5	99.6	Presser, Theresa S. and Swain, Walter C.	Geochemical evidence for Se mobilization by the weathering of pyritic shale, San Joaquin Valley, California, U.S.A.	Applied Geochemistry	5	1990	Elsevier	10.1016/0883-2927(90)90066-E
558ec3e3e13823109f3ee570	105	Rustler Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
579f5bc9cf58f12a53c41a24	277	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
580e3bc6cf58f172dd1b8676	493	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b2e020e138231cbdd6ced3	524	Siltstone Sandstone	121.4	122.4925	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
58d05105cf58f13f39efd424	434	Passaic Formation	199.6	228	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
5ce2f9b20b45c76caf8ae21e	321	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b3dfb4e138231cbdd6d442	1707	Forelle mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
55b83d31e13823bd29ba865c	7462	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57beed05cf58f1419cfbd6b3	80	Qijiachuan Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
59073182cf58f17e24d9c0bb	314	Pierre Shale	65.5	145.5	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
57c19e14cf58f16bf61df64c	171	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
550f21dce1382369a6f940aa	78	Zaragoza Gypsum Formation	5.332	23.03	Guinea, Ander et al.	Geoelectrical prospecting of glauberite deposits in the Ebro basin (Spain)	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.03.007
572ee8a5cf58f11bb5bc1a43	448	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
57ec17eccf58f1ac335ac1b3	5	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
572cdf45cf58f133c4f9d591	823	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b83d31e13823bd29ba865c	741	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
580e3bc6cf58f172dd1b8676	276	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
5908198ccf58f116699a13db	193	Christian County Rogers Group			Goldstein, Alan	Kentucky Mineral: Locality Index	Rocks & Minerals	81	2006	Taylor and Francis	10.3200/RMIN.81.6.420-440
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
54b4324fe138239d8684b069	243	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
5734b312cf58f14dbc2c579f	482	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
550af900e1382369a6f92edb	23	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from cretaceous black shale: II. Effect of geology, weathering, climate, and land use on salinity and selenium cycling, Mancos Shale landscapes, southwestern United States	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.011
559c3f39e138230816dad2ff	200	Forty-niner Member			Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
57ec2895cf58f1b1c442edb0	46	Lueders Formation	273.01	282	Simon, Sharane S.T. and Gibling, Martin R.	Fine-grained meandering systems of the Lower Permian Clear Fork Formation of north-central Texas, USA: Lateral and oblique accretion on an arid plain	Sedimentology		2016	Wiley	10.1111/sed.12322
5c19917d1faed655488915d3	241	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559e58a2e138230816dadbe2	707	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
584aa62ccf58f19d6a5f583e	55	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4328ee138239d86855f3a	45	Krzyżanowice Formation			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55c3965ccf58f1a8110b90be	153	Heletz mention			Chan, Lui-Heung et al.	The behavior of lithium and its isotopes in oilfield brines: evidence from the Heletz-Kokhav field, Israel	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00800-6
5897de3fcf58f1081e8c64e1	49	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
58b7df47cf58f18af629a04c	123	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
58b7df47cf58f18af629a04c	218	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b6d6a7e13823bd29ba7dcc	9163	Torrance County Feet Limestone			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
577959b6cf58f16b6b61b62a	230	California mention			INGERSON, EARL	NONRADIOGENIC ISOTOPES IN GEOLOGY: A REVIEW	Geol Soc America Bull	64	1953	Geological Society of America	10.1130/0016-7606(1953)64[301:niigar]2.0.co;2
55b83d31e13823bd29ba865c	7160	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1266	Moccasin Creek Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7726	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
579f5bc9cf58f12a53c41a24	149	Trubi Formation	1.806	5.332	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5502e189e1382326932d7bd2	305	Dolostones Chert			Melezhik, Victor A. et al.	Extreme 13Ccarb enrichment in ca. 2.0 Ga magnesite–stromatolite–dolomite–`red beds' association in a global context: a case for the world-wide signal enhanced by a local environment	Earth-Science Reviews	1-2	1999	Elsevier	10.1016/S0012-8252(99)00044-6
579f5bc9cf58f12a53c41a24	30	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	7703	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43290e138239d86856489	77	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
57a43018cf58f11204e17fe0	279	LAKE MEAD REGION Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54e8ae2de138237cc9150ec9	1396	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
5897de3fcf58f1081e8c64e1	310	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5897de3fcf58f1081e8c64e1	306	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5734b312cf58f14dbc2c579f	1	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b83d31e13823bd29ba865c	6772	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5509217ee138238460c4f689	82	Culebra Dolomite	251	299	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b83d31e13823bd29ba865c	4870	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca16cf58f15c72c90624	159	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
56c1ea81cf58f15c72c908aa	217	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b83d31e13823bd29ba865c	7452	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ea81cf58f15c72c908aa	327	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
580e3bc6cf58f172dd1b8676	286	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57ec16f5cf58f1abd84ca0b7	387	Morrison mention	145	174.7	Jennings, Debra S. et al.	Comparison of modern and ancient barite-bearing acid-sulphate soils using micromorphology, geochemistry and field relationships	Sedimentology	62	2015	Wiley	10.1111/sed.12177
5b6f081fcf58f1539ffa6761	154	Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
54f9553fe138239936c6c748	75	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b7869fe13823bd29ba8231	3010	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c4f4ecf58f16b97cc4df6	41	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	6810	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	12	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
56c1d8a6cf58f15c72c9073f	179	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5906dd0fcf58f15fea53aef7	451	Glen Rose Limestone	65.5	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
579f5bc9cf58f12a53c41a24	251	Ponda Fm			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b7869fe13823bd29ba8231	2017	Kaibab Formation	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57ec17eccf58f1ac335ac1b3	97	Pinda Group	99.6	112	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b4328de138239d86855c34	160	Gypsiferous Claystone Member			Orłi, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54e49f08e138237cc914fdcc	74	Bay Fiord Formation	459.975	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558d4970e13823109f3edd1b	168	Nugusibulake Group			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
550c651ce1382369a6f9352b	383	Magnesian Limestone	251	299	BELL, F.G.	Chapter 12 Construction Materials	Engineering Geology and Geotechnics		1980	Elsevier	10.1016/B978-0-408-00355-1.50015-1
54e7a556e138237cc9150a6b	290	Warman mention			Van Stempvoort, Dale R. et al.	Sources and dynamics of sulfur in weathered till, Western Glaciated Plains of North America	Chemical Geology	1-4	1994	Elsevier	10.1016/0009-2541(94)90081-7
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b83d31e13823bd29ba865c	4478	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
572ee8a5cf58f11bb5bc1a43	276	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55b2f105e138231cbdd6cf26	4171	Carmel Formation	161.2	175.6	U.S. Geological Survey	Geological Survey research 1967, Chapter D	Professional Paper		1967	United States Geological Survey	10.3133/pp575D
579f5bc9cf58f12a53c41a24	72	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	7244	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
584aa178cf58f19c3c0fb294	182	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b83d31e13823bd29ba865c	7386	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c3540ea1faed655488c1248	165	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
56c1a95dcf58f15c72c903aa	1	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5c19917d1faed655488915d3	424	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
579f5bc9cf58f12a53c41a24	149	Trubi Formation	1.806	5.332	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b43247e138239d86849b52	242	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55c01a9ecf58f16e99a37305	34	Tamarisk Member	251.902	273.01	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f2ced1cf58f16256a21973	182	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55f4877fcf58f16256a22522	51	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55c13e85cf58f1a8110b7ec2	1422	Antrim mention	358.9	382.7		Goldschmidt Abstracts 2009 – K	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.05.009
54b4328ce138239d86855aad	392	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b83d31e13823bd29ba865c	8176	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1cb24cf58f15c72c90642	189	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
56c1ca16cf58f15c72c90624	162	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
54b4324de138239d8684aba6	75	Gessoso Solfifera Formation	5.332	7.246	Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
5579e2a0e138232a625d7143	5332	Feet mention			Hewett, D.F. et al.	Mineral resources of the region around Boulder Dam	Bulletin		1936	United States Geological Survey	10.3133/b871
557bfbc7e138239225f86664	402	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
57177ecdcf58f1637fb099ed	345	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55b7869fe13823bd29ba8231	2229	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c04652e1382389c54c3686	302	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55b75a36e13823bd29ba8116	1851	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
5733f2e2cf58f12e47457e00	115	Brazer Dolomite	318.1	359.2	Joyce M. Budai et al.	Burial Dedolomite in the Mississippian Madison Limestone, Wyoming and Utah Thrust Belt	SEPM Journal of Sedimentary Research	Vol. 54	1984	Society for Sedimentary Geology	10.1306/212f83ff-2b24-11d7-8648000102c1865d
54b43281e138239d86853bfd	214	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b83d31e13823bd29ba865c	402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57ec17eccf58f1ac335ac1b3	420	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b83d31e13823bd29ba865c	7352	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b2c402e138231cbdd6ce3e	648	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
56c1d8a6cf58f15c72c9073f	197	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
56c1c470cf58f15c72c905bd	203	Fenfeng Formation	443.7	488.3	Rodriguez-Aranda, Juan P. et al.	Lower Miocene gypsum palaeokarst in the Madrid Basin (central Spain): dissolution diagenesis, morphological relics and karst end-products	Sedimentology	49	2002	Wiley-Blackwell	10.1046/j.1365-3091.2002.00504.x
55ae0ba7e13823763a83091d	768	Woods Ranch Member	273.01	282	Wenrich, K. J. et al.	A mineralized breccia pipe in Mohawk Canyon; lithologic and geophysical logs	Open-File ReportA mineralized breccia pipe in Mohawk Canyon, Arizona; lithologic and geophysical logs		1986	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	435	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55990e4de1382390cc6410c3	501	Sp Gp			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
57c1a08dcf58f16cbd62157f	286	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
56c1c470cf58f15c72c905bd	203	Fenfeng Formation	443.7	488.3	Rodriguez-Aranda, Juan P. et al.	Lower Miocene gypsum palaeokarst in the Madrid Basin (central Spain): dissolution diagenesis, morphological relics and karst end-products	Sedimentology	49	2002	Wiley-Blackwell	10.1046/j.1365-3091.2002.00504.x
557cd3cfe138239225f869e5	1110	Blaine mention	268.51	275.2575	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57320459cf58f19ced0f7bc5	292	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
54b43284e138239d868544db	170	Calcite mention			Glaccum, Robert A and Prospero, Joseph M	Saharan aerosols over the tropical North Atlantic — Mineralogy	Marine Geology	37	1980	Elsevier	10.1016/0025-3227(80)90107-3
55b6dc28e13823bd29ba7dec	21949	See mention			Schrader, Frank Charles et al.	Useful minerals of the United States	Bulletin		1917	United States Geological Survey	10.3133/b624
5ce2f9b20b45c76caf8ae21e	384	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56830b14cf58f1479a0ab918	512	Tripoli Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
558d4970e13823109f3edd1b	274	Aertashi Formation	55.8	65.5	Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
559c3f39e138230816dad2ff	195	Magenta Dolomite	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
559cd25ee138230816dad548	392	Verde mention	4.1777	8.342	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
558eb5d6e13823109f3ee517	418	Gatuna Formation	0.01143	1.806	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b3055ce138231cbdd6cf97	3407	Marada mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
57beed05cf58f1419cfbd6b3	102	Qijiachuan Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
55b6d6a7e13823bd29ba7dcc	1680	SANDSTONE mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1b69acf58f15c72c904b3	150	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
54b43254e138239d8684be46	81	Yunlong Formation	55.8	65.5	Tang, Yong-Yong et al.	Microscale sulfur isotopic compositions of sulfide minerals from the Jinding Zn–Pb deposit, Yunnan Province, Southwest China	Gondwana Research	26	2014	Elsevier	10.1016/j.gr.2013.07.021
55b6d6a7e13823bd29ba7dcc	7561	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58bb7f59cf58f1878850d92a	415	Duperow Fm.	359.2	385.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
557cd3cfe138239225f869e5	3109	Minnelusa Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
557bfbc7e138239225f86664	414	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	710	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328be138239d86855631	367	Sarlyar Limestone			İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
5731caeecf58f192f36c5766	275	Karstryggen Fm	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
56c1cb24cf58f15c72c90642	92	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54b43247e138239d86849b52	296	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5599341be1382390cc641189	211	Tajuña Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
572cdf45cf58f133c4f9d591	707	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
54c04652e1382389c54c3686	184	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54e7c15ae138237cc9150ae2	74	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c0f018cf58f16e99a3799f	30	Salado Formation	251	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
55b7869fe13823bd29ba8231	1101	Kirschberg Evaporite Member	100.5	113	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579411f4cf58f1a07169666f	40	Creede Formation	23.03	33.9	Finkelstein, D. B. et al.	Origin and diagenesis of lacustrine sediments, upper Oligocene Creede Formation, southwestern Colorado	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1175:oadols>2.3.co;2
55b83d31e13823bd29ba865c	1208	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	307	Beuda mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
57ec2895cf58f1b1c442edb0	436	Clear Fork Formation	270.6	299	Simon, Sharane S.T. and Gibling, Martin R.	Fine-grained meandering systems of the Lower Permian Clear Fork Formation of north-central Texas, USA: Lateral and oblique accretion on an arid plain	Sedimentology		2016	Wiley	10.1111/sed.12322
56ac24facf58f19442534c08	63	Zaragoza Formation	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
55b6d6a7e13823bd29ba7dcc	4451	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	4581	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2887	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3671	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5506a9ebe1382326932d924e	316	Samra Formation			Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
5ce2f9b20b45c76caf8ae21e	321	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54bfef15e1382330560e0801	230	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
57c9f7a1cf58f1bbcffcfdff	341	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
55b78281e13823bd29ba8218	935	Rustler mention	253.9652	256.0278	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	186	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55baa3b5e1382373b63b89e7	199	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b6bd25e13823bd29ba7d29	530	Kyanite Limestone			Tooker, Edwin Wilson and Beeby, David J.	Industrial minerals in California; economic importance, present availability, and future development	Bulletin		1990	United States Geological Survey	10.3133/b1958
5833ce7ecf58f1110fa956dd	43	Calatrava Limestone			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
58d05f04cf58f143d83df298	225	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
557cbb8ae138239225f8697d	2899	Verde Formation	5.332	23.03	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
54f9553fe138239936c6c748	54	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b33067e138231cbdd6d081	864	Glen Canyon mention	170.9	201.4	Gregory, H.E.	The geology and geography of the Paunsaugunt region, Utah	Professional Paper		1951	United States Geological Survey	10.3133/pp226
54b4328ae138239d86855525	130	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
57dff9fccf58f1a8e0d13cbe	1	Resource Recovery Chair Group			Kijjanapanich, Pimluck et al.	Biological sulfate removal from gypsum contaminated construction and demolition debris	Journal of Environmental Management		2013	Elsevier	10.1016/j.jenvman.2013.09.025
55b6d6a7e13823bd29ba7dcc	8111	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b3dfb4e138231cbdd6d442	1652	Ld Sandstone			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
58b7df47cf58f18af629a04c	340	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bf7e39e13823023e43de1a	270	Bellerophon Formation	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55b83d31e13823bd29ba865c	3829	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	2167	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
590785cdcf58f19bf342565e	358	Pinicon Ridge mention	382.7	393.3	Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
55b3055ce138231cbdd6cf97	3280	Ghanam Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
559dcd1ae138230816dad9be	2065	Mancos Shale	65.5	145.5	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
5682e830cf58f1479a0ab75f	588	Castile Formation	253.8	260.4	Schr��der, Stefan et al.	A depositional model for the terminal Neoproterozoic-Early Cambrian Ara Group evaporites in south Oman	Sedimentology	50	2003	Wiley-Blackwell	10.1046/j.1365-3091.2003.00587.x
57464969cf58f165ff103f08	98	Blomidon Formation	203.6	216.5	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
55b83d31e13823bd29ba865c	8235	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c98a6ee4e85ba2e7cc08a76	41	Mountain Limestone			Ivanovski, Nikola et al.	Microvertebrates from the basal Rhaetian Bone Bed (latest Triassic) at Aust Cliff, S.W. England	Proceedings of the Geologists' Association	129	2018	Elsevier	10.1016/j.pgeola.2018.06.002
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54df4a35e138238a47f96f37	183	Cherty mention			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
56b60579cf58f14c238d3700	84	Daisy Bed	470	485.4	KING, R. J.	Minerals explained 13: Gypsum	Geology Today	6	1990	Wiley-Blackwell	10.1111/j.1365-2451.1990.tb00742.x
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55f28e79cf58f16256a217ad	78	Yolüstü Formation			Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
5b6f081fcf58f1539ffa6761	266	Germik Formation			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
55b83d31e13823bd29ba865c	7182	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
590785cdcf58f19bf342565e	284	Aplington Dolomite	360.425	365	Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
55c01a9ecf58f16e99a37305	300	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55a751cee13823757cc6ff3c	1206	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55b2c402e138231cbdd6ce3e	697	Hermosa Formation	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5b6d936dcf58f1a92c2d33b5	48	Daisy Bed	470	485.4	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
55b83d31e13823bd29ba865c	7779	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	754	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
578cff68cf58f101e2dda387	124	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
56830c1fcf58f1479a0ab928	107	Hevyon Member			Sandler, Amir et al.	Early formation of K-feldspar in shallow-marine sediments at near-surface temperatures (southern Israel): evidence from K-Ar dating	Sedimentology	51	2004	Wiley-Blackwell	10.1111/j.1365-3091.2004.00626.x
584aa62ccf58f19d6a5f583e	81	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54c0cf26e1382389c54c3932	267	Norseman mention	37.71	47.8	Benison, Kathleen Counter and Bowen, Brenda Beitler	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
54df7758e138238a47f96ff3	220	Gypsum Calcite Dolomite			Snyder, M. et al.	Redox zonation at the saline-influenced boundaries of a permeable surficial aquifer: effects of physical forcing on the biogeochemical cycling of iron and manganese	Journal of Hydrology	296	2004	Elsevier	10.1016/j.jhydrol.2004.03.019
55b6d6a7e13823bd29ba7dcc	7678	Red Bluff mention	0.0117	33.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	4646	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b78281e13823bd29ba8218	798	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5906dd0fcf58f15fea53aef7	420	Fredericksburg Formation	100.5	104.6666	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5682e272cf58f1479a0ab716	475	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56831341cf58f1479a0ab983	8	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b83d31e13823bd29ba865c	6118	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5b6f081fcf58f1539ffa6761	734	Belayim Formation	11.608	15.97	Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
584aa62ccf58f19d6a5f583e	133	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b6d6a7e13823bd29ba7dcc	9182	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
578cff68cf58f101e2dda387	42	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
577bdee8cf58f15bef495d06	257	Gypsum Spring Member	170.225	170.9	HEARD, HUGH C. and RUBEY, WILLIAM W.	Tectonic Implications of Gypsum Dehydration	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[741:tiogd]2.0.co;2
55b690a7e138238e2d05483f	3444	Spearfish mention	201.4	269.635	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b7869fe13823bd29ba8231	629	Michigan mention	342.0833	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7678	Red Bluff mention	0.0117	33.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55ad3126e13823763a8303a0	207	Rustler mention	253.9652	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54b4328de138239d86855dfa	183	Salwa Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
57a43018cf58f11204e17fe0	682	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4328ee138239d86855f3a	193	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
54e8ae2de138237cc9150ec9	1325	Durham mention			Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
55b83d31e13823bd29ba865c	7771	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55990036e1382390cc641074	157	Uragen mention			Xue, Chunji et al.	Geology, geochemistry and genesis of the Cretaceous and Paleocene sandstone- and conglomerate-hosted Uragen Zn–Pb deposit, Xinjiang, China: A review	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.06.005
54b43250e138239d8684b46c	6	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
59079ad6cf58f1a3f1fe48e7	588	Tymochtee Dolomite	416	443.7	Carlson, Ernest H.	Ohio Mineral Locality Index	Rocks & Minerals	65	1990	Taylor and Francis	10.1080/00357529.1990.11761719
55b75a36e13823bd29ba8116	2049	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
57760111cf58f134d11ea726	805	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
55b83d31e13823bd29ba865c	5529	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1cb24cf58f15c72c90642	59	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
5783caf0cf58f13fb21dfa1a	481	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
54b4328ee138239d86855f3a	232	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55b83d31e13823bd29ba865c	3881	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
580e3bc6cf58f172dd1b8676	85	Bambata mention	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
57c1a06bcf58f16cbd621551	97	Mavqi'im Formation			Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
55b83d31e13823bd29ba865c	2930	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5731caeecf58f192f36c5766	86	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	2771	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2fe60d1faed655488b6bad	168	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5515012fe1382394b500cd4d	68	Calcite Gypsum Dolomite			Badía, David et al.	Influence of slope and parent rock on soil genesis and classification in semiarid mountainous environments	Geoderma		2013	Elsevier	10.1016/j.geoderma.2012.10.020
5748f823cf58f170c57fbbd7	102	Codroy Group	318.1	359.2	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
558e3447e13823109f3ee1ef	199	Rustler Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
58b7df47cf58f18af629a04c	550	Besalu Fm.			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	7771	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	419	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557cbb8ae138239225f8697d	1423	Verde mention	4.1777	8.342	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
54b47dabe138239e89d63a32	198	Space mention			Hildyard, Rebecca C. et al.	Microstructural analysis of anhydrite rocks from the Triassic Evaporites, Umbria-Marche Apennines, Central Italy: An insight into deformation mechanisms and possible slip systems	Journal of Structural Geology	31	2009	Elsevier	10.1016/j.jsg.2008.10.009
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2ad1181faed655488b08a2	103	Red mention	324.4643	324.8857	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
55b30ea3e138231cbdd6cfcd	916	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
550aa1a2e138238460c4fdf5	198	Baza Formation			Hidalgo, M.Carmen and Cruz-Sanjulián, Javier	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
55b6f685e13823bd29ba7e86	754	Gypsum Jasper Kaolinite Limestone			Moore, Bernard Nettleton	Nonmetallic mineral resources of eastern Oregon	Bulletin		1937	United States Geological Survey	10.3133/b875
55b83d31e13823bd29ba865c	3357	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d4bfe13823bd29ba7dc0	72	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b83d31e13823bd29ba865c	8032	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.525	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558d0009e13823109f3edbbc	1776	Vicksburg Group	27.82	33.9	Anderson, R. Ernest et al.	Geologic and hydrologic summary of salt domes in Gulf Coast region of Texas, Louisiana, Mississippi, and Alabama	Open-File Report		1973	United States Geological Survey	
55917250e13823109f3ef5b1	1650	Maha Sarakam Formation	65.5	145.5	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	68	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b83d31e13823bd29ba865c	7160	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6810	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4324de138239d8684aba6	145	Gesso Fm			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
55b83d31e13823bd29ba865c	7402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5732d749cf58f1be482cdc3e	202	Lisan Formation	0.01143	0.126	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	5936	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c0cf26e1382389c54c3932	90	Norseman mention	37.71	47.8	Benison, Kathleen Counter and Bowen, Brenda Beitler	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
54e9f64ee138237cc9151412	459	Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b2c402e138231cbdd6ce3e	666	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
558d206fe13823109f3edc62	3075	Barstow mention	13.2725	15.44	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
57126a16cf58f140fa5c33f2	177	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b83d31e13823bd29ba865c	1186	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557b5a2ae138239225f86399	421	Pomorzany Mine Dolomite			Sutley, S.J. et al.	Mineralogy and chemistry of oxidized ores from the Upper Silesia Mississippi Valley-type zinc-lead deposits, Poland	Open-File Report		1999	United States Geological Survey	10.3133/ofr99394
54b4328de138239d86855c34	160	Gypsiferous Claystone Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
56c1ca03cf58f15c72c90620	203	Quillagua Formation	5.332	11.608	Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
57ec1ab3cf58f1acfab96941	81	Passaic Formation	199.6	228	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
55b83d31e13823bd29ba865c	3594	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2062	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57bee020cf58f13d88794bee	214	Windsor Group	318.1	359.2	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
55b83d31e13823bd29ba865c	1150	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b8484be13823bd29ba869d	392	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
55b83d31e13823bd29ba865c	7967	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b83d31e13823bd29ba865c	7409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7094	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5734b312cf58f14dbc2c579f	361	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b83d31e13823bd29ba865c	8032	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55ae0df7e13823763a830928	2356	Todilto Formation	145.5	199.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	288	Castile Formation	253.8	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
56c1d8a6cf58f15c72c9073f	288	Castile Formation	253.8	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
558fe155e13823109f3eec57	377	Rustler mention	253.9652	256.0278	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b83d31e13823bd29ba865c	6772	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2553	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	553	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
558fa710e13823109f3eeaeb	691	Arapien Shale	145.5	199.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	7857	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3074	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	3063	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b735f3e13823bd29ba8028	4378	Kiser Gypsum Bed	273.01	282	Luttrell, Gwendolyn Werth et al.	Lexicon of new formal geologic names of the United States, 1976-1980	Bulletin		1986	United States Geological Survey	
54b4328be138239d8685580e	216	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
579ed180cf58f1030df9c51e	289	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43276e138239d86851d3b	112	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
55b83d31e13823bd29ba865c	425	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2f6c2e138231cbdd6cf45	1004	Rustler Formation	251	260.4	Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology, hydrology, and topography; Articles 1-59	Professional Paper		1962	United States Geological Survey	
5906dd0fcf58f15fea53aef7	235	Eagle Ford Shale	65.5	99.6	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b7277de13823bd29ba7fc3	2502	Colorado mention	90.825	95.55	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
55b83d31e13823bd29ba865c	8100	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5b6f081fcf58f1539ffa6761	142	Yapılar Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
55b83d31e13823bd29ba865c	7060	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55988f24e1382390cc640e38	314	Ore-host Dolomite			Han, Run-Sheng et al.	Geological features and origin of the Huize carbonate-hosted Zn–Pb–(Ag) District, Yunnan, South China	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2006.03.003
54b4327fe138239d8685356d	199	Rounded Dolomite			Howari, F.M. et al.	Depositional and diagenetic processes of Qa Khanna playa, North Jordan basaltic plateau, Jordan	Journal of Asian Earth Sciences	39	2010	Elsevier	10.1016/j.jseaes.2010.04.001
55c01a9ecf58f16e99a37305	505	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55f38765cf58f16256a21e5e	52	Barbastro Gypsum Formation			Moret-Fernández, D. and Herrero, J.	Effect of gypsum content on soil water retention	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.06.030
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
59073883cf58f180c26e3666	131	Pierre Shale	65.5	145.5	Degraw, Harold M. and Pabian, Roger K.	Collecting in Nebraska's Cretaceous Strata	Rocks & Minerals	55	1980	Taylor and Francis	10.1080/00357529.1980.11764638
54beddace13823023e43d931	209	Furnace Creek Formation	1.806	5.332	Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
58b7df47cf58f18af629a04c	137	Banyoles Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54bfef15e1382330560e0801	254	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
55b83d31e13823bd29ba865c	402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43281e138239d86853bfd	196	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
579f5bc9cf58f12a53c41a24	216	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b690a7e138238e2d05483f	3451	Spearfish mention	201.4	269.635	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55f4877fcf58f16256a22522	419	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
57177ecdcf58f1637fb099ed	73	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55ada974e13823763a830682	55	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
57177ecdcf58f1637fb099ed	130	Midco mention			Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
5514907ce1382394b500cb75	1	Kuwait mention			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
55b7869fe13823bd29ba8231	2239	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	5462	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2900	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5a0472c5cf58f1b964028eed	291	Sijes Formation	1.806	65.5	Gasda, Patrick J. et al.	In situ detection of boron by ChemCam on Mars	Geophysical Research Letters	44	2017	Wiley-Blackwell	10.1002/2017GL074480

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5783caf0cf58f13fb21dfa1a	608	Zaragoza Gypsum Formation	5.332	23.03	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
579fb605cf58f145b1742f66	198	Baxa Group			Long, S. et al.	Tectonostratigraphy of the Lesser Himalaya of Bhutan: Implications for the along-strike stratigraphic continuity of the northern Indian margin	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30202.1
55b83d31e13823bd29ba865c	4606	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7571	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	3034	Todilto mention	158.1835	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2fe60d1faed655488b6bad	159	Yunlong Formation	55.8	65.5	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b83d31e13823bd29ba865c	6779	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7994	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54e66657e138237cc915052a	67	Arctomys Formation	501	503.5	Yonge, C.J. and Krouse, H. Roy	The origin of sulphates in Castleguard Cave, Columbia Icefields, Canada	Chemical Geology: Isotope Geoscience section	65	1987	Elsevier	10.1016/0168-9622(87)90018-2
58c8ed8ccf58f1a71217fb6b	173	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
557cdb22e138239225f86a07	3592	Feet mention			Dane, C.H.	Geology of the Salt Valley anticline and adjacent areas, Grand County, Utah	Bulletin		1935	United States Geological Survey	10.3133/b863
578cff68cf58f101e2dda387	142	Monongahela Formation	299	318.1	Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
56830b14cf58f1479a0ab918	521	Yesares mention	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
577bdee8cf58f15bef495d06	256	Amsden Formation	318.1	359.2	HEARD, HUGH C. and RUBEY, WILLIAM W.	Tectonic Implications of Gypsum Dehydration	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[741:tiogd]2.0.co;2
55b690a7e138238e2d05483f	3355	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55c01a9ecf58f16e99a37305	397	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5b6f081fcf58f1539ffa6761	74	Yapılar mention			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
5897de3fcf58f1081e8c64e1	46	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55ae0df7e13823763a830928	492	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	2052	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
575c4f4ecf58f16b97cc4df6	78	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
572cf1fccf58f13accaa0e61	269	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
584aa62ccf58f19d6a5f583e	127	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4328ce138239d86855a1e	367	Zaragoza mention	23.03	33.9	Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
5733004ccf58f1066ffdaeaa	3	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
550901a3e138238460c4f59b	279	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
559d88f0e138230816dad87c	3829	Carlsbad System Series Formation			Bjorklund, Louis Jay and Motts, Ward Sundt	Geology and water resources of the Carlsbad area, Eddy County, New Mexico	Open-File Report		1959	United States Geological Survey	10.3133/ofr599
584aa62ccf58f19d6a5f583e	244	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic Dolomite			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5517568be1382394b500d6fd	207	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
55b6df25e13823bd29ba7dfe	226	Gypsum Limestone			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
54b4328de138239d86855dfa	333	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
557c738ee138239225f8685b	1257	Castile Formation	253.8	260.4	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
54b43246e138239d86849721	198	Culpeper mention	184.2	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
55b7869fe13823bd29ba8231	1762	Supai Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	1978	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54f9553fe138239936c6c748	166	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
572cdf45cf58f133c4f9d591	826	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
54f9553fe138239936c6c748	33	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
580e3bc6cf58f172dd1b8676	70	Bambata mention	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
558d206fe13823109f3edc62	993	Moenkopi Formation	199.6	251	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5a2d0619cf58f19f7117d37a	102	CdB mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
55917250e13823109f3ef5b1	1624	Loei mention			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
5503421ae1382326932d7e6d	1100	Rus Fm	33.9	55.8	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5a39ee95cf58f1314cf12808	215	Sedom mention	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
570fe41dcf58f114a862267f	48	Platy Dolomite			Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55988dfce1382390cc640e32	153	Yunlong Formation	55.8	65.5	Xue, Chunji et al.	Geologic, fluid inclusion and isotopic characteristics of the Jinding Zn–Pb deposit, western Yunnan, South China: A review	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2005.04.007
5aba3998cf58f110658059ec	115	Location Calcite Dolomite			Walter, Benjamin F. et al.	Multi-reservoir fluid mixing processes in rift-related hydrothermal veins, Schwarzwald, SW-Germany	Journal of Geochemical Exploration	186	2018	Elsevier	10.1016/j.gexplo.2017.12.004
55b83d31e13823bd29ba865c	3074	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5743e12ccf58f15a87556580	49	Coal Huangmaqing Fm			Mianping, ZHENG et al.	Regional Distribution and Prospects of Potash in China	Acta Geologica Sinica - English Edition	85	2011	Wiley-Blackwell	10.1111/j.1755-6724.2011.00376.x
5ce2f9b20b45c76caf8ae21e	191	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
557cc6e1e138239225f869b5	714	Ogallala Formation	-5.5012E-05	23.03	Boettcher, Arnold J. and Horr, C. Albert	Geology and ground-water resources in eastern Cheyenne and Kiowa Counties, Colorado	Water Supply Paper		1964	United States Geological Survey	10.3133/wsp1779N
55b3055ce138231cbdd6cf97	1076	Ghanarn Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
54b4328ce138239d86855a68	45	Alcubierre Formation			Arenas, C et al.	Dedolomitization and other early diagenetic processes in Miocene lacustrine deposits, Ebro Basin (Spain)	Sedimentary Geology	125	1999	Elsevier	10.1016/S0037-0738(98)00146-8
55f4877fcf58f16256a22522	56	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5d3d79da0b45c76cafa1aa30	43	Cement Clinker Limestone			Petrella, Andrea et al.	Use of cellulose fibers from wheat straw for sustainable cement mortars	Journal of Sustainable Cement-Based Materials	8	2019	Informa UK Limited	10.1080/21650373.2018.1534148

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5907c51bcf58f1b45c88c8fc	209	Columbus Limestone	385.3	397.5	Hanson, Sarah L.	Midwest Places of Geologic Interest	Rocks & Minerals	92	2017	Taylor and Francis	10.1080/00357529.2017.1241696
54b7e5cfe138230a74d15b25	264	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
54b43289e138239d868551ab	7	Edwards Group	99.6	145.5	Longman, Mark W. and Mench, Patricia A.	Diagenesis of Cretaceous limestones in the Edwards aquifer system of south-central Texas: A scanning electron microscope study	Sedimentary Geology	21	1978	Elsevier	10.1016/0037-0738(78)90022-2
55ae0df7e13823763a830928	442	Yeso mention	275.2575	286.225	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	793	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558d206fe13823109f3edc62	2283	Verde Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
572cdf45cf58f133c4f9d591	707	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b6d6a7e13823bd29ba7dcc	6619	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558cbceae13823109f3eda41	165	Moenkopi Formation	199.6	251	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b83d31e13823bd29ba865c	4543	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	384	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54b4328ce138239d86855b7a	327	Queen Formation	260.4	270.6	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
56831341cf58f1479a0ab983	65	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
58c8ed8ccf58f1a71217fb6b	116	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55f2ced1cf58f16256a21973	182	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b83d31e13823bd29ba865c	414	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
590769c6cf58f191e58edf9d	29	Salt Plains mention	273.01	279.7525	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
5506a9ebe1382326932d924e	253	Ze'elim Fm	-5.5012E-05	0.01143	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
57a43018cf58f11204e17fe0	508	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b6df25e13823bd29ba7dfe	1616	Verde Formation	5.332	23.03	Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
5682dd16cf58f1479a0ab6de	2	Gessoso-solfifera Formation			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
55b388d6e138231cbdd6d25d	1084	Gamma Member			Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
5731ac74cf58f18e0ffaff50	71	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
558d206fe13823109f3edc62	2588	Horse Spring Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55b7869fe13823bd29ba8231	1189	Yeso mention	275.2575	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559e58a2e138230816dadbe2	707	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b83d31e13823bd29ba865c	3083	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4492	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3804	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	8161	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579ed180cf58f1030df9c51e	196	Granule Conglomerate			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b7869fe13823bd29ba8231	2258	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b78281e13823bd29ba8218	2012	Yeso mention	275.2575	286.225	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4328ae138239d868553d8	60	Samh Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
58bfe48bcf58f113393dbc03	354	Calcite mention			Gil-Márquez, J.M. et al.	Hydrological and geochemical processes constraining groundwater salinity in wetland areas related to evaporitic (karst) systems. A case study from Southern Spain	Journal of Hydrology		2017	Elsevier	10.1016/j.jhydrol.2016.11.062
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
579f5bc9cf58f12a53c41a24	175	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5945b493cf58f195edc28b3a	272	Capas Rojas Formation	65.5	145.5	Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
55b83d31e13823bd29ba865c	7771	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4543	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
59069dcecf58f1491d1b327e	135	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
55a7c745e13823757cc70251	143	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b83d31e13823bd29ba865c	4833	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c3540ea1faed655488c1248	131	Gypsum mention			Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
57a43018cf58f11204e17fe0	754	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b6d6a7e13823bd29ba7dcc	7950	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
578cff68cf58f101e2dda387	40	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
54b4328de138239d86855c5f	314	Green River Formation	33.9	55.8	Wells, Neil A. et al.	Quantitative evaluation of color measurements II. Analysis of Munsell color values from the Colton and Green River Formations (Eocene, central Utah)	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(01)00205-6
54d3bc73e13823811a06902d	121	DISSOLVE Calcite Dolomite			Eckstein, Yoram and Hau, Joseph A.	Modeling the neutralizing processes of acid precipitation in soils and glacial sediments of northern Ohio	Journal of Hydrology	131	1992	Elsevier	10.1016/0022-1694(92)90226-L
559c3f39e138230816dad2ff	277	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
56c1b6a3cf58f15c72c904b4	135	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
558ecdcbe13823109f3ee5af	346	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55a8145ce13823757cc70446	891	Clean Sandstone			Bain, G. L. and Brown, C. E.	Evaluation of the Durham Triassic basin of North Carolina and techniques used to characterize its waste-storage potential	Open-File Report		1981	United States Geological Survey	
579ed180cf58f1030df9c51e	231	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b67f4fe1382373b63b7864	90	Seaham Formation	251.902	273.01	Bath, A.H et al.	18O16O and 2H1H changes during progressive hydration of a Zechstein anhydrite formation	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90122-0
5712f1aacf58f16fb4cc921a	51	Newark Supergroup	65.5	251	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5aba329acf58f10db4023201	174	Itararé Subgroup			Bulia, Isabella Longhi and Enzweiler, Jacinta	The hydrogeochemistry of bottled mineral water in São Paulo state, Brazil	Journal of Geochemical Exploration	188	2018	Elsevier	10.1016/j.gexplo.2018.01.007
58b7df47cf58f18af629a04c	324	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
57ec1ab3cf58f1acfab96941	81	Passaic Formation	199.6	228	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
54bf26f8e13823023e43db6f	587	Carmel Formation	161.2	175.6	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5734b312cf58f14dbc2c579f	504	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b6d6a7e13823bd29ba7dcc	4722	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4324de138239d8684aba6	145	Gesso Fm			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
5503421ae1382326932d7e6d	323	Sijes Formation	1.806	65.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b78281e13823bd29ba8218	801	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
558fda65e13823109f3eec30	1330	Gothic Formation	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
5ab90b76cf58f15ad7d7cedf	154	Salt mention	251	260.4	Lettéron, Alexandre et al.	Reconstruction of a saline, lacustrine carbonate system (Priabonian, St-Chaptes Basin, SE France): Depositional models, paleogeographic and paleoclimatic implications	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2017.12.023
55b78281e13823bd29ba8218	1965	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
557cd3cfe138239225f869e5	865	Flowerpot Shale	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b88a09e13823bd29ba883a	3597	Madison Limestone	318.1	359.2	Edited by Gohn, Gregory S.	Proceedings of the 1988 U.S. Geological Survey Workshop on the Geology and geohydrology of the Atlantic Coastal Plain	Circular		1992	United States Geological Survey	
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
54b43247e138239d86849b52	242	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5897de3fcf58f1081e8c64e1	7	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	835	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5904567dcf58f12801059399	629	Shell Limestone	1.806	5.332		Classified Advertisements	Rocks & Minerals	40	1965	Taylor and Francis	10.1080/00357529.1965.11765749
56c1cb24cf58f15c72c90642	198	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55b83d31e13823bd29ba865c	1530	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558cbceae13823109f3eda41	166	Moenkopi Formation	199.6	251	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b7869fe13823bd29ba8231	2487	Medicine Lodge Gypsum Member	273.01	282	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3667	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1d607cf58f15c72c9071a	289	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
5c2aade11faed655488b04a4	75	Sahabi Formation			Stathopoulou, E.T. et al.	A geochemical approach to fossilization processes in Miocene vertebrate bones from Sahabi, NE Libya	Journal of African Earth Sciences	149	2019	Elsevier	10.1016/j.jafrearsci.2018.07.019
54b4328ae138239d86855525	188	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55a82328e13823757cc7049a	1212	Gypsum Spring Formation	168.65	174.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
54c061c1e1382389c54c375d	213	Carillon Formation	460.9	471.8	Dix, George R. and Robinson, George W.	The geochemical record of hydrothermal mineralization and tectonism inboard of the Appalachian Orogen: the Ottawa Embayment	Chemical Geology	197	2003	Elsevier	10.1016/S0009-2541(02)00245-0
59073182cf58f17e24d9c0bb	1101	Bearpaw Shale	70.575	75.9333	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
55ad3126e13823763a8303a0	23	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b83d31e13823bd29ba865c	3960	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca03cf58f15c72c90620	144	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
57a43018cf58f11204e17fe0	682	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b83d31e13823bd29ba865c	1193	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5517568be1382394b500d6fd	207	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
5732d749cf58f1be482cdc3e	202	Lisan Formation	0.01143	0.126	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	3167	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a850dffcf58f13f065e41c5	66	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
575c4f4ecf58f16b97cc4df6	31	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55a7c745e13823757cc70251	133	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b83d31e13823bd29ba865c	7462	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c44114cf58f17493f8536e	125	Dockum Group	199.6	251	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
55b83d31e13823bd29ba865c	2704	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6df25e13823bd29ba7dfe	214	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55b6d6a7e13823bd29ba7dcc	7902	Salt Limestone	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	5015	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5515012fe1382394b500cd4d	138	IUSS Working Group			Badía, David et al.	Influence of slope and parent rock on soil genesis and classification in semiarid mountainous environments	Geoderma		2013	Elsevier	10.1016/j.geoderma.2012.10.020
54b43246e138239d86849721	198	Culpeper mention	184.2	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
557f7360e13823bc80ba26f4	1489	Queen Formation	260.4	270.6	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
558fe155e13823109f3eec57	830	Culebra mention	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
54b4327fe138239d868536c9	171	Kalavassos mention			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
558cbceae13823109f3eda41	168	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b2e020e138231cbdd6ced3	765	EXPLANATION Sandstone			Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
580e3bc6cf58f172dd1b8676	69	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b6d6a7e13823bd29ba7dcc	10535	FORMATION mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328fe138239d868561aa	120	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
57c19e14cf58f16bf61df64c	326	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55b7869fe13823bd29ba8231	1426	Gypsum Spring Formation	168.65	174.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54f98125e138239936c6c811	45	Brasso Formation	5.332	23.03	Wilson, Brent	A lagoonal interlude with occasional hypersalinity in the deposition of the Early–Middle Miocene Brasso Formation of Trinidad	Journal of South American Earth Sciences	29	2010	Elsevier	10.1016/j.jsames.2009.10.003
54b43249e138239d8684a19a	57	Tripoli Formation	5.332	7.246	Blanc-Valleron, M.-M et al.	Sedimentary, stable isotope and micropaleontological records of paleoceanographic change in the Messinian Tripoli Formation (Sicily, Italy)	Palaeogeography, Palaeoclimatology, Palaeoecology	185	2002	Elsevier	10.1016/S0031-0182(02)00302-4
57128432cf58f14a08338b39	112	Castile Formation	253.8	260.4	Manzi, V. et al.	High-Frequency Cyclicity In the Mediterranean Messinian Evaporites: Evidence For Solar-Lunar Climate Forcing	Journal of Sedimentary Research	82	2012	Society for Sedimentary Geology	10.2110/jsr.2012.81
5731caeecf58f192f36c5766	224	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5ce2f9b20b45c76caf8ae21e	321	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b83b40e1382373b63b7fe6	27	Blaine Fm	251	299	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
55b7869fe13823bd29ba8231	2087	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5906dd0fcf58f15fea53aef7	136	Pen Shale	83.6	87.175	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5ce2f9b20b45c76caf8ae21e	193	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b83d31e13823bd29ba865c	5455	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55990036e1382390cc641074	157	Uragen mention			Xue, Chunji et al.	Geology, geochemistry and genesis of the Cretaceous and Paleocene sandstone- and conglomerate-hosted Uragen Zn–Pb deposit, Xinjiang, China: A review	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.06.005
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559dcd1ae138230816dad9be	2870	Moab mention	161.5	165.3	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
58c8d892cf58f1a052bddb32	86	Kirmir Formation	5.332	23.03	Helvaci, Cahit et al.	Presence and Distribution of Lithium in Borate Deposits and Some Recent Lake Waters of West-Central Turkey	International Geology Review	46	2004	Taylor and Francis	10.2747/0020-6814.46.2.177
55b83d31e13823bd29ba865c	6407	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b83d31e13823bd29ba865c	4825	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43248e138239d86849e30	64	Alcubierre mention			Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
54c01d34e1382389c54c3543	99	Yamba Formation	0	0.129	Harrington, N.M. et al.	Hydrological and geochemical processes controlling variations in Na+–Mg2+–Cl—SO42− groundwater brines, south-eastern Australia	Chemical Geology	251	2008	Elsevier	10.1016/j.chemgeo.2008.02.007
55ad1d69e13823763a83031a	102	Rustler Formation	251	260.4	Cooper, J. B.	Road log from Carlsbad, New Mexico, to Project Gnome site	Open-File Report		1962	United States Geological Survey	10.3133/ofr6230
5514907ce1382394b500cb75	183	Dibdibba Formation			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
584aa62ccf58f19d6a5f583e	207	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b7869fe13823bd29ba8231	629	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
580e3bc6cf58f172dd1b8676	56	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55c01a9ecf58f16e99a37305	8	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b83d31e13823bd29ba865c	5529	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d4bfe13823bd29ba7dc0	1191	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b83d31e13823bd29ba865c	1184	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558cbceae13823109f3eda41	163	Moenkopi Formation	199.6	251	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b6d6a7e13823bd29ba7dcc	8148	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5897de3fcf58f1081e8c64e1	465	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
578d341ecf58f10f11b89145	214	Cloud Chief Formation	251	299	REYNOLDS, RICHARD L. et al.	Iron sulfide minerals at Cement oil field, Oklahoma: Implications for magnetic detection of oil fields	Geological Society of America Bulletin	102	1990	GSA	10.1130/0016-7606(1990)102<0368:ismaco>2.3.co;2
54e9b707e138237cc915131b	950	Furnace Creek Formation	1.806	5.332	Duff, K.L. and Ford, T.D.	Field meetings to the Western USA 1981 & 1982	Proceedings of the Geologists' Association	95	1984	Elsevier	10.1016/S0016-7878(84)80001-2
5b18df21cf58f1049eab0bc8	53	Bayport mention			Blaske, Allan R.	History, Geology, and Mineralogy of the Bayport Limestone Quarries, Bellevue, Eaton County, Michigan	Rocks & Minerals	93	2018	Informa UK Limited	10.1080/00357529.2018.1428860
5712f1aacf58f16fb4cc921a	74	Perkasie Member	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bf7e39e13823023e43de1a	226	Reichenhall Formation	199.6	251	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
558fa710e13823109f3eeaeb	489	Nugget Sandstone	145.5	199.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
550a2b43e138238460c4fc04	155	Osaka Group	0.01143	1.806	Yamanaka, Masaru et al.	Hydrogeochemical evolution of confined groundwater in northeastern Osaka Basin, Japan: estimation of confined groundwater flux based on a cation exchange mass balance method	Applied Geochemistry	20	2005	Elsevier	10.1016/j.apgeochem.2004.07.004
55b83d31e13823bd29ba865c	5999	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
590769c6cf58f191e58edf9d	145	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
57bedb9ccf58f13bf01999e9	293	Moenkopi Formation	199.6	251	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55b78281e13823bd29ba8218	2052	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b78281e13823bd29ba8218	4213	Santa Rosa mention	268.4275	320.2999	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	9678	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b43247e138239d86849b52	204	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
579f5bc9cf58f12a53c41a24	388	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54c635bee1382389c54c4fc8	277	Santana Formation	99.6	112	Beurlen, H.	The mineral resources of the Borborema Province in Northeastern Brazil and its sedimentary cover: a review	Journal of South American Earth Sciences	8	1995	Elsevier	10.1016/0895-9811(95)00020-G
56c60ad7cf58f17493f876b5	168	St. Louis Limestone	318.1	359.2	Stueber, Alan M. and Criss, Robert E.	ORIGIN AND TRANSPORT OF DISSOLVED CHEMICALS IN A KARST WATERSHED, SOUTHWESTERN ILLINOIS	Journal of the American Water Resources Association	41	2005	Wiley-Blackwell	10.1111/j.1752-1688.2005.tb03734.x
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55096011e138238460c4f859	42	Winnipeg Formation	443.7	488.3	Desbarats, Alexandre J.	On elevated fluoride and boron concentrations in groundwaters associated with the Lake Saint-Martin impact structure, Manitoba	Applied Geochemistry	24	2009	Elsevier	10.1016/j.apgeochem.2009.02.016
54b4325ce138239d8684d4cc	139	Arenazzolo mention	5.332	7.246	Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
55b7869fe13823bd29ba8231	1459	Gypsum Spring Formation	168.65	174.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e7c15ae138237cc9150ae2	78	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55f4877fcf58f16256a22522	568	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5731caeecf58f192f36c5766	285	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
572ecdb4cf58f1177819e19e	319	Zechstein mention	251.902	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55c121fdcf58f1a8110b7ddc	29	Lisan mention	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
56c1cb24cf58f15c72c90642	401	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
558c8afce13823109f3ed928	2794	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
55b3055ce138231cbdd6cf97	1040	Ghanam Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
54f9553fe138239936c6c748	40	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55c01a9ecf58f16e99a37305	300	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54d2216be13823302d02428b	127	Northwich Halite Formation	242	247.2	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
564e2642cf58f141b60cac40	600	Ca mention			Schröder, S. et al.	Hydrogen detection with ChemCam at Gale crater	Icarus		2015	Elsevier	10.1016/j.icarus.2014.08.029
56ac24facf58f19442534c08	236	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
55d16099cf58f1b3b25e36c3	36	Zaragoza Fm	5.332	23.03	Pueyo Anchuela, Ó. et al.	Three dimensional characterization of complex mantled karst structures. Decision making and engineering solutions applied to a road overlying evaporite rocks in the Ebro Basin (Spain)	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2015.04.022
575c4f4ecf58f16b97cc4df6	467	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55093459e138238460c4f715	201	Lincolnshire Limestone	145.5	199.6	Samborska, Katarzyna and Halas, Stanislaw	34S and 18O in dissolved sulfate as tracers of hydrogeochemical evolution of the Triassic carbonate aquifer exposed to intense groundwater exploitation (Olkusz–Zawiercie region, southern Poland)	Applied Geochemistry	25	2010	Elsevier	10.1016/j.apgeochem.2010.06.010
584aa62ccf58f19d6a5f583e	140	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	5941	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fa710e13823109f3eeaeb	961	James Hardie Gypsum mention			Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
578cff68cf58f101e2dda387	21	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
577ef8c7cf58f1ac737005ec	133	Diluted Bed			Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
5502c2cae1382326932d7ae8	156	Salina Formation	416	443.7	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55f4877fcf58f16256a22522	455	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
558fbd00e13823109f3eeb74	201	Blue River Group	323.2	335	Wangsness, David J. et al.	Hydrology of area 32, Eastern Region, Interior Coal Province, Indiana	Open-File Report		1981	United States Geological Survey	10.3133/ofr81498
55b6d6a7e13823bd29ba7dcc	9659	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
5783caf0cf58f13fb21dfa1a	482	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
55b6d6a7e13823bd29ba7dcc	8111	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	448	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b83d31e13823bd29ba865c	5455	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1214	Briggs Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
584aa62ccf58f19d6a5f583e	87	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5c2d3bb41faed655488b4068	136	Argillaceous Dolomite			Su, J.Z. et al.	Brittleness evaluation of the inter-salt shale oil reservoir in Jianghan Basin in China	Marine and Petroleum Geology	102	2019	Elsevier	10.1016/j.marpetgeo.2018.12.013
55b7869fe13823bd29ba8231	2020	Moenkopi Formation	199.6	251	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7970	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55c176c1cf58f1a8110b808a	1882	Navajo Sandstone	145.5	199.6		Goldschmidt Abstracts 2008- B	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.005
55b83d31e13823bd29ba865c	3180	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6772	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
578cff68cf58f101e2dda387	8	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
557d3f86e138239225f86b9f	180	Uinta mention	36.7575	46.15	Liebermann, Timothy D. et al.	Characteristics and trends of streamflow and dissolved solids in the upper Colorado River Basin, Arizona, Colorado, New Mexico, Utah, and Wyoming	Water Supply Paper		1989	United States Geological Survey	10.3133/wsp2358

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4325ae138239d8684cec7	321	SE Elhiopia Dolomite			Tadesse, Solomon et al.	Geology and mineral potential of Ethiopia: a note on geology and mineral map of Ethiopia	Journal of African Earth Sciences	36	2003	Elsevier	10.1016/S0899-5362(03)00048-4
550dedb5e1382369a6f93ba1	94	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55af1c5ce13823763a830fe9	852	Salado mention	256.0278	262.2168	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
5ce2f9b20b45c76caf8ae21e	191	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56c1ea81cf58f15c72c908aa	3	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b83d31e13823bd29ba865c	8714	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	9050	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55ae0df7e13823763a830928	487	Fourmile Draw Member	273.01	282	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56c1b6a3cf58f15c72c904b4	213	Pasquasia mention			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
5c31f51e1faed655488ba517	407	Grabfeld Formation	227	242	Diniz-Akarca, Cansu	Soft-sediment deformation structures related to tectonomagmatic activity: A case study from the borate-bearing lacustrine deposits of early Miocene Bigadiç Basin, NW Turkey	Sedimentary Geology	373	2018	Elsevier	10.1016/j.sedgeo.2018.05.012
55b358eee138231cbdd6d158	168	Table Group			Compiled by Hill, Thelma P.	Chemical composition of sedimentary rocks in California and Hawaii	Professional Paper		1981	United States Geological Survey	
563d5ed5cf58f18954974436	505	Salt Othexs Chert			Shaw, Brian R. and Simms, Richard	Stratigraphic analysis system: SAS	Computers & Geosciences	3	1977	Elsevier	10.1016/0098-3004(77)90017-6
54b4328ae138239d8685557f	417	Raisby Formation	251.902	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
54b4328fe138239d868561aa	165	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b7277de13823bd29ba7fc3	187	Colorado mention	90.825	95.55	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
5a3dff46cf58f12be0bde56e	45	Oligocene-Miocene Zaragoza Formation			Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
5b541d97cf58f120001757f5	10	Precipice Sandstone	145.5	199.6	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology	399	2015	Elsevier	10.1016/j.chemgeo.2014.10.028
54e4d444e138237cc914feb2	32	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
54b4328de138239d86855dfa	333	Al Nakhsh Member	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
54ddbfdae138238a47f968be	302	Rift mention			Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
55ae0df7e13823763a830928	1401	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
59069dcecf58f1491d1b327e	77	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
55f4877fcf58f16256a22522	8	Sulphur Limestone			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
572ee8a5cf58f11bb5bc1a43	276	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	5455	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c2ce13cf58f1a8110b8b48	407	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5897de3fcf58f1081e8c64e1	470	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5712f1aacf58f16fb4cc921a	215	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b83d31e13823bd29ba865c	421	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	15	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b83d31e13823bd29ba865c	3441	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1450	Goose Egg mention	247.2	282	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	417	Rustler mention	253.9652	256.0278	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54b43246e138239d8684987e	608	Soil Formation			Magee, J.W.	Late quaternary lacustrine, groundwater, aeolian and pedogenic gypsum in the Prungle Lakes, southeastern Australia	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90033-N
5ce2f9b20b45c76caf8ae21e	427	Lyne Formation	323.2	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	3562	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b82344e13823bd29ba85af	440	Sespe mention	17.095	42.85	Dickinson, Kendell A. and Leventhal, Joel S.	The geology, carbonaceous materials, and origin of the epigenetic uranium deposits in the Tertiary Sespe Formation in Ventura County, California	Bulletin		1988	United States Geological Survey	10.3133/b1771
54b4328ee138239d86855f3a	244	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55b78281e13823bd29ba8218	854	Fourmile Draw Member	273.01	282	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	7840	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7423	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
578cff68cf58f101e2dda387	21	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	374	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b43246e138239d86849872	318	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
584aa62ccf58f19d6a5f583e	191	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	3667	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1e5e7cf58f15c72c90847	24	Lockatong mention	213.125	227	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
56c1ca03cf58f15c72c90620	161	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
572cf1fccf58f13accaa0e61	104	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55087dc1e138237a6f73910e	55	Mancos Shale	65.5	145.5	Presser, Theresa S. and Swain, Walter C.	Geochemical evidence for Se mobilization by the weathering of pyritic shale, San Joaquin Valley, California, U.S.A.	Applied Geochemistry	5	1990	Elsevier	10.1016/0883-2927(90)90066-E
56c1ea81cf58f15c72c908aa	327	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b6d6a7e13823bd29ba7dcc	4010	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54f9553fe138239936c6c748	89	Sorbas Member			Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
57c8716acf58f1429a428969	148	Mineral Group	65.5	251	Thorpe, Michael T. et al.	Quantitative compositional analysis of sedimentary materials using thermal emission spectroscopy: 1. Application to sedimentary rocks	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2015JE004863
56a11434cf58f1079fd4cab7	56	Paradox mention	306	319.714	Huntoon, Peter W.	Incredible Tale of Texasgulf Well 7 and Fracture Permeability, Paradox Basin, Utah	Ground Water	24	1986	Wiley-Blackwell	10.1111/j.1745-6584.1986.tb03713.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578cff68cf58f101e2dda387	124	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
559147b8e138236ee2217b0d	131	Rock Group			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
579f5bc9cf58f12a53c41a24	15	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55b83d31e13823bd29ba865c	381	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d86855525	251	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
5897de3fcf58f1081e8c64e1	309	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
578cff68cf58f101e2dda387	68	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b78281e13823bd29ba8218	2015	Andres mention			Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55f4877fcf58f16256a22522	492	Gypsum Mbr			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b6d6a7e13823bd29ba7dcc	7551	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b78281e13823bd29ba8218	3351	Bliss mention	477.7	497.85	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
57126a16cf58f140fa5c33f2	177	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5ab92ea3cf58f16811edda29	336	Cl Group			Jones, Samantha Elsie et al.	A multi-proxy approach to understanding complex responses of salt-lake catchments to climate variability and human pressure: A Late Quaternary case study from south-eastern, Spain	Quaternary Science Reviews	184	2018	Elsevier	10.1016/j.quascirev.2017.12.015
584aa62ccf58f19d6a5f583e	131	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	4004	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b73032e13823bd29ba8000	379	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
58d2816dcf58f121bb50088d	2	Francis Group	305.425	305.7125	Lockley, Martin G. and Rodríguez-de la Rosa, Rubén A.	Preservation of Human Tracks in Arid Environments	Ichnos	16	2009	Taylor and Francis	10.1080/10420940802470920
5756ab9ecf58f19941112e26	211	Sands Formation			Farid, Intissar et al.	Geochemical and isotopic study of surface and groundwaters in Ain Bou Mourra basin, central Tunisia	Quaternary International		2013	Elsevier	10.1016/j.quaint.2013.04.021
558fe155e13823109f3eec57	166	Santa Rosa Sandstone	199.6	228	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
54b4327fe138239d86853736	16	Gypsum mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
55b83d31e13823bd29ba865c	5917	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43277e138239d86851f15	1072	Sijes Formation	1.806	65.5	Cobbold, Peter R. et al.	Bedding-parallel fibrous veins (beef and cone-in-cone): Worldwide occurrence and possible significance in terms of fluid overpressure, hydrocarbon generation and mineralization	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2013.01.010
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4327fe138239d86853736	191	Basin mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
57ec17eccf58f1ac335ac1b3	97	Pinda Group	99.6	112	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b6df25e13823bd29ba7dfe	40	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55b7869fe13823bd29ba8231	696	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5506a9ebe1382326932d924e	42	Sedom Formation	5.332	23.03	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
573090ddcf58f160029e9d90	1	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassinge	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	43	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6595	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7571	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	3809	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c35bc5cf58f1a8110b8fcc	656	Werra mention			Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
557f7360e13823bc80ba26f4	1495	Queen Formation	260.4	270.6	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
54b4324fe138239d8684b069	263	Khuff Formation	199.6	251	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
55b3dfb4e138231cbdd6d442	1733	Ervay mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
54c04652e1382389c54c3686	76	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55b7869fe13823bd29ba8231	2455	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c19917d1faed655488915d3	528	SUBAERIAL Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
54b4328de138239d86855c34	42	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	7929	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3667	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3387	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6656	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57126a16cf58f140fa5c33f2	184	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b33375e138231cbdd6d08f	777	Lisan Formation	0.01143	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	3644	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c04652e1382389c54c3686	135	Graneros Formation			Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
54e4d444e138237cc914feb2	116	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55b83d31e13823bd29ba865c	6020	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
572cf900cf58f13d86a1bdc8	294	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
57760111cf58f134d11ea726	921	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
54b4325ce138239d8684d4cc	361	Gypsum mention			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
57484ab3cf58f13effae7ac5	109	Mabou Group	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
54c04652e1382389c54c3686	210	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55b6d6a7e13823bd29ba7dcc	7995	Gypsum Sandstone			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682dd16cf58f1479a0ab6de	144	Gessoso-solfifera Formation			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
56c1ca03cf58f15c72c90620	253	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b75a36e13823bd29ba8116	2208	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
579f5bc9cf58f12a53c41a24	399	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55917e77e13823109f3ef5e3	456	Panoche Formation	65.5	99.6	Presser, T.S. et al.	Geologic sources, mobilization, and transport of selenium from the California Coast Ranges to the western San Joaquin Valley; a reconnaissance study	Water-Resources Investigations Report		1990	United States Geological Survey	10.3133/wri904070
5906dd0fcf58f15fea53aef7	235	Eagle Ford Shale	65.5	99.6	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
575c4f4ecf58f16b97cc4df6	137	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55990e4de1382390cc6410c3	501	Sp Gp			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b83d31e13823bd29ba865c	3715	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c78673cf58f1a8110ba138	160	Aragonite Calcite Dolomite			Navarro, Andrés et al.	Geochemistry and groundwater contamination in the La Selva geothermal system (Girona, Northeast Spain)	Geothermics	40	2011	Elsevier	10.1016/j.geothermics.2011.07.005
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55b83d31e13823bd29ba865c	7409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57126a16cf58f140fa5c33f2	56	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5734b312cf58f14dbc2c579f	361	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b83d31e13823bd29ba865c	4543	Gypsum Sandstone			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	2342	Ogallala Formation	-5.5012E-05	23.03	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5897de3fcf58f1081e8c64e1	358	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
56831341cf58f1479a0ab983	452	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5906cf0dcf58f15ad9553b8a	151	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b6d4bfe13823bd29ba7dc0	72	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558cbceae13823109f3eda41	154	Coconino Sandstone	251	299	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
57126a16cf58f140fa5c33f2	177	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
551775abe1382394b500d785	41	Calatayud Gypsum Formation			Gutiérrez, Francisco	Gypsum karstification induced subsidence: effects on alluvial systems and derived geohazards (Calatayud Graben, Iberian Range, Spain)	Geomorphology	16	1996	Elsevier	10.1016/0169-555X(96)00004-9
54b4327fe138239d86853736	191	Basin mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
55b83d31e13823bd29ba865c	6701	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e4d444e138237cc914feb2	121	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55b83d31e13823bd29ba865c	5455	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5b18df21cf58f1049eab0bc8	52	Bayport mention			Blaske, Allan R.	History, Geology, and Mineralogy of the Bayport Limestone Quarries, Bellevue, Eaton County, Michigan	Rocks & Minerals	93	2018	Informa UK Limited	10.1080/00357529.2018.1428860
55b83d31e13823bd29ba865c	3438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	316	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
584aa178cf58f19c3c0fb294	126	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55f28e79cf58f16256a217ad	478	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57516912cf58f129ff61ef40	201	Macumber mention	323.2	358.9	Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
574822d9cf58f13411b192a3	48	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
57ec17eccf58f1ac335ac1b3	73	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
57ec17eccf58f1ac335ac1b3	543	Minkinfjellet Formation			Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b4328ee138239d86855fe9	348	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
5c3e6d6c1faed655488cd35a	131	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55ae0df7e13823763a830928	3174	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56c1b69acf58f15c72c904b3	203	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b3e6a3e138231cbdd6d46d	3863	Muddy Creek Formation	5.332	23.03	Edited by Vine, James David	Lithium resources and requirements by the year 2000	Professional Paper		1976	United States Geological Survey	10.3133/pp1005
584aa62ccf58f19d6a5f583e	561	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	262	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	313	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
566b32efcf58f10a31736c53	277	Maokou Formation	260.4	270.6	Dai, Shifeng et al.	Mineralogical and geochemical compositions of Late Permian coals and host rocks from the Guxu Coalfield, Sichuan Province, China, with emphasis on enrichment of rare metals	International Journal of Coal Geology		2015	Elsevier	10.1016/j.coal.2015.12.004
5732032ecf58f19cbcbc550f	67	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b6d6a7e13823bd29ba7dcc	3628	Socorro mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	1555	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5897de3fcf58f1081e8c64e1	7	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	2553	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	3065	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	7848	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d868555 25	60	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
559e58a2e138230816dadbe2	697	Coconino Sandstone	251	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b83d31e13823bd29ba865c	409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b8484be13823bd29ba869d	396	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
55b83d31e13823bd29ba865c	297	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5590ec95e13823109f3ef2e5	1060	Paradox Member	299	318.1	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
550aa1a2e138238460c4fdf5	103	Gypsum mention			Hidalgo, M.Carmen and Cruz-Sanjulián, Javier	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
55b83d31e13823bd29ba865c	8605	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5508c83fe138238460c4f3ef	251	Sedom Formation	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bb7f59cf58f1878850d92a	415	Duperow Fm.	359.2	385.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
5906dd0fcf58f15fea53aef7	323	Bluff mention	393.3	419.2	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54bf7e39e13823023e43de1a	145	Bellerophon mention	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
579f5bc9cf58f12a53c41a24	135	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
57760111cf58f134d11ea726	802	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
55a7bdc9e13823757cc7020e	655	Colorado mention	90.825	95.55	Collins, Donley S. et al.	Bibliography for update and revision of U.S.G.S. Bulletin 1114, Minerals of Colorado -- a 100 year record, by Edwin B. Eckel, Part A - Paper copy --Bibliography data file disks	Open-File Report		1989	United States Geological Survey	10.3133/ofr89206A
558d206fe13823109f3edc62	2449	Tularosa mention			Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
574822d9cf58f13411b192a3	195	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
55ada974e13823763a830682	449	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
55b7869fe13823bd29ba8231	277	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558eb5d6e13823109f3ee517	334	Tamarisk mention	251.902	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
557b4c6fe138239225f86356	131	Salt mention	251	260.4	Leith, William	Geologic and engineering constraints on the feasibility of clandestine nuclear testing by decoupling in large underground cavities	Open-File Report		2000	United States Geological Survey	10.3133/ofr0128
54b43276e138239d86851d3b	144	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
55b7869fe13823bd29ba8231	3035	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5c2fe60d1faed655488b6bad	225	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
54b43248e138239d86849e30	307	Zaragoza mention	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
5c19917d1faed655488915d3	300	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b6d6a7e13823bd29ba7dcc	7950	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b43250e138239d8684b46c	4	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55b6d4bfe13823bd29ba7dc0	40	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5945b493cf58f195edc28b3a	173	Ammonítico Rosso Fm			Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
558e3447e13823109f3ee1ef	160	Tamarisk mention	251.902	273.01	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
559dcd1ae138230816dad9be	347	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
54f98125e138239936c6c811	121	Brasso Formation	5.332	23.03	Wilson, Brent	A lagoonal interlude with occasional hypersalinity in the deposition of the Early–Middle Miocene Brasso Formation of Trinidad	Journal of South American Earth Sciences	29	2010	Elsevier	10.1016/j.jsames.2009.10.003
54b43247e138239d86849b52	113	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b75a36e13823bd29ba8116	1865	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57ec17eccf58f1ac335ac1b3	64	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
58c8ed8ccf58f1a71217fb6b	193	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b7869fe13823bd29ba8231	2008	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
557cbb8ae138239225f8697d	1262	Verde mention	4.1777	8.342	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
55b83d31e13823bd29ba865c	585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
573090ddcf58f160029e9d90	116	Salado mention	256.0278	262.2168	Dennis W. Powers and Bruce W. Hassinge	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
56830b14cf58f1479a0ab918	252	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5906cf0dcf58f15ad9553b8a	96	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b6d6a7e13823bd29ba7dcc	11381	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5734b312cf58f14dbc2c579f	373	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b3055ce138231cbdd6cf97	4934	Nubian Sandstone	65.5	145.5	Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
57177ecdcf58f1637fb099ed	232	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
550901a3e138238460c4f59b	210	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55b83d31e13823bd29ba865c	7995	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d8685544	219	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
59073182cf58f17e24d9c0bb	253	Morrison Formation	145.5	161.2	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
575019eacf58f1696f3ea50a	98	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
558cbceae13823109f3eda41	176	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
550dedb5e1382369a6f93ba1	3	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
54b4328ae138239d86855525	60	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55b7869fe13823bd29ba8231	2804	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57ec1ab3cf58f1acfab96941	81	Passaic Formation	199.6	228	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
55b83d31e13823bd29ba865c	421	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55090847e138238460c4f5cc	540	Magnesite Dolomite			Harrison, Wendy J. et al.	Geochemical interactions resulting from carbon dioxide disposal on the seafloor	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00018-F
57ec17eccf58f1ac335ac1b3	76	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
58b7df47cf58f18af629a04c	286	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	564	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43246e138239d86849872	317	Mirikata Formation	5.332	23.03	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
5a3dff46cf58f12be0bde56e	56	Zaragoza Gypsum Formation	5.332	23.03	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
55c01a9ecf58f16e99a37305	577	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2ad1181faed655488b08a2	103	Red mention	324.4643	324.8857	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
55ae0df7e13823763a830928	1394	Artesia Group	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5945b493cf58f195edc28b3a	272	Capas Rojas Formation	65.5	145.5	Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
558eb5d6e13823109f3ee517	1303	Forty-niner Member			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55a7c745e13823757cc70251	146	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5a39ee95cf58f1314cf12808	86	Sedom Formation	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
54c0c25fe1382389c54c390a	86	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
54e7c15ae138237cc9150ae2	51	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b83d31e13823bd29ba865c	7844	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7277de13823bd29ba7fc3	663	Eagle Valley Formation	298.9	312	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
55c121fdcf58f1a8110b7ddc	487	Lisan mention	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
580e3bc6cf58f172dd1b8676	291	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
579ed180cf58f1030df9c51e	69	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
5712f1aacf58f16fb4cc921a	196	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5ab66103cf58f143ea8f4c06	200	Selective Formation				Graphical Abstract: Angew. Chem. Int. Ed. 13/2015	Angewandte Chemie International Edition	54	2015	Wiley-Blackwell	10.1002/anie.201590016
5734b312cf58f14dbc2c579f	34	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
56c1c32bcf58f15c72c9059b	68	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
5c19917d1faed655488915d3	528	SUBAERIAL Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
5732d749cf58f1be482cdc3e	202	Lisan Formation	0.01143	0.126	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
584aa62ccf58f19d6a5f583e	87	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
56ac24facf58f19442534c08	62	Zaragoza Formation	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
558eb5d6e13823109f3ee517	334	Tamarisk mention	251.902	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b4324de138239d8684aa17	149	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b83d31e13823bd29ba865c	394	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5734b312cf58f14dbc2c579f	462	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
5592a4a8e138236ee22180c0	83	Calcite Dolomite			Boyle, R.W. and Jonasson, I.R.	The geochemistry of antimony and its use as an indicator element in geochemical prospecting	Journal of Geochemical Exploration	20	1984	Elsevier	10.1016/0375-6742(84)90071-2
55b83d31e13823bd29ba865c	3074	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1cb24cf58f15c72c90642	401	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5787e5f1cf58f1ba1190c99a	135	Lucas Formation	385.3	397.5	RICKARD, LAWRENCE V.	Correlation of the subsurface Lower and Middle Devonian of the Lake Erie region	Geol Soc America Bull	95	1984	GSA	10.1130/0016-7606(1984)95<814:cotsla>2.0.co;2
55b83d31e13823bd29ba865c	616	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ee138239d86855fe9	340	Baza Fm			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
55b83d31e13823bd29ba865c	4736	Gypsum Limestone			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.525	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ee138239d8684ae63	304	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
55b6d6a7e13823bd29ba7dcc	7565	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	608	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
57ec17eccf58f1ac335ac1b3	353	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5897de3fcf58f1081e8c64e1	183	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
575c4f4ecf58f16b97cc4df6	261	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
559d4d6ee138230816dad784	27	Castile Formation	253.8	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
575019eacf58f1696f3ea50a	98	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
5748f823cf58f170c57fbbd7	102	Codroy Group	318.1	359.2	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
590696b8cf58f1468f4bf39e	28	Datolite Dawsonite Diopside Dolomite			Wight, Quintin and Chao, George Y.	Mont Saint-Hilaire: Revisited Part 2	Rocks & Minerals	70	1995	Taylor and Francis	10.1080/00357529.1995.9926606
55f4877fcf58f16256a22522	419	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54b43246e138239d8684987e	608	Soil Formation			Magee, J.W.	Late quaternary lacustrine, groundwater, aeolian and pedogenic gypsum in the Prungle Lakes, southeastern Australia	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90033-N
57c19e14cf58f16bf61df64c	287	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
5579e2a0e138232a625d7143	7017	Magnesite mention			Hewett, D.F. et al.	Mineral resources of the region around Boulder Dam	Bulletin		1936	United States Geological Survey	10.3133/b871
56830b14cf58f1479a0ab918	442	Be'eri Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
572ee8a5cf58f11bb5bc1a43	319	Yaks Formation			Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
5511d58ee1382394b500bff1	274	Great Group			Boyadgiev, T.G. and Verheye, W.H.	Contribution to a utilitarian classification of gypsiferous soil	Geoderma	74	1996	Elsevier	10.1016/S0016-7061(96)00074-2
55b3055ce138231cbdd6cf97	1386	Abd Formation			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
54b4328de138239d86855c34	532	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
56c1ea81cf58f15c72c908aa	187	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
579ed180cf58f1030df9c51e	196	Granule Conglomerate			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b83d31e13823bd29ba865c	5586	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e66657e138237cc915052a	48	Eldon Formation	503	505.85	Yonge, C.J. and Krouse, H. Roy	The origin of sulphates in Castleguard Cave, Columbia Icefields, Canada	Chemical Geology: Isotope Geoscience section	65	1987	Elsevier	10.1016/0168-9622(87)90018-2
559cd25ee138230816dad548	392	Verde mention	4.1777	8.342	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
57484ab3cf58f13effae7ac5	109	Mabou Group	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
558cbceae13823109f3eda41	159	Harrisburg mention	273.01	282	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d6a7e13823bd29ba7dcc	7700	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
575c4f4ecf58f16b97cc4df6	41	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
57126a16cf58f140fa5c33f2	53	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
54b43288e138239d86854e95	44	Dibddiba Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
55b83d31e13823bd29ba865c	425	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	6099	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
578fb2c8cf58f1bdcd2df236	412	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
57a43018cf58f11204e17fe0	769	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6df25e13823bd29ba7dfe	1618	Verde mention	4.1777	8.342	Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55b83d31e13823bd29ba865c	3259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c121fdcf58f1a8110b7ddc	29	Lisan mention	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
557f7360e13823bc80ba26f4	1982	Carmel Formation	161.2	175.6	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
55f4877fcf58f16256a22522	61	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55f4877fcf58f16256a22522	610	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
557c7a3ae138239225f8687b	216	Tabuk Sandstone			Roberts, Ralph Jackson et al.	Mineral deposits in western Saudi Arabia; a preliminary report	Open-File Report		1975	United States Geological Survey	
55b7869fe13823bd29ba8231	2766	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	8076	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b43245e138239d8684952a	249	Salina Formation	416	443.7	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
5a39ee95cf58f1314cf12808	220	Lisan Formation	0.01143	0.126	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
54b4328fe138239d868561aa	240	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b83d31e13823bd29ba865c	6024	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3278	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2396	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	427	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a2d0619cf58f19f7117d37a	171	CdB Formation			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
55b7869fe13823bd29ba8231	2890	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b2e020e138231cbdd6ced3	846	Thumb Member	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
558df7d7e13823109f3ee082	235	Castile mention	259	259.51	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56a46596cf58f1944252b800	322	Burns Formation	23.03	33.9	Glotch, Timothy D. et al.	Mineralogy of the light-toned outcrop at Meridiani Planum as seen by the Miniature Thermal Emission Spectrometer and implications for its formation	Journal of Geophysical Research	111	2006	Wiley-Blackwell	10.1029/2005JE002672
550895c3e138237a6f7391ae	396	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55c0d379cf58f16e99a378b9	41	Castile Formation	253.8	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b78281e13823bd29ba8218	2010	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54b4328fe138239d868561aa	167	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
590777cbcf58f196b33265eb	222	Beekmantown Group	443.7	488.3	Robinson, George W. et al.	Minerals of the Beekmantown Group, Southeastern Ontario, Southern Quebec, and Northwestern New York	Rocks & Minerals	86	2011	Taylor and Francis	10.1080/00357529.2011.622227
5734b312cf58f14dbc2c579f	446	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
5554ccdbe138239301770ced	70	Segui Formation			Barbieri, Roberto et al.	Microbial signatures in sabkha evaporite deposits of Chott el Gharsa (Tunisia) and their astrobiological implications	Planetary and Space Science	54	2006	Elsevier	10.1016/j.pss.2006.04.003
57ec1ab3cf58f1acfab96941	81	Passaic Formation	199.6	228	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
55b7869fe13823bd29ba8231	2075	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	7146	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56831341cf58f1479a0ab983	66	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
558ecdcbe13823109f3ee5af	297	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55917250e13823109f3ef5b1	1624	Loei mention			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
55b7869fe13823bd29ba8231	1246	Blaine mention	268.51	275.2575	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55f36cb9cf58f16256a21d8b	523	Zaragoza Gypsum Formation	5.332	23.03	Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
557cbb8ae138239225f8697d	2899	Verde Formation	5.332	23.03	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
55092590e138238460c4f6a7	289	Judea Group	65.5	99.6	Yechieli, Y. et al.	Evolution of brackish groundater in a typical arid region: Northern Arava Rift Valley, southern Israel	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90026-Y
54b4328ce138239d86855a1e	575	Falces mention			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558d206fe13823109f3edc62	3559	Flagstaff Limestone	33.9	55.8	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
5ce2f9b20b45c76caf8ae21e	448	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5682f95fcf58f1479a0ab839	5	Zaragoza Gypsum Formation	5.332	23.03		Contents	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2007.volcontents_1.x
5712f1aacf58f16fb4cc921a	113	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5590c038e13823109f3ef1c7	85	Magenta Dolomite	251.902	273.01	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
55baa3b5e1382373b63b89e7	413	Louann Formation	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
572ea708cf58f10f9db0ebad	275	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
590769c6cf58f191e58edf9d	76	Cloud Chief Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
557d3f86e138239225f86b9f	615	Mancos Shale	65.5	145.5	Liebermann, Timothy D. et al.	Characteristics and trends of streamflow and dissolved solids in the upper Colorado River Basin, Arizona, Colorado, New Mexico, Utah, and Wyoming	Water Supply Paper		1989	United States Geological Survey	10.3133/wsp2358
54b4328ae138239d8685544	23	Salina Group	416	443.7	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
55b83d31e13823bd29ba865c	5910	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56831341cf58f1479a0ab983	134	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54f9553fe138239936c6c748	77	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b388d6e138231cbdd6d25d	954	La Caja Formation	145.5	161.2	Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
55b2bc12e138231cbdd6ce12	883	Maha Sarakam Formation	65.5	145.5	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
55f4877fcf58f16256a22522	5	Tripoli Formation	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
580e3bc6cf58f172dd1b8676	78	Tumbalunda Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b83d31e13823bd29ba865c	4542	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5506a9ebe1382326932d924e	259	Lisan Fm	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
57760111cf58f134d11ea726	932	Chugwater mention	201.4	247.2	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
58b8f161cf58f13c4631a064	42	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
55b7277de13823bd29ba7fc3	663	Eagle Valley mention	298.9	312	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
5981f724cf58f18c3530aa71	2	Francis Group	305.425	305.7125	Islam, Muhammad et al.	Relative Efficiency of Two Sulfur Sources Regarding Nitrogen Fixation and Yield of Chickpea	Communications in Soil Science and Plant Analysis	43	2012	Taylor and Francis	10.1080/00103624.2012.648358
5907a8e9cf58f1a944ce7e96	131	Tymochtee Dolomite	416	443.7	Carlson, Ernest H.	Ohio Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9925652
57760111cf58f134d11ea726	932	Chugwater mention	201.4	247.2	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
557cd3cfe138239225f869e5	2023	Duncan Sandstone	271.885	273.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d6a7e13823bd29ba7dcc	3611	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55f4877fcf58f16256a22522	767	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56c1a95dcf58f15c72c903aa	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54b4328ae138239d86855525	188	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55b6bedae13823bd29ba7d35	185	Furnace Creek Formation	1.806	5.332	Armstrong, Augustus K. et al.	Mineral resources of the Funeral Mountains Wilderness Study Area, Inyo County, California	Bulletin		1987	United States Geological Survey	10.3133/b1709A
56830b14cf58f1479a0ab918	446	Mavqi'im Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
57177ecdcf58f1637fb099ed	205	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55f4877fcf58f16256a22522	68	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
550dedb5e1382369a6f93ba1	91	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
55b75a36e13823bd29ba8116	1850	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b75a36e13823bd29ba8116	1850	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
557d3f86e138239225f86b9f	164	Mancos Shale	65.5	145.5	Liebermann, Timothy D. et al.	Characteristics and trends of streamflow and dissolved solids in the upper Colorado River Basin, Arizona, Colorado, New Mexico, Utah, and Wyoming	Water Supply Paper		1989	United States Geological Survey	10.3133/wsp2358
55b83d31e13823bd29ba865c	5472	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6144	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7039	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	4843	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57beed05cf58f1419cfbd6b3	232	Xiejia Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
57306580cf58f15948b1af00	254	Belayim Formation	11.608	15.97	Tadeusz Marek Peryt (1) and Volodymyr	Association of Redeposited Salt Breccias and Potash Evaporites in the Lower Miocene of Stebnyk (Carpathian Foredeep, West Ukraine)	SEPM Journal of Sedimentary Research	Vol. 67	1997	Society for Sedimentary Geology	10.1306/d4268676-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4328fe138239d868561aa	125	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
558d4970e13823109f3edd1b	275	Qimugen Formation	33.9	55.8	Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
550aa1a2e138238460c4fdf5	100	Guadix Formation			Hidalgo, M.Carmen and Cruz-Sanjulián, Javier	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
559e58a2e138230816dadbe2	574	Verde mention	4.1777	8.342	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b6d6a7e13823bd29ba7dcc	7748	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56a40443cf58f1944252b0ad	477	Planum Boreum mention			Murchie, Scott L. et al.	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2009JE003342
55ada974e13823763a830682	413	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
5732d61ecf58f1be188d2a21	99	Steinsfjord Formation			Snorre Olaussen (2)	Formation of Celestite in the Wenlock, Oslo Region Norway-Evidence for Evaporitic Depositional Environments	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7c02-2b24-11d7-8648000102c1865d
57177ecdcf58f1637fb099ed	130	Midco mention			Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
5682d639cf58f1479a0ab68d	3	Evaporite mention			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
55b7869fe13823bd29ba8231	2042	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328be138239d8685567e	374	Rus mention	33.9	55.8	Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
57ec17eccf58f1ac335ac1b3	645	Burano Formation	237	251	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55a7c745e13823757cc70251	128	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	148	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
56c1cb24cf58f15c72c90642	239	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55baa3b5e1382373b63b89e7	338	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1b69acf58f15c72c904b3	203	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b83d31e13823bd29ba865c	5905	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f28e79cf58f16256a217ad	115	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
5c2b5da21faed655488b16ed	275	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
54b4328ee138239d86856168	250	Calcite mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328fe138239d868561aa	125	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
550eebb2e1382369a6f93fc6	356	Zaragoza Gypsum Formation	5.332	23.03	Pueyo Anchuela, Ó. et al.	Assessing karst hazards in urbanized areas. Case study and methodological considerations in the mantle karst from Zaragoza city (NE Spain)	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2014.10.025
578aea2bcf58f13920dc7baa	50	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5b6eb3c5cf58f13c68e2d5dc	45	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
55b78281e13823bd29ba8218	2003	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	5447	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57c4b51dcf58f18ca41d0d6f	233	Calcite Aragonite Dolomite			Sun, Ziyong et al.	Hydrogeological and hydrogeochemical control of groundwater salinity in an arid inland basin: Dunhuang Basin, northwestern China	Hydrological Processes	30	2016	Wiley	10.1002/hyp.10760
58b7df47cf58f18af629a04c	590	Beuda mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	6242	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a2f1524cf58f1a44cb985a4	120	Nontronite Talc Calcite Dolomite			Salvatore, M.R. et al.	Bulk mineralogy of the NE Syrtis and Jezero crater regions of Mars derived through thermal infrared spectral analyses	Icarus	301	2018	Elsevier	10.1016/j.icarus.2017.09.019
55af1c5ce13823763a830fe9	734	Minnelusa Formation	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b83d31e13823bd29ba865c	409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5732d61ecf58f1be188d2a21	221	Ringerike Group			Snorre Olaussen (2)	Formation of Celestite in the Wenlock, Oslo Region Norway-Evidence for Evaporitic Depositional Environments	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7c02-2b24-11d7-8648000102c1865d
579f5bc9cf58f12a53c41a24	214	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
590769c6cf58f191e58edf9d	33	Hennessey Formation	273.01	279.7525	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
579f5bc9cf58f12a53c41a24	15	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
557f7360e13823bc80ba26f4	1479	Yeso mention	275.2575	286.225	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
54b43250e138239d8684b46c	142	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55baa3b5e1382373b63b89e7	205	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1d607cf58f15c72c9071a	399	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55b6d4bfe13823bd29ba7dc0	1290	Gypsum mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55f4877fcf58f16256a22522	244	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
589ebd9dcf58f101e1d918ac	201	Anhydrite Aragonite Calcite Dolomite			Balci, Nurgül et al.	Reproducing Authigenic Carbonate Precipitation in the Hypersaline Lake Acigöl (Turkey) with Microbial Cultures	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099763
58bb7f59cf58f1878850d92a	386	EdiacaranCambrian Ara Group			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
55ae0df7e13823763a830928	4079	GPSM Shale			edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	186	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5903521bcf58f184bec4336f	44	Zaragoza Gypsum Formation	5.332	23.03	Castañeda, Carmen et al.	Dedicated SAR interferometric analysis to detect subtle deformation in evaporite areas around Zaragoza, NE Spain	International Journal of Remote Sensing	32	2011	Taylor and Francis	10.1080/01431161003631584
55b6d6a7e13823bd29ba7dcc	7995	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4324de138239d8684aa17	177	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558e3447e13823109f3ee1ef	203	Rustler Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
54e865c7e138237cc9150d7f	314	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
56c1cb24cf58f15c72c90642	581	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54b4324de138239d8684aa17	229	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55ae0df7e13823763a830928	514	Queen Formation	260.4	270.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
590762a7cf58f18fc090d7b2	311	Salem Limestone	337.5	339	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
57bedb9ccf58f13bf01999e9	293	Moenkopi Formation	199.6	251	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55b83d31e13823bd29ba865c	74	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	206	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
558fda65e13823109f3eec30	429	Dinwoody Formation	250.4	251	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b83d31e13823bd29ba865c	421	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1c32bcf58f15c72c9059b	2	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
55b6d6a7e13823bd29ba7dcc	8061	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55c01a9ecf58f16e99a37305	327	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54b4328ae138239d8685557f	285	Raisby Formation	251.902	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
5b52e830cf58f189cf4f1128	104	Map Group	5.333	23.03	Walter, Benjamin F. et al.	Exploration of hydrothermal carbonate magnesium isotope signatures as tracers for continental fluid aquifers, Schwarzwald mining district, SW Germany	Chemical Geology	400	2015	Elsevier	10.1016/j.chemgeo.2015.02.009
54b4328de138239d86855c34	72	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	7060	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557f199ce13823bc80ba25a0	854	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5906cf0dcf58f15ad9553b8a	271	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
54e9f64ee138237cc9151412	464	Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
54b43247e138239d86849b52	226	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
558cbceae13823109f3eda41	167	Verde mention	4.1777	8.342	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54df4a35e138238a47f96f37	183	Cherty mention			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
5ce2f9b20b45c76caf8ae21e	455	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5906cf0dcf58f15ad9553b8a	151	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
579ed180cf58f1030df9c51e	303	Carroza mention	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
54c04652e1382389c54c3686	220	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ae138239d86855525	14	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
5503421ae1382326932d7e6d	2242	Zaragoza Gypsum Formation	5.332	23.03	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
57464969cf58f165ff103f08	94	Blornidon Formation			Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
5783caf0cf58f13fb21dfa1a	19	Furnace Creek Fm	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
54d2216be13823302d02428b	475	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
54b4324ee138239d8684ae63	129	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
5599341be1382390cc641189	273	Val Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
559afea3e1382390cc641cc4	491	Burano Formation	237	251	Montomoli, Chiara et al.	Fluid source and pressure–temperature conditions of high-salinity fluids in syn-tectonic veins from the Northeastern Apuan Alps (Northern Apennines, Italy)	Physics and Chemistry of the Earth, Parts A/B/C	30	2005	Elsevier	10.1016/j.pce.2005.01.003
564d7e68cf58f141b60ca7e2	505	Burns Formation	23.03	33.9	Zabrusky, Kelsey et al.	Reconstructing the distribution and depositional history of the sedimentary deposits of Arabia Terra, Mars	Icarus	220	2012	Elsevier	10.1016/j.icarus.2012.05.007
551545dbe1382394b500ce58	45	Muddy Creek Fm	5.332	23.03	Brock-Hon, Amy L. et al.	Micromorphological investigation of pedogenic barite in Mormon Mesa petrocalcic horizons, Nevada USA: Implication for genesis	Geoderma		2012	Elsevier	10.1016/j.geoderma.2012.02.012
5734b312cf58f14dbc2c579f	63	Monte Verde Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
58b8ce49cf58f12dec1f62bf	74	Na Cl Celestine Dolomite			Jensen, Gavin K.S.	Weyburn oilfield core assessment investigating cores from pre and post CO2 injection: Determining the impact of CO2 on the reservoir	International Journal of Greenhouse Gas Control	54	2016	Elsevier	10.1016/j.ijggc.2016.09.003
5590c038e13823109f3ef1c7	79	Culebra Dolomite	251	299	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
558fe155e13823109f3eec57	141	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
58d03bf3cf58f138516d1200	397	Smackover Formation	145.5	161.2	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55b33375e138231cbdd6d08f	1107	Lisan Formation	0.01143	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
559e58a2e138230816dadbe2	706	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55baa3b5e1382373b63b89e7	370	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54b4328ee138239d86855f3a	45	Krzyżanowice Formation			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
5599341be1382390cc641189	49	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
54b4328de138239d86855c34	408	Gypsiferous Claystone Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
558d206fe13823109f3edc62	3879	Furnace Creek Formation	1.806	5.332	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
5682dd16cf58f1479a0ab6de	144	Gessoso-solfifera Formation			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
55b83d31e13823bd29ba865c	4654	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	60	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
57a43018cf58f11204e17fe0	827	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
557b5a2ae138239225f86399	421	Pomorzany Mine Dolomite			Sutley, S.J. et al.	Mineralogy and chemistry of oxidized ores from the Upper Silesia Mississippi Valley-type zinc-lead deposits, Poland	Open-File Report		1999	United States Geological Survey	10.3133/ofr99394

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a751cee13823757cc6ff3c	968	Seven Rivers Formation	251	299	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
5743f3cacf58f16102c3d8df	39	Fenghuoshan Group			Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
579f5bc9cf58f12a53c41a24	30	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
59073883cf58f180c26e3666	69	Niobrara Formation	65.5	145.5	Degraw, Harold M. and Pabian, Roger K.	Collecting in Nebraska's Cretaceous Strata	Rocks & Minerals	55	1980	Taylor and Francis	10.1080/00357529.1980.11764638
55b83d31e13823bd29ba865c	8032	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2d73ee1faed655488b42bb	215	St. Louis Limestone	318.1	359.2	Liu, Dayong et al.	Origin and evolution of oilfield waters in the Tazhong oilfield, Tarim Basin, China, and their relationship to multiple hydrocarbon charging events	Marine and Petroleum Geology	98	2018	Elsevier	10.1016/j.marpetgeo.2018.09.018
584aa62ccf58f19d6a5f583e	142	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
598ba21ccf58f11db7396445	227	Mancos Shale	65.5	145.5	Jones, Colleen P. et al.	Selenium and salt mobilization in wetland and arid upland soils of Pariette Draw, Utah (USA)	Geoderma	305	2017	Elsevier	10.1016/j.geoderma.2017.06.028
55b388d6e138231cbdd6d25d	954	La Caja Formation	145.5	161.2	Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
56259ba1cf58f13437de53d5	151	TEM Hematite Dolomite			Kandler, Konrad et al.	Chemical composition and complex refractive index of Saharan Mineral Dust at Izaña, Tenerife (Spain) derived by electron microscopy	Atmospheric Environment	41	2007	Elsevier	10.1016/j.atmosenv.2007.06.047
56c1cb24cf58f15c72c90642	174	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55b83d31e13823bd29ba865c	191	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54cc5427e138236bcc929f92	159	Yeso Formation	251	299	Böhlke, J.K. and Irwin, J.J.	Brine history indicated by argon, krypton, chlorine, bromine, and iodine analyses of fluid inclusions from the Mississippi Valley type lead-fluorite-barite deposits at Hansonburg, New Mexico	Earth and Planetary Science Letters	110	1992	Elsevier	10.1016/0012-821X(92)90038-W
55b83d31e13823bd29ba865c	1467	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b8f161cf58f13c4631a064	42	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
54bf7e39e13823023e43de1a	268	Cencenighe Member			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55b7869fe13823bd29ba8231	2377	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
59081969cf58f116699a134d	100	Summerville mention	154.8	162.45	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
5945b493cf58f195edc28b3a	360	Keuper mention	266.9	242	Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
56c1b69acf58f15c72c904b3	197	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b83d31e13823bd29ba865c	6635	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8499	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8608	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3083	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579ed180cf58f1030df9c51e	304	Minas Viejas Formation			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b6d6a7e13823bd29ba7dcc	476	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56831341cf58f1479a0ab983	42	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b2c402e138231cbdd6ce3e	655	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
54b4328ce138239d86855aad	267	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
58c8ed8ccf58f1a71217fb6b	193	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
558e100ae13823109f3ee10f	159	Todilto mention	158.1835	162.45	Soulliere, Sandra J. et al.	Mineral resources of the Ojito and Cabezon Wilderness Study Areas, Sandoval County, New Mexico	Bulletin		1987	United States Geological Survey	10.3133/b1733B
58c2563ecf58f1330d6276bb	69	Latady Formation	145	201.4	Vennum, Walter R.	Evaporite encrustations and sulphide oxidation products from the southern Antarctic Peninsula	New Zealand Journal of Geology and Geophysics	23	1980	Taylor and Francis	10.1080/00288306.1980.10424121

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b83d31e13823bd29ba865c	622	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ce138239d86855b7a	332	Seven Rivers mention	261.76	264.5725	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
56a4fde9cf58f1944252c303	14	Chihsia Formation	251	299		Contents	Sedimentology	50	2003	Wiley-Blackwell	10.1111/j.1365-3091.2003.v50_i6_volindex.x
55b83d31e13823bd29ba865c	2905	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4324ae138239d8684a2ce	613	Barstow Formation	5.332	23.03	Martínez-Delclòs, Xavier et al.	Taphonomy of insects in carbonates and amber	Palaeogeography, Palaeoclimatology, Palaeoecology	203	2004	Elsevier	10.1016/S0031-0182(03)00643-6
55b83d31e13823bd29ba865c	7352	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	1991	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5c2567d81faed655488a6df8	167	Yesares Member	5.332	7.246	Pierre, Catherine	The isotopic record of gypsum diagenesis in diluted solutions: Observations in natural salinas and experiments	Chemical Geology	493	2018	Elsevier	10.1016/j.chemgeo.2018.06.024
57f555decf58f17e0fbf38b4	568	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
56c1b69acf58f15c72c904b3	62	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55f4877fcf58f16256a22522	79	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b83d31e13823bd29ba865c	7401	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c2a9cacf58f1a8110b8a1e	60	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5518b748e1382394b500dcce	2	Zaragoza mention	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
572f9e49cf58f1399347bfef	148	Cayman Formation	5.332	23.03	Brian Jones	Processes Associated with Microbial Biofilms in the Twilight Zone of Caves: Examples from the Cayman Islands	SEPM Journal of Sedimentary Research	Vol. 65A	1995	Society for Sedimentary Geology	10.1306/d426812b-2b26-11d7-8648000102c1865d
57ec17eccf58f1ac335ac1b3	87	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5907fd67cf58f10b6afca834	52	Fall River Sandstone	114.4	119.3	Smith, Arthur E. and Fritzsch, Eric	SOUTH DAKOTA	Rocks & Minerals	75	2000	Taylor and Francis	10.1080/00357520009605635
55c03cd3cf58f16e99a37419	60	LUtite Sandstone			Teixidor, Pilar et al.	Isopranylglycerol diethers in non-alkaline evaporitic environments	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90497-K
559dbdc9e138230816dad971	2040	Las Vegas Formation	0.0117	2.58	Conrad, J.E.	Mineral summaries for Nevada; U.S. Bureau of Land Management wilderness study areas	Open-File Report		1990	United States Geological Survey	10.3133/ofr90638
55b83d31e13823bd29ba865c	5941	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5731caeecf58f192f36c5766	96	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	1743	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	334	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5908209acf58f118fc585786	153	Lockport Formation	423	433.4	Watts, Stephen H.	Calcite Occurrences of Ontario	Rocks & Minerals	59	1984	Taylor and Francis	10.1080/00357529.1984.11764481
55b83d31e13823bd29ba865c	8538	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
550ab8aae138238460c4fe5e	47	Windsor Group	318.1	359.2	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
5731caeecf58f192f36c5766	114	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
598bc577cf58f12aa26601d6	90	Green River Formation	33.9	55.8	Shteyngol'ts, V. L. et al.	THE ASSOCIATION OF SODA DEPOSITS WITH ORGANIC-RICH SEDIMENTS	International Geology Review	34	1992	Taylor and Francis	10.1080/00206819209465620
56c44114cf58f17493f8536e	110	Salado mention	256.0278	262.2168	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
55f4877fcf58f16256a22522	216	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b6d6a7e13823bd29ba7dcc	6619	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	148	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559e58a2e138230816dadbe2	717	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b6d6a7e13823bd29ba7dcc	3628	Socorro mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
54b4324ee138239d8684ae63	318	Bordalba mention			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
56c1cb24cf58f15c72c90642	239	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b6d4bfe13823bd29ba7dc0	793	Gypsum Dolomite			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
578909b2cf58f15b69a740e1	109	Red Formation	23.03	33.9	JACKSON, M.P.A. and TALBOT, C. J.	External shapes, strain rates, and dynamics of salt structures	Geol Soc America Bull	97	1986	GSA	10.1130/0016-7606(1986)97<305:essrad>2.0.co;2
55b83d31e13823bd29ba865c	3829	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
551eecf7e138236e51a99d74	55	Zaragoza Fm	5.332	23.03	Pueyo Anchuela, Óscar et al.	Combination of electromagnetic, geophysical methods and sedimentological studies for the development of 3D models in alluvial sediments affected by karst (Ebro Basin, NE Spain)	Journal of Applied Geophysics		2014	Elsevier	10.1016/j.jappgeo.2014.01.002
55b83d31e13823bd29ba865c	6809	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557bfbc7e138239225f86664	611	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54b43246e138239d86849872	309	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
557c7a3ae138239225f8687b	665	Raghama Formation			Roberts, Ralph Jackson et al.	Mineral deposits in western Saudi Arabia; a preliminary report	Open-File Report		1975	United States Geological Survey	
559e58a2e138230816dadbe2	667	Kaibab Formation	270.6	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
579ed180cf58f1030df9c51e	122	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b83d31e13823bd29ba865c	6020	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c061c1e1382389c54c375d	97	Beekmantown mention	464.25	485.4	Dix, George R. and Robinson, George W.	The geochemical record of hydrothermal mineralization and tectonism inboard of the Appalachian Orogen: the Ottawa Embayment	Chemical Geology	197	2003	Elsevier	10.1016/S0009-2541(02)00245-0
5c2fe60d1faed655488b6bad	241	Altash Formation			Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b6d6a7e13823bd29ba7dcc	9680	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	4655	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f36cb9cf58f16256a21d8b	175	Zaragoza Fm	5.332	23.03	Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
54c04652e1382389c54c3686	5	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
558df7d7e13823109f3ee082	243	Salina Formation	416	443.7	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56831341cf58f1479a0ab983	300	Gypsum Formation			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56ac24facf58f19442534c08	77	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
55b83d31e13823bd29ba865c	5447	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1570	Salt Limestone	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	1449	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4324ce138239d8684a8ac	232	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
55b6d4bfe13823bd29ba7dc0	451	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b83d31e13823bd29ba865c	6262	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	4060	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54c046b4e1382389c54c3689	350	Sevier River Formation	2.58	13.09	Cunningham, Charles G. et al.	Supergene destruction of a hydrothermal replacement alunite deposit at Big Rock Candy Mountain, Utah: mineralogy, spectroscopic remote sensing, stable-isotope, and argon-age evidences	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.055
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b43247e138239d86849b52	208	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5597c097e1382390cc6409b0	143	Minerals Dolomite			Bauerek, Arkadiusz et al.	Chemical composition of surface runoff from flotation wastes of Zn–Pb ore formation of the Mississippi Valley-type, Olkusz, Southern Poland	Journal of Geochemical Exploration		2013	Elsevier	10.1016/j.gexplo.2013.05.002
55f46dbecf58f16256a22478	1573	Jatta Gypsum Formation			Vandenbroucke, M. and Largeau, C.	Kerogen origin, evolution and structure	Organic Geochemistry	38	2007	Elsevier	10.1016/j.orggeochem.2007.01.001
558df7d7e13823109f3ee082	2953	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b83d31e13823bd29ba865c	622	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	1945	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	3387	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1469	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	244	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55f4877fcf58f16256a22522	52	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56c1cb24cf58f15c72c90642	150	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
579f5bc9cf58f12a53c41a24	45	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
58c8ed8ccf58f1a71217fb6b	158	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b4327de138239d8685311c	53	Shotori Formation	228	245	Sarkarinejad, Khalil and Ghanbarian, Mohammad Ali	The Zagros hinterland fold-and-thrust belt in-sequence thrusting, Iran	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.017
55b83d31e13823bd29ba865c	7728	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	49	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
56c1fcefcf58f15c72c90a17	450	Sarakham Formation			Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
56c1c32bcf58f15c72c9059b	169	Bellerophon mention	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
55b83d31e13823bd29ba865c	5472	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	90	Beuda Gypsum Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b2e020e138231cbdd6ced3	846	Thumb Member	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56830b14cf58f1479a0ab918	266	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
558df7d7e13823109f3ee082	2332	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54dc2da6e138238a47f96228	181	Edwards mention	100.5	103.625	Land, Lynton S. and Prezbindowski, Dennis R.	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
59073883cf58f180c26e3666	85	Pierre mention	71.0935	84.275	Degraw, Harold M. and Pabian, Roger K.	Collecting in Nebraska's Cretaceous Strata	Rocks & Minerals	55	1980	Taylor and Francis	10.1080/00357529.1980.11764638
54b4328fe138239d868561aa	158	Solfifera Formation			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b83d31e13823bd29ba865c	3180	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557f199ce13823bc80ba25a0	784	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5682dd16cf58f1479a0ab6de	77	Laga mention			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
55b7869fe13823bd29ba8231	2021	Carmel Formation	161.2	175.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c79dd081faed6554897e428	47	Francis Group	305.425	305.7125	Ghorab, Hanaa Youssef et al.	Progress research on earth construction: Cast earth with glass wastes, cement kiln bypass dust and activated clay	African Journal of Science, Technology, Innovation and Development			Informa UK Limited	10.1080/20421338.2018.1479141
55b83d31e13823bd29ba865c	7188	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	134	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5c2ad1181faed655488b08a2	89	Marl Dozahir mention	33.9	55.8	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
55b6df25e13823bd29ba7dfe	226	Gypsum Limestone			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55b83d31e13823bd29ba865c	5941	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6e66fe13823bd29ba7e28	620	Flagstaff mention	330.9	346.7	Franczyk, K. J. et al.	Cretaceous and Tertiary paleogeographic reconstructions for the Uinta-Piceance Basin Study Area, Colorado and Utah	Bulletin		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	590	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54d2216be13823302d02428b	380	Collyhurst Sandstone	251	299	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
56c1d8a6cf58f15c72c9073f	197	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54b43246e138239d86849919	699	Norian-Hettangian Blomidon Formation			Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
54b43247e138239d86849b52	242	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b83d31e13823bd29ba865c	4615	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5967	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3e6a3e138231cbdd6d46d	3950	Horse Spring Formation	5.332	23.03	Edited by Vine, James David	Lithium resources and requirements by the year 2000	Professional Paper		1976	United States Geological Survey	10.3133/pp1005
5c3e6d6c1faed655488cd35a	76	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
5506a9ebe1382326932d924e	375	Ze'elim Fm	-5.5012E-05	0.01143	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55b3055ce138231cbdd6cf97	4150	Ghanam mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b7869fe13823bd29ba8231	1208	Canas Gypsum Member	273.01	282	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558e100ae13823109f3ee10f	198	Wanakah Formation	161.2	175.6	Soulliere, Sandra J. et al.	Mineral resources of the Ojito and Cabezon Wilderness Study Areas, Sandoval County, New Mexico	Bulletin		1987	United States Geological Survey	10.3133/b1733B
5590ec95e13823109f3ef2e5	1063	Paradox Member	299	318.1	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
5597020ce1382390cc640567	165	Albite Dolomite			Smuda, Jochen et al.	Mineralogical and geochemical study of element mobility at the sulfide-rich Excelsior waste rock dump from the polymetallic Zn–Pb–(Ag–Bi–Cu) deposit, Cerro de Pasco, Peru	Journal of Geochemical Exploration	92	2007	Elsevier	10.1016/j.gexplo.2006.08.001
58c183abcf58f1a32df49350	313	Burano Formation	237	251	Kuroda, Junichiro et al.	Characterization of sulfate mineral deposits in central Thailand	Island Arc	26	2017	Wiley-Blackwell	10.1111/iar.12175
55b6d6a7e13823bd29ba7dcc	3228	Alamogordo mention	351.5	358.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328de138239d86855dfa	430	Al Nakhsh Member	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b82344e13823bd29ba85af	172	Sespe mention	17.095	42.85	Dickinson, Kendell A. and Leventhal, Joel S.	The geology, carbonaceous materials, and origin of the epigenetic uranium deposits in the Tertiary Sespe Formation in Ventura County, California	Bulletin		1988	United States Geological Survey	10.3133/b1771
55f2ced1cf58f16256a21973	261	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b83d31e13823bd29ba865c	7844	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
59079ad6cf58f1a3f1fe48e7	227	Tymochtee mention	419.2	429.2	Carlson, Ernest H.	Ohio Mineral Locality Index	Rocks & Minerals	65	1990	Taylor and Francis	10.1080/00357529.1990.11761719
5c19917d1faed655488915d3	865	Lapatkos Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
5599341be1382390cc641189	182	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
54e97acfe138237cc915120b	76	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
54b43250e138239d8684b33f	38	Artés Formation			Pérez, Aureli Álvarez and Pérez, German Álvarez	Preservation of original aragonite structure in Desmophyllum castellolense (Scleractinia) from the Eocene Igualada Basin (NE Spain)	Palaeoworld	23	2014	Elsevier	10.1016/j.palwor.2014.04.001
57ec17eccf58f1ac335ac1b3	439	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b3c597e138231cbdd6d3b5	1768	Franciscan Formation	65.5	99.6	Schlocker, Julius	Geology of the San Francisco North Quadrangle, California	Professional Paper		1974	United States Geological Survey	10.3133/pp782
55b7869fe13823bd29ba8231	2087	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b3055ce138231cbdd6cf97	3335	Garian mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
54b4328de138239d86855c34	7	CßayirhanmentionCß			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
577ef8c7cf58f1ac737005ec	88	Salt Bed	251	260.4	Bihao, Wu et al.	Deposition of Potash-Magnesium Salts in the Qarhan Playa, Qaidam Basin	Acta Geologica Sinica-English	60	1986	Wiley-Blackwell	10.1111/j.1755-6724.1986.mp60003007.x
55b6bd25e13823bd29ba7d29	4075	Kyanite mention			Tooker, Edwin Wilson and Beeby, David J.	Industrial minerals in California; economic importance, present availability, and future development	Bulletin		1990	United States Geological Survey	10.3133/b1958
55b83d31e13823bd29ba865c	7844	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4478	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5998	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3dfb4e138231cbdd6d442	1689	Opeche Shale	251	299	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
54b43276e138239d86851d3b	648	Trubi mention	3.6	5.332	Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
55b7869fe13823bd29ba8231	2048	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c44c3ecf58f1a8110b93c8	120	Tochilinite Breunnerite Dolomite			Court, Richard W. and Sephton, Mark A.	New estimates of the production of volatile gases from ablating carbonaceous micrometeoroids at Earth and Mars during an E-belt-type Late Heavy Bombardment	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.09.010
54b43289e138239d868551ab	705	Edwards Group	99.6	145.5	Longman, Mark W. and Mench, Patricia A.	Diagenesis of Cretaceous limestones in the Edwards aquifer system of south-central Texas: A scanning electron microscope study	Sedimentary Geology	21	1978	Elsevier	10.1016/0037-0738(78)90022-2
55b7869fe13823bd29ba8231	2873	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ee138239d8684ae63	313	Palaeogene Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5d35e56c0b45c76caf93f034	1312	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
54b43282e138239d86853ec7	64	Albert Formation	318.1	359.2	Chowdhury, Ali H. and Noble, James P.A.	Organic carbon and pyrite sulphur relationships as evidences of bottom water conditions of sedimentation, Albert Formation fine-grained lacustrine sediments, New Brunswick, Canada	Marine and Petroleum Geology	13	1996	Elsevier	10.1016/0264-8172(95)00035-6
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b4328ce138239d86855aad	12	Middle Member			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56e03f27cf58f1688d55b242	135	Calcite Dolomite			Koeppen, William C. and Hamilton, Victoria E.	Global distribution, composition, and abundance of olivine on the surface of Mars from thermal infrared data	Journal of Geophysical Research	113	2008	Wiley-Blackwell	10.1029/2007JE002984
54b43246e138239d86849872	314	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
558fe155e13823109f3eec57	359	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b7277de13823bd29ba7fc3	417	Leadville Limestone	318.1	359.2	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
54e865c7e138237cc9150d7f	347	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55f4877fcf58f16256a22522	492	Gypsum Mbr			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
58b7df47cf58f18af629a04c	424	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
598bfd90cf58f13f5702dd7b	26	Type Deposits Class Group			Gorbachev, B.F. et al.	Deposits of nonmetallic mineral resources in weathering crusts	International Geology Review	18	2009	Taylor and Francis	10.1080/00206817609471174
5906dd0fcf58f15fea53aef7	50	Wichita Group	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
58d03bf3cf58f138516d1200	397	Smackover Formation	145.5	161.2	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
54e865c7e138237cc9150d7f	410	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b83d31e13823bd29ba865c	1150	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4685	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2c402e138231cbdd6ce3e	666	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55c0ff9acf58f16e99a37a1c	384	Qiakemake Formation	145.5	199.6		Goldschmidt Abstracts 2010 – J	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.04.035
55baa3b5e1382373b63b89e7	159	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
58b6daf1cf58f11f2b0dde84	825	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
54b43247e138239d86849b52	66	Chaunaca mention			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b83d31e13823bd29ba865c	3117	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b78281e13823bd29ba8218	2018	Rustler mention	253.9652	256.0278	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
557d3f86e138239225f86b9f	163	Mancos Shale	65.5	145.5	Liebermann, Timothy D. et al.	Characteristics and trends of streamflow and dissolved solids in the upper Colorado River Basin, Arizona, Colorado, New Mexico, Utah, and Wyoming	Water Supply Paper		1989	United States Geological Survey	10.3133/wsp2358
5599341be1382390cc641189	139	Fuentes Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b83d31e13823bd29ba865c	2704	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558bbed5e13823109f3ed4f8	252	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55b83d31e13823bd29ba865c	8714	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
59080b6ccf58f111237d82af	206	De Queen Formation	99.6	145.5	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c31f51e1faed655488ba517	737	Belayım Formation			Diniz-Akarca, Cansu	Soft-sediment deformation structures related to tectonomagmatic activity: A case study from the borate-bearing lacustrine deposits of early Miocene Bigadiç Basin, NW Turkey	Sedimentary Geology	373	2018	Elsevier	10.1016/j.sedgeo.2018.05.012
558b2c2be13823109f3ed1ee	425	Barstow Fm	5.332	23.03	Orris, G. J.	Borate deposits	Open-File Report		1995	United States Geological Survey	
54b4328de138239d86855c34	384	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b690a7e138238e2d05483f	3629	Moreno Formation	65.5	99.6	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b83d31e13823bd29ba865c	3585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bfef15e1382330560e0801	265	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5c2bea2e1faed655488b221b	132	Nugget Formation	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
55b83d31e13823bd29ba865c	7703	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4324ee138239d8684ae63	4	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
54b4328fe138239d868561aa	240	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
5901cf4bcf58f1b4d0585930	80	Analytical Group			Reidy, Lorlyn et al.	Elemental fingerprinting of gypsum drywall using sector field ICP-MS and multivariate statistics	International Journal of Environmental Analytical Chemistry	94	2014	Taylor and Francis	10.1080/03067319.2014.954561
55b300e5e138231cbdd6cf7b	6215	Ag Millerite Dolomite			Heyl, Allen V. et al.	The Geology of the Upper Mississippi Valley Zinc-Lead District	Professional Paper		1959	United States Geological Survey	10.3133/pp309
578fb2c8cf58f1bdcd2df236	127	San Andres Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5906cf0dcf58f15ad9553b8a	52	Salina Group	416	443.7	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55911c4ee13823109f3ef407	483	Uinta Formation	33.9	55.8	Robson, S. G. and Saulnier, G. J., Jr.	Hydrogeochemistry and simulated solute transport, Piceance Basin, northwestern Colorado	Professional Paper		1981	United States Geological Survey	
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	4297	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
580e3bc6cf58f172dd1b8676	23	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
56f4128bcf58f13288bf82d4	22	Burns mention	23.03	33.9	Zolotov, Mikhail Y. and Shock, Everett L.	Formation of jarosite-bearing deposits through aqueous oxidation of pyrite at Meridiani Planum, Mars	Geophysical Research Letters	32	2005	Wiley-Blackwell	10.1029/2005GL024253
5c3033451faed655488b73cf	2	Tupo Formation			Rouchon, Véronique et al.	Gypsum growth induced by pyrite oxidation jeopardises the conservation of fossil specimens: an example from the Xiaheyan entomofauna (Late Carboniferous, China)	Palaeogeography, Palaeoclimatology, Palaeoecology	507	2018	Elsevier	10.1016/j.palaeo.2018.05.035
578b8ab6cf58f1645f54f0c6	106	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5800ebeecf58f182fc2bc3f1	122	Calcite Aragonite Dolomite			Ramírez-Reinat, Edgardo L. and Garcia-Pichel, Ferran	CHARACTERIZATION OF A MARINE CYANOBACTERIUM THAT BORES INTO CARBONATES AND THE REDESCRIPTION OF THE GENUS MASTIGOCOLEUS1	Journal of Phycology	48	2012	Wiley	10.1111/j.1529-8817.2012.01157.x
5c2b5da21faed655488b16ed	275	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
5731caeecf58f192f36c5766	224	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
54b4328ae138239d8685544	7	Greenfield Dolomite	422.05	429.8	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	7182	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7997	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8714	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55ae0df7e13823763a830928	1405	Dewey Lake Formation	251.902	253.9652	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b3055ce138231cbdd6cf97	1024	Bu Ghaylan Limestone	145.5	199.6	Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
54b4327fe138239d868536c9	220	Middle Salwa Member			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
55b6d6a7e13823bd29ba7dcc	1986	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558c8afce13823109f3ed928	587	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
589a4380cf58f1ab398ea2c6	157	Phase Group	65.5	251	Naderi Peikam, Elahe and Jalali, Mohsen	Application of inverse geochemical modelling for predicting surface water chemistry in Ekbatan watershed, Hamedan, western Iran	Hydrological Sciences Journal	61	2016	Taylor and Francis	10.1080/02626667.2015.1016947
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2855	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	667	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b6df25e13823bd29ba7dfe	315	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
558fda65e13823109f3eec30	130	Hermosa Formation	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
54b4327de138239d868530d9	65	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
579b56dacf58f13d24f0d7ef	49	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54b43248e138239d86849e57	196	Lauca Formation	1.806	5.332	Gaupp, Reinhard et al.	Palaeoclimatic implications of Mio–Pliocene sedimentation in the high-altitude intra-arc Lauca Basin of northern Chile	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00017-6
5906dd0fcf58f15fea53aef7	179	Salado mention	256.0278	262.2168	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b83d31e13823bd29ba865c	259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b31f28e138231cbdd6d027	5814	Furnace Creek Formation	1.806	5.332	Hunt, Charles Butler and Mabey, Don R.	Stratigraphy and structure, Death Valley, California	Professional Paper		1966	United States Geological Survey	10.3133/pp494A
55b83d31e13823bd29ba865c	3351	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56830b14cf58f1479a0ab918	266	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b75a36e13823bd29ba8116	1505	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b83d31e13823bd29ba865c	1690	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3764	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	80	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b83d31e13823bd29ba865c	5969	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54fe25efe138239936c6e7e5	197	Calcite Dolomite			Mayo, Alan L. and Klauk, Robert H.	Contributions to the solute and isotopic groundwater geochemistry, Antelope Island, Great Salt Lake, Utah	Journal of Hydrology	1-4	1991	Elsevier	10.1016/0022-1694(91)90120-7
55b6d6a7e13823bd29ba7dcc	8171	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1ca03cf58f15c72c90620	244	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5897de3fcf58f1081e8c64e1	43	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
578cff68cf58f101e2dda387	119	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b7869fe13823bd29ba8231	2771	Johnson Shale	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	6809	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55a42573e13823757cc6f13f	108	Dammam Formation			Smith, C. L.	Reconnaissance investigation of brine in the eastern Rub al Khali, Kingdom of Saudi Arabia	Open-File Report		1981	United States Geological Survey	10.3133/ofr82387
54df4a35e138238a47f96f37	183	Cherty mention			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
54f5c2d8e13823054496a81e	32	Bearpaw Formation	65.5	145.5	Oscarson, D.W. et al.	Mass transport through defected bentonite plugs	Applied Clay Science	2-4	1996	Elsevier	10.1016/S0169-1317(96)00021-X
55b83d31e13823bd29ba865c	4826	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57320585cf58f19d17198262	35	Mineral mention	307	315.2	Gerald M. Friedman	Methane-Generated Lithified Dolostone of Holocene Age: Eastern Mediterranean	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c7-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fc7de5e138239936c6dc25	24	Tripoli Formation	5.332	7.246	Müller, Daniel W. and Mueller, Paul A.	Origin and age of the Mediterranean Messinian evaporites: implications from Sr isotopes	Earth and Planetary Science Letters	107	1991	Elsevier	10.1016/0012-821X(91)90039-K
57a43018cf58f11204e17fe0	859	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56f2f5d1cf58f188070f2ce8	310	Wiksane Formation			RHAZI, Mohammed EL and HAYASHI, Ken-ichiro	Mineralogy, Geochemistry, and Age Constraints on the Beni Bou Ifrour Skarn Type Magnetite Deposit, Northeastern Morocco	Resource Geology	52	2002	Wiley-Blackwell	10.1111/j.1751-3928.2002.tb00114.x
579f5bc9cf58f12a53c41a24	81	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b43290e138239d86856489	217	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
572ee8a5cf58f11bb5bc1a43	276	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
58bfe48bcf58f113393dbc03	253	Calcite Dolomite			Gil-Márquez, J.M. et al.	Hydrological and geochemical processes constraining groundwater salinity in wetland areas related to evaporitic (karst) systems. A case study from Southern Spain	Journal of Hydrology		2017	Elsevier	10.1016/j.jhydrol.2016.11.062
55b6d6a7e13823bd29ba7dcc	5981	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c60ad7cf58f17493f876b5	168	St. Louis Limestone	318.1	359.2	Stueber, Alan M. and Criss, Robert E.	ORIGIN AND TRANSPORT OF DISSOLVED CHEMICALS IN A KARST WATERSHED, SOUTHWESTERN ILLINOIS	Journal of the American Water Resources Association	41	2005	Wiley-Blackwell	10.1111/j.1752-1688.2005.tb03734.x
55b3d511e138231cbdd6d40e	228	Weber Sandstone	270.6	299	Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
56c1c32bcf58f15c72c9059b	2	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
564da7c8cf58f141b60ca916	314	Hl Thn Gp			Battler, Melissa M. et al.	Mineralogy of saline perennial cold springs on Axel Heiberg Island, Nunavut, Canada and implications for spring deposits on Mars	Icarus	224	2013	Elsevier	10.1016/j.icarus.2012.08.031
54e736c1e138237cc915089d	537	Prairie Evaporate Formation			Bottomley, D.J. et al.	The origin and evolution of Canadian Shield brines: evaporation or freezing of seawater? New lithium isotope and geochemical evidence from the Slave craton	Chemical Geology	155	1999	Elsevier	10.1016/S0009-2541(98)00166-1
55b83d31e13823bd29ba865c	4825	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5d150bd20b45c76caf904e78	239	Isachsen Formation	109.875	134.4	Harrington, Elise M. et al.	A Polarimetric SAR and Multispectral Remote Sensing Approach for Mapping Salt Diapirs: Axel Heiberg Island, NU, Canada	Canadian Journal of Remote Sensing	45	2019	Informa UK Limited	10.1080/07038992.2019.1610656
5598dfe1e1382390cc640fbc	166	Huanglong Formation	299	359.2	Du, Yilun et al.	Petrology and geochemistry of Silurian–Triassic sedimentary rocks in the Tongling region of Eastern China: Their roles in the genesis of large stratabound skarn ore deposits	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.11.021
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b3edd0e138231cbdd6d498	2949	Nevada mention	386.45	391.9	Winograd, I. J. and Thordarson, William	Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site	Professional Paper		1975	United States Geological Survey	10.3133/pp712C
558c8afce13823109f3ed928	587	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
55b7869fe13823bd29ba8231	2799	Spearfish Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b3dfb4e138231cbdd6d442	1729	Ervay mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
57f555decf58f17e0fbf38b4	568	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
5897de3fcf58f1081e8c64e1	421	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
579f5bc9cf58f12a53c41a24	147	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b4328ee138239d86855f3a	188	Wieliczka mention			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
54b4324ee138239d8684ae63	318	Bordalba mention			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
54b4328fe138239d868561aa	165	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58b8f161cf58f13c4631a064	42	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
5897de3fcf58f1081e8c64e1	183	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b78281e13823bd29ba8218	596	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5b6d936dcf58f1a92c2d33b5	41	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
558eb5d6e13823109f3ee517	1511	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b43246e138239d86849872	324	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55b83d31e13823bd29ba865c	8320	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fe155e13823109f3eec57	350	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
57613d6fcf58f138292ba937	482	Bozkır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
558de3b1e13823109f3ee00b	678	Age Formation	251	542	Hoots, H.W.	Contributions to economic geology (short papers and preliminary reports), 1925, Part I, Metals and nonmetals except fuels. Geology of a part of western Texas and southeastern New Mexico, with special reference to salt and potash	Bulletin		1926	United States Geological Survey	10.3133/b780B
55b83d31e13823bd29ba865c	5910	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3804	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
5b526230cf58f1a50a464a8d	257	Shizigou Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
5599341be1382390cc641189	283	Caños Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55baa3b5e1382373b63b89e7	347	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
558fda65e13823109f3eec30	1602	Goose Egg Formation	199.6	251	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
578cff68cf58f101e2dda387	142	Monongahela Formation	299	318.1	Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
56c1cb24cf58f15c72c90642	342	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54c04e8fe1382389c54c36c6	42	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
54c046b4e1382389c54c3689	350	Sevier River Formation	2.58	13.09	Cunningham, Charles G. et al.	Supergene destruction of a hydrothermal replacement alunite deposit at Big Rock Candy Mountain, Utah: mineralogy, spectroscopic remote sensing, stable-isotope, and argon-age evidences	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.055
5cfd8fb70b45c76caf8df5d1	141	Lafarge Group			Arsène, M.-A. et al.	Chemically and Thermally Treated Vegetable Fibers for Reinforcement of Cement-Based Composites	Materials and Manufacturing Processes	22	2007	Informa UK Limited	10.1080/10426910601063386
58b7df47cf58f18af629a04c	110	Besalu mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	3750	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57128432cf58f14a08338b39	112	Castile Formation	253.8	260.4	Manzi, V. et al.	High-Frequency Cyclicity In the Mediterranean Messinian Evaporites: Evidence For Solar-Lunar Climate Forcing	Journal of Sedimentary Research	82	2012	Society for Sedimentary Geology	10.2110/jsr.2012.81
5c2b5da21faed655488b16ed	431	Dalan Formation	251	260.4	Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
55ae0df7e13823763a830928	491	Fourmile Draw mention	273.01	282	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b83d31e13823bd29ba865c	8340	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d27dd9cf58f121bb4ffb04	29	Cerro Azul Formation	5.332	23.03	Vezzosi, Raúl Ignacio	First record of Procariama simplex Rovereto, 1914 (Phorusrhacidae, Psilopterinae) in the Cerro Azul Formation (upper Miocene) of La Pampa Province; remarks on its anatomy, palaeogeography and chronological range	Alcheringa: An Australasian Journal of Palaeontology	36	2012	Taylor and Francis	10.1080/03115518.2011.597657
58c8ed8ccf58f1a71217fb6b	10	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5509ab13e138238460c4f9de	229	Calcite Dolomite			van Helvoort, Pieter-Jan et al.	Characterization of the reactivity of riverine heterogeneous sediments using a facies-based approach; the Rhine–Meuse delta (The Netherlands)	Applied Geochemistry	22	2007	Elsevier	10.1016/j.apgeochem.2007.06.016
55b7869fe13823bd29ba8231	2005	Kaibab Formation	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578cff68cf58f101e2dda387	68	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
57a43018cf58f11204e17fe0	711	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57c86deecf58f14147c0a3d0	672	Codó Formation			Nachon, M. et al.	Calcium sulfate veins characterized by ChemCam/Curiosity at Gale crater, Mars	Journal of Geophysical Research: Planets	119	2014	Wiley	10.1002/2013JE004588
559e58a2e138230816dadbe2	707	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
575c4f4ecf58f16b97cc4df6	236	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	8320	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557e95f1e1382390b43c844a	84	USCS Group			Aldaood, Abdulrahman et al.	Impact of freeze–thaw cycles on mechanical behaviour of lime stabilized gypseous soils	Cold Regions Science and Technology		2014	Elsevier	10.1016/j.coldregions.2013.12.003
557cd3cfe138239225f869e5	1072	Gilliam mention			McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55a751cee13823757cc6ff3c	1773	Castile mention	259	259.51	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
58b8f161cf58f13c4631a064	41	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
55b83d31e13823bd29ba865c	6656	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6721	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b4328ee138239d868561688	123	Tripoli Formation	5.332	7.246	Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
55b83d31e13823bd29ba865c	3904	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
565f6ebfcf58f148c57ec29d	1	Tunisian Chemical Group			Boumnijel, Ibtissem et al.	Effect of calcinated and activated perlite on improving efficiency of dihydrate process for phosphoric acid	International Journal of Mineral Processing		2013	Elsevier	10.1016/j.minpro.2013.10.005
55b83d31e13823bd29ba865c	7352	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	366	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
590762a7cf58f18fc090d7b2	463	Salem Limestone	337.5	339	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
55b83d31e13823bd29ba865c	1487	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5833ce7ecf58f1110fa956dd	191	Stratigraphic Depth Calcite Dolomite			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
55b83d31e13823bd29ba865c	3829	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7678	Red Bluff mention	0.0117	33.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5768b00ecf58f104af50a3e1	289	Sulphur Fluorite Limestone			Ayres, R.U.	Preliminary Description of Materials/Energy Balance Statistical Subsystem (MEBSS)	Science for Better Environment Proceedings of the International Congress on the Human Environment (Hesc) (Kyoto, 1975)		1977	Elsevier	10.1016/B978-0-08-021948-6.50089-3
5731caeecf58f192f36c5766	53	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55f4877fcf58f16256a22522	305	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
56831341cf58f1479a0ab983	23	Cerezo Gypsum Fm			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57ec17eccf58f1ac335ac1b3	439	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
56c1a95dcf58f15c72c903aa	433	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
58ce025ccf58f13091d9e1e6	3	Francis Group	305.425	305.7125	Glamoclija, Mihaela et al.	Microbial Nitrogen and Sulfur Cycles at the Gypsum Dunes of White Sands National Monument, New Mexico	Geomicrobiology Journal	29	2012	Taylor and Francis	10.1080/01490451.2011.608111
5554ccdbe138239301770ced	70	Segui Formation			Barbieri, Roberto et al.	Microbial signatures in sabkha evaporite deposits of Chott el Gharsa (Tunisia) and their astrobiological implications	Planetary and Space Science	54	2006	Elsevier	10.1016/j.pss.2006.04.003
54b43246e138239d86849919	757	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b7869fe13823bd29ba8231	2062	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ca16cf58f15c72c90624	162	Zaragoza Formation	23.03	33.9	Valero-GarcÉs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
558fda65e13823109f3eec30	1108	Round Valley Limestone	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
5712f1aacf58f16fb4cc921a	16	Newark mention	192.9	237	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
58b7df47cf58f18af629a04c	127	Vallfogona Fm			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
559877f7e1382390cc640dbc	311	Bellerophon Formation	251	299	Palinkaš, Ladislav A. et al.	Metallogeny of the Northwestern and Central Dinarides and Southern Tisia	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.05.006
55b83d31e13823bd29ba865c	7056	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55826ca1e1382390b43c936b	69	Coal mention	251	260.4	Ward, Colin R.	Minerals in bituminous coals of the Sydney basin (Australia) and the Illinois basin (U.S.A.)	International Journal of Coal Geology	13	1989	Elsevier	10.1016/0166-5162(89)90104-3
54b4328de138239d86855dfa	183	Salwa Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
5731caeecf58f192f36c5766	285	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	7703	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6817	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
557f199ce13823bc80ba25a0	785	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54c0c25fe1382389c54c390a	662	Burano Formation	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55b7008ee13823bd29ba7ebf	2108	Moss Back mention	201.4	237	Finnell, Tommy L. et al.	Geology, ore deposits, and exploratory drilling in the Deer Flat area, White Canyon district, San Juan County, Utah	Bulletin		1963	United States Geological Survey	10.3133/b1132
55ad3126e13823763a8303a0	186	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56aaa9f0cf58f19442532ee1	105	Thebes Formation			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
54e7a556e138237cc9150a6b	11	Floral Formation			Van Stempvoort, Dale R. et al.	Sources and dynamics of sulfur in weathered till, Western Glaciated Plains of North America	Chemical Geology	1-4	1994	Elsevier	10.1016/0009-2541(94)90081-7
5906dd0fcf58f15fea53aef7	446	Jackson mention	10.08	11.04	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b7869fe13823bd29ba8231	1468	Gypsum Spring Formation	168.65	174.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5580277de13823bc80ba29fd	99	Platinum Group			Leonard, Kenneth R.	Preliminary deposit-type map of northwestern Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr89158
5897de3fcf58f1081e8c64e1	368	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55c01a9ecf58f16e99a37305	389	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b83d31e13823bd29ba865c	3840	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558d4970e13823109f3edd1b	299	Keluoziyi Formation			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55ae0df7e13823763a830928	564	Bernal Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	3669	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	588	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
575019eacf58f1696f3ea50a	377	Salina Group	416	443.7	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
57436148cf58f12dd96016ef	42	Sanhedong mention	199.6	228	GAO, Lan et al.	New Progress in Study of the Ore-bearing Black Limestone of Jinding Giant Zn-Pb Deposit, Yunnan, Southwest China	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12368_6
5731caeecf58f192f36c5766	280	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b67b0be1382373b63b7842	1632	Green River mention	34.8525	58.4		List of referees, list of contents, subject index and author index vol. 51, 1987	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90142-6
55b83d31e13823bd29ba865c	8200	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	3048	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1b69acf58f15c72c904b3	141	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
54b43247e138239d86849b52	241	Cayara mention	45.6	53.95	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5580277de13823bc80ba29fd	12128	Los Lamentos Fm	100.5	145	Leonard, Kenneth R.	Preliminary deposit-type map of northwestern Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr89158
5783caf0cf58f13fb21dfa1a	600	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
54c04e8fe1382389c54c36c6	69	Abu Dhabi mention	-5.5012E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
559cd25ee138230816dad548	392	Verde mention	4.1777	8.342	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	1730	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55f2d67dcf58f16256a219a7	136	Cameli Formation			Budakoglu, Murat et al.	The rare earth element geochemistry on surface sediments, shallow cores and lithological units of Lake Acıgöl basin, Denizli, Turkey	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.05.016
579f5bc9cf58f12a53c41a24	22	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	5930	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43246e138239d86849919	693	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b7869fe13823bd29ba8231	2842	Smackover Limestone	154.8	165.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
570fe41dcf58f114a862267f	147	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
56c1b69acf58f15c72c904b3	58	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
558fe155e13823109f3eec57	841	Culebra Dolomite	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
54b4328fe138239d868561aa	158	Solfifera Formation			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54bf26f8e13823023e43db6f	196	Aroa mention			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	1945	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328de138239d86855c34	3	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
5897de3fcf58f1081e8c64e1	368	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
58b7df47cf58f18af629a04c	284	Beuda mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
5945b493cf58f195edc28b3a	527	Guadalquivir mention			Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
5731caeecf58f192f36c5766	275	Karstryggen Fm	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
57177ecdcf58f1637fb099ed	38	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
56831341cf58f1479a0ab983	1	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
580e3bc6cf58f172dd1b8676	85	Bambata mention	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
570a5694cf58f13f88a48a02	44	Gessoso-Solfifera Fm			Scalenghe, Riccardo et al.	The role of pedogenic overprinting in the obliteration of parent material in some polygenetic landscapes of Sicily (Italy)	Geoderma Regional	7	2016	Elsevier	10.1016/j.geodrs.2016.01.003
55b3dfb4e138231cbdd6d442	1730	Ervay mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
57ec17eccf58f1ac335ac1b3	121	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56c1b6a3cf58f15c72c904b4	250	Cattolica mention			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
55b83d31e13823bd29ba865c	3438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
59072a7fcf58f17b9fec3eff	181	Porters Creek Formation	55.8	65.5	Dean, Lewis S.	Alabama Mineral Locality Index	Rocks & Minerals	70	1995	Taylor and Francis	10.1080/00357529.1995.9926642
575c4f4ecf58f16b97cc4df6	41	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
57a43018cf58f11204e17fe0	810	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
579f5bc9cf58f12a53c41a24	217	Ponda Formation			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b4328de138239d86855c34	154	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
584aa62ccf58f19d6a5f583e	134	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	6407	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	305	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b690a7e138238e2d05483f	3616	Dakota mention	98.85	119.3	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b83d31e13823bd29ba865c	793	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	269	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ee138239d86855fe9	348	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
5712f1aacf58f16fb4cc921a	262	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
580e3bc6cf58f172dd1b8676	291	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54d0272be13823b501cdbc75	58	Bear Rock Formation	359.2	416	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58b7df47cf58f18af629a04c	547	Beuda Gypsum Fm			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b6d6a7e13823bd29ba7dcc	9592	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55f2d67dcf58f16256a219a7	136	Cameli Formation			Budakoglu, Murat et al.	The rare earth element geochemistry on surface sediments, shallow cores and lithological units of Lake Acıgöl basin, Denizli, Turkey	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.05.016
54b43290e138239d86856489	140	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
557cd3cfe138239225f869e5	4050	Cedar Mesa Member	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
579f5bc9cf58f12a53c41a24	85	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
57c1a08dcf58f16cbd62157f	235	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
55b2c402e138231cbdd6ce3e	2478	Mancos Shale	65.5	145.5	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55b83d31e13823bd29ba865c	4647	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55917250e13823109f3ef5b1	855	Lorn Sak Formation			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
54b43248e138239d86849d6d	280	Project-Spanish Group			Rodríguez-Aranda, J.P and Calvo, J.P	Trace fossils and rhizoliths as a tool for sedimentological and palaeoenvironmental analysis of ancient continental evaporite successions	Palaeogeography, Palaeoclimatology, Palaeoecology	140	1998	Elsevier	10.1016/S0031-0182(98)00036-4
54f9553fe138239936c6c748	90	Yesares Member	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
5a3b865dcf58f103a802eed2	92	Karacaören Formation			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
57ec17eccf58f1ac335ac1b3	142	Pinda Group	99.6	112	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
59080b6ccf58f111237d82af	17	Glen Rose Formation	65.5	145.5	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463
55b83d31e13823bd29ba865c	5969	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
5731caeecf58f192f36c5766	61	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
55b83d31e13823bd29ba865c	5899	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559c3f39e138230816dad2ff	128	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5c2ad1181faed655488b08a2	89	Marl Dozahir mention	33.9	55.8	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
54b4328ae138239d868553bb	34	Age Formation	251	542	Qiuyuan, Lao and Wenxue, Gao	The characteristics of cenozoic sedimentary basins in the North China platform	Sedimentary Geology	40	1984	Elsevier	10.1016/0037-0738(84)90041-1
54b4328de138239d86855c34	154	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	7995	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7507	Figure mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1cb24cf58f15c72c90642	174	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
5731caeecf58f192f36c5766	61	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	6407	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1101	Kirschberg Evaporite Member	100.5	113	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	3229	Opeche Shale	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b97a75e1382369e57e4cef	2	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5897de3fcf58f1081e8c64e1	314	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b3055ce138231cbdd6cf97	3280	Ghanam Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
56a07543cf58f1079fd4bebf	12	Asmari Limestone	5.332	23.03	Waltham, Tony	Salt terrains of Iran	Geology Today	24	2008	Wiley-Blackwell	10.1111/j.1365-2451.2008.00686.x
56833129cf58f1479a0abb1c	873	Rus Formation	33.9	55.8	Clarke, Michael W. Hughes	STRATIGRAPHY AND ROCK UNIT NOMENCLATURE IN THE OIL-PRODUCING AREA OF INTERIOR OMAN	Journal of Petroleum Geology	11	1988	Wiley-Blackwell	10.1111/j.1747-5457.1988.tb00800.x
55b83d31e13823bd29ba865c	1193	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55988f24e1382390cc640e38	92	Baizuo Formation	299	359.2	Han, Run-Sheng et al.	Geological features and origin of the Huize carbonate-hosted Zn–Pb–(Ag) District, Yunnan, South China	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2006.03.003
56a4fde9cf58f1944252c303	14	Chihsia Formation	251	299		Contents	Sedimentology	50	2003	Wiley-Blackwell	10.1111/j.1365-3091.2003.v50_i6_volindex.x
55b83d31e13823bd29ba865c	3830	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56b99311cf58f14c238d4bdc	203	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
557b5a2ae138239225f86399	438	Ankerite Dolomite			Sutley, S.J. et al.	Mineralogy and chemistry of oxidized ores from the Upper Silesia Mississippi Valley-type zinc-lead deposits, Poland	Open-File Report		1999	United States Geological Survey	10.3133/ofr99394
57c9f7a1cf58f1bbcffcfdff	251	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
54b4328ee138239d86855fe9	348	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
54e76d92e138237cc915098c	116	Furnace Creek Formation	1.806	5.332	Böhlke, J.K. et al.	Stable isotope evidence for an atmospheric origin of desert nitrate deposits in northern Chile and southern California, U.S.A.	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00124-6
5906c7e5cf58f1587481407b	51	Lockport Group	416	443.7	Dietrich, R. V.	Rocks Rock Chips: What is the Niagara Escarpment?	Rocks & Minerals	69	1994	Taylor and Francis	10.1080/00357529.1994.9925589
56b99311cf58f14c238d4bdc	145	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
56c1c32bcf58f15c72c9059b	2	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
575c4f4ecf58f16b97cc4df6	467	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
57321bc8cf58f1a0ac39199e	122	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
575c4f4ecf58f16b97cc4df6	261	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b78281e13823bd29ba8218	1349	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54e8ae2de138237cc9150ec9	285	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
5897de3fcf58f1081e8c64e1	368	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5514907ce1382394b500cb75	222	Kuwait mention			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
56c1a95dcf58f15c72c903aa	47	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56830b14cf58f1479a0ab918	386	Colombacci Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b3edd0e138231cbdd6d498	3017	Spring mention			Winograd, I. J. and Thordarson, William	Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site	Professional Paper		1975	United States Geological Survey	10.3133/pp712C
5907c51bcf58f1b45c88c8fc	220	Rush Springs Sandstone	251	260.4	Hanson, Sarah L.	Midwest Places of Geologic Interest	Rocks & Minerals	92	2017	Taylor and Francis	10.1080/00357529.2017.1241696
559e58a2e138230816dadbe2	574	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
5712f1aacf58f16fb4cc921a	296	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
5a0493edcf58f1b96402aae7	277	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	478	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	693	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b7869fe13823bd29ba8231	2023	Curtis Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558cbceae13823109f3eda41	168	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
5733f2e2cf58f12e47457e00	33	Madison mention	332.345	358.9	Joyce M. Budai et al.	Burial Dedolomite in the Mississippian Madison Limestone, Wyoming and Utah Thrust Belt	SEPM Journal of Sedimentary Research	Vol. 54	1984	Society for Sedimentary Geology	10.1306/212f83ff-2b24-11d7-8648000102c1865d
550895c3e138237a6f7391ae	10	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
5a2f778acf58f10a775a37f3	204	MARRE CREEK Zaragoza Fm			Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b6d6a7e13823bd29ba7dcc	7423	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55ad3126e13823763a8303a0	203	Rustler mention	253.9652	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
557ff66ee13823bc80ba2925	474	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
590762a7cf58f18fc090d7b2	463	Salem Limestone	337.5	339	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5c29b7d41faed655488ae938	220	Luocheng mention			Ji, Dongping et al.	Mississippian anthracites in Guangxi Province, southern China: Petrological, mineralogical, and rare earth element evidence for high-temperature solutions	International Journal of Coal Geology	197	2018	Elsevier	10.1016/j.coal.2018.08.006
557b5a2ae138239225f86399	415	Trzebionka Dolomite			Sutley, S.J. et al.	Mineralogy and chemistry of oxidized ores from the Upper Silesia Mississippi Valley-type zinc-lead deposits, Poland	Open-File Report		1999	United States Geological Survey	10.3133/ofr99394
57613d6fcf58f138292ba937	449	Bayındır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
57126a16cf58f140fa5c33f2	241	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b83d31e13823bd29ba865c	2887	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3dfb4e138231cbdd6d442	1693	Blaine Formation	251	299	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
5d35e56c0b45c76caf93f034	1312	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
55b83d31e13823bd29ba865c	3387	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b43246e138239d86849919	85	Newark Supergroup	65.5	251	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b7869fe13823bd29ba8231	720	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	4015	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58bc3d4dcf58f1173a73e22e	195	Coal mention	251	260.4	Dai, Shifeng et al.	Enrichment of U-Re-V-Cr-Se and rare earth elements in the Late Permian coals of the Moxinpo Coalfield, Chongqing, China: Genetic implications from geochemical and mineralogical data	Ore Geology Reviews		2017	Elsevier	10.1016/j.oregeorev.2016.06.015
54b4328ee138239d868560336	423	Grabfeld Formation	227	242	Galfetti, Thomas et al.	Evolution of Early Triassic outer platform paleoenvironments in the Nanpanjiang Basin (South China) and their significance for the biotic recovery	Sedimentary Geology	204	2008	Elsevier	10.1016/j.sedgeo.2007.12.008
584aa62ccf58f19d6a5f583e	55	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5a30910ccf58f1715016597b	90	Parachute Creek Member	33.9	55.8	Lowenstein, Tim K. et al.	The Green River salt mystery: What was the source of the hyperalkaline lake waters?	Earth-Science Reviews	173	2017	Elsevier	10.1016/j.earscirev.2017.07.014

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6e66fe13823bd29ba7e28	620	Flagstaff mention	330.9	346.7	Franczyk, K. J. et al.	Cretaceous and Tertiary paleogeographic reconstructions for the Uinta-Piceance Basin Study Area, Colorado and Utah	Bulletin		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	461	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	714	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	3044	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5734b312cf58f14dbc2c579f	78	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b6d6a7e13823bd29ba7dcc	5981	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
589ebd9dcf58f101e1d918ac	77	Reference Huntite Calcite Dolomite			Balci, Nurgül et al.	Reproducing Authigenic Carbonate Precipitation in the Hypersaline Lake Acıgöl (Turkey) with Microbial Cultures	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099763
55ae0df7e13823763a830928	492	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	1991	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55f4877fcf58f16256a22522	244	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5783caf0cf58f13fb21dfa1a	536	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
55b83d31e13823bd29ba865c	841	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57177ecdcf58f1637fb099ed	140	Wellington Group	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55b78281e13823bd29ba8218	667	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55ae4f4be13823763a830ada	352	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5d35e56c0b45c76caf93f034	1259	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
5683349ccf58f1479a0abb4e	103	Castile mention	259	259.51	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b7869fe13823bd29ba8231	2043	Carmel mention	458.4	485.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57613d6fcf58f138292ba937	452	Bayındır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
58d05f41cf58f143d83df312	118	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
5c19917d1faed655488915e2	434	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
5907a8f7cf58f1a944ce7ed3	181	Keokuk Formation	341.375	351.5	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
5c2d73ee1faed655488b42bb	222	Penglaiba Formation			Liu, Dayong et al.	Origin and evolution of oilfield waters in the Tazhong oilfield, Tarim Basin, China, and their relationship to multiple hydrocarbon charging events	Marine and Petroleum Geology	98	2018	Elsevier	10.1016/j.marpetgeo.2018.09.018
55b83d31e13823bd29ba865c	6258	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7678	Red Bluff mention	0.0117	33.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56830b14cf58f1479a0ab918	446	Mavqi'im Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54b43250e138239d8684b46c	142	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57ec17eccf58f1ac335ac1b3	11	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b8b8e9e13823bd29ba8989	382	PRINCIPAL SOURCES Limestone			Severson, R.C. and Shacklette, Hansford T.	Essential elements and soil amendments for plants; sources and use for agriculture	Circular		1988	United States Geological Survey	10.3133/cir1017
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
54be90c7e13823299564b137	479	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55b83d31e13823bd29ba865c	3869	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558cbceae13823109f3eda41	163	Moenkopi Formation	199.6	251	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b3055ce138231cbdd6cf97	938	Jabal Ben Ghenema Limestone			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
57c86f1bcf58f141c6f7b1f8	461	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54b4328de138239d86855dfa	330	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
558eb5d6e13823109f3ee517	1511	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
580e3bc6cf58f172dd1b8676	56	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
559d88f0e138230816dad87c	4011	Sand mention			Bjorklund, Louis Jay and Motts, Ward Sundt	Geology and water resources of the Carlsbad area, Eddy County, New Mexico	Open-File Report		1959	United States Geological Survey	10.3133/ofr599
5506a9ebe1382326932d924e	300	Amora Formation	0.01143	1.806	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
577b3daccf58f13110d8e98f	217	Fe mention			OMORI, KEIICHI and KERR, PAUL F.	Infrared Studies of Saline Sulfate Minerals	Geol Soc America Bull	74	1963	Geological Society of America	10.1130/0016-7606(1963)74[709:isossm]2.0.co;2
55b7869fe13823bd29ba8231	1602	Paradox mention	306	319.714	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	8351	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	2052	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57516912cf58f129ff61ef40	332	Horton mention	425.6	427.4	Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
54b4328ee138239d86855f3a	232	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55f4877fcf58f16256a22522	530	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	698	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	9637	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4327fe138239d868536c9	208	Middle Al Nakhsh Member			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
54e7c15ae138237cc9150ae2	51	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
54b43249e138239d8684a19a	50	Tripoli Formation	5.332	7.246	Blanc-Valleron, M.-M et al.	Sedimentary, stable isotope and micropaleontological records of paleoceanographic change in the Messinian Tripoli Formation (Sicily, Italy)	Palaeogeography, Palaeoclimatology, Palaeoecology	185	2002	Elsevier	10.1016/S0031-0182(02)00302-4
55c3965ccf58f1a8110b90be	202	Heletz mention			Chan, Lui-Heung et al.	The behavior of lithium and its isotopes in oilfield brines: evidence from the Heletz-Kokhav field, Israel	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00800-6
55b83d31e13823bd29ba865c	3669	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7768	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b88a09e13823bd29ba883a	3372	Tampa mention	23.6288	24.2275	Edited by Gohn, Gregory S.	Proceedings of the 1988 U.S. Geological Survey Workshop on the Geology and geohydrology of the Atlantic Coastal Plain	Circular		1992	United States Geological Survey	
58b7df47cf58f18af629a04c	112	Vallfogona Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
584aa62ccf58f19d6a5f583e	505	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54c029e6e1382389c54c35a6	224	Lisan mention	0.01143	0.126	Möller, P. et al.	Hydrochemical processes in the lower Jordan valley and in the Dead Sea area	Chemical Geology	239	2007	Elsevier	10.1016/j.chemgeo.2006.12.004
58c8ed8ccf58f1a71217fb6b	9	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b83d31e13823bd29ba865c	5108	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	1865	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
54b4328ee138239d868561688	285	Calcite Dolomite			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b6d6a7e13823bd29ba7dcc	1986	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	1487	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	150	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b6d6a7e13823bd29ba7dcc	5911	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ce138239d86855aad	660	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b83d31e13823bd29ba865c	425	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf7e39e13823023e43de1a	145	Bellerophon mention	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
58c8ed8ccf58f1a71217fb6b	10	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
58b7df47cf58f18af629a04c	130	Beuda Fm			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	8190	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55990e4de1382390cc6410c3	238	Sp mention			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
55b7869fe13823bd29ba8231	2783	Madison Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c1a06bcf58f16cbd621551	59	Ramon Group	199.6	251	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
557ff66ee13823bc80ba2925	710	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
54b43246e138239d86849872	130	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
5734b312cf58f14dbc2c579f	78	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
590769c6cf58f191e58edf9d	49	Rush Springs Sandstone	251	260.4	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57ec17eccf58f1ac335ac1b3	738	Castile mention	259	259.51	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5580277de13823bc80ba29fd	9834	Boleo Fm			Leonard, Kenneth R.	Preliminary deposit-type map of northwestern Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr89158
5907a8f7cf58f1a944ce7ed3	298	Excello Shale	306	312	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
54c0cf26e1382389c54c3932	267	Norseman mention	37.71	47.8	Benison, Kathleen Counter and Bowen, Brenda Beitler	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b3d511e138231cbdd6d40e	286	Tabular mention			Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
55b83d31e13823bd29ba865c	3594	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c00c02e1382389c54c34be	149	Hüttenberg Formation			Frimmel, Hartwig E.	Trace element distribution in Neoproterozoic carbonates as palaeoenvironmental indicator	Chemical Geology	258	2009	Elsevier	10.1016/j.chemgeo.2008.10.033
5900d92bcf58f169295f6afb	147	Guanzhuang Formation			Tan, H-B. et al.	Fractionation of hydrogen and oxygen isotopes of gypsum hydration water and assessment of its geochemical indications	Australian Journal of Earth Sciences	61	2014	Taylor and Francis	10.1080/08120099.2014.921242
572cdf45cf58f133c4f9d591	963	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
5579c265e138231c7c52c464	147	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54b4328ae138239d86855525	41	Hagif Formation			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
5731caeecf58f192f36c5766	275	Karstryggen Fm	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
5c3e6d6c1faed655488cd35a	242	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b83d31e13823bd29ba865c	6656	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7964	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2aade11faed655488b04a4	63	Sahabi Formation			Stathopoulou, E.T. et al.	A geochemical approach to fossilization processes in Miocene vertebrate bones from Sahabi, NE Libya	Journal of African Earth Sciences	149	2019	Elsevier	10.1016/j.jafrearsci.2018.07.019
55baa3b5e1382373b63b89e7	413	Louann Formation	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5c19917d1faed655488915d3	865	Lapatkos Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
5598dfe1e1382390cc640fbc	163	Dalong Formation	251	260.4	Du, Yilun et al.	Petrology and geochemistry of Silurian–Triassic sedimentary rocks in the Tongling region of Eastern China: Their roles in the genesis of large stratabound skarn ore deposits	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.11.021
58b7df47cf58f18af629a04c	314	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
570fe41dcf58f114a862267f	230	Zechstein mention	251.902	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
557ff66ee13823bc80ba2925	1041	Lance Formation	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
55b83d31e13823bd29ba865c	399	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8714	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4325ce138239d8684d4cc	111	Base mention			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
55b83d31e13823bd29ba865c	3675	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d4bfe13823bd29ba7dc0	1297	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5c19917d1faed655488915d3	424	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
58c8ed8ccf58f1a71217fb6b	70	Kizilirmak Formation			GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
574822d9cf58f13411b192a3	195	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
55b83d31e13823bd29ba865c	4543	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4015	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c61f5ccf58f17493f87854	77	Feldspar Dolomite			Naftz, David L.	PREDICTIVE CAPABILITIES OF BATCH-EXTRACT EXPERIMENTS USING WATER FROM A COAL MINE	Journal of the American Water Resources Association	24	1988	Wiley-Blackwell	10.1111/j.1752-1688.1988.tb00939.x
575c4f4ecf58f16b97cc4df6	41	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5b6f081fcf58f1539ffa6761	192	Yapılar Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
55b83d31e13823bd29ba865c	7452	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558d206fe13823109f3edc62	2710	Moenkopi mention	203.175	251.902	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
572ce192cf58f134a3e8d070	310	Cove Mountain Member	33.9	66	Johnson, Ronald C. et al.	Geology of tight oil and potential tight oil reservoirs in the lower part of the Green River Formation, Uinta, Piceance, and Greater Green River Basins, Utah, Colorado, and Wyoming	Scientific Investigations Report		2016	USGS	10.3133/sir20165008
59069dcecf58f1491d1b327e	79	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
54b4328ee138239d86855fe9	348	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
58c8ed8ccf58f1a71217fb6b	106	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b4328ee138239d86855f3a	273	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
56c1cb24cf58f15c72c90642	239	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54b43284e138239d868544db	171	Calcite mention			Glaccum, Robert A and Prospero, Joseph M	Saharan aerosols over the tropical North Atlantic — Mineralogy	Marine Geology	37	1980	Elsevier	10.1016/0025-3227(80)90107-3
55b6d6a7e13823bd29ba7dcc	7923	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5bf90c4dcf58f1a9c3124ad5	87	Calcite Dolomite			Giustetto, Roberto et al.	Deterioration of building materials and artworks in the 'Santa Maria della Stella' church, Saluzzo (Italy): Causes of decay and possible remedies	Studies in Conservation	62	2017	Informa UK Limited	10.1080/00393630.2016.1217694
574aba21cf58f133347f7fbe	207	Montmorillonite Calcite Dolomite			Birk, Dieter	Quantitative coal mineralogy of the Sydney Coalfield, Nova Scotia, Canada, by scanning electron microscopy, computerized image analysis, and energy-dispersive X-ray spectrometry	Canadian Journal of Earth Sciences	27	1990	Canadian Science Publishing	10.1139/e90-017
55b64a4de1382314227d0039	318	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55092590e138238460c4f6a7	238	Kurnub mention	65.5	145.5	Yechieli, Y. et al.	Evolution of brackish groundater in a typical arid region: Northern Arava Rift Valley, southern Israel	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90026-Y
55b83d31e13823bd29ba865c	1193	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fda65e13823109f3eec30	1134	Paradox Member	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
55b78281e13823bd29ba8218	2018	Rustler mention	253.9652	256.0278	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
590769c6cf58f191e58edf9d	145	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
5a39cb7bcf58f124b3de3ef9	59	Nanlin Formation	5.332	23.03	Xiao, ChangHao et al.	Subduction-related hot spring-type gold mineralization in the central Tengchong block, southwestern China	Ore Geology Reviews	90	2017	Elsevier	10.1016/j.oregeorev.2016.12.011
54b4328ee138239d86855aad	296	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5682e272cf58f1479a0ab716	592	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578b8ab6cf58f1645f54f0c6	241	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
57177ecdcf58f1637fb099ed	205	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55b83d31e13823bd29ba865c	4647	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54df4a35e138238a47f96f37	183	Cherty mention			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
54b4328de138239d86855dfa	272	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	277	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56b43ed6cf58f14c238d2c89	164	None Present Sandstone			MAZAHERI, S.A. et al.	A fuzzy allocation scheme for the Australian Great Soil Groups Classification system	European Journal of Soil Science	46	1995	Wiley-Blackwell	10.1111/j.1365-2389.1995.tb01356.x
5ce2f9b20b45c76caf8ae21e	148	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b83d31e13823bd29ba865c	1467	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca16cf58f15c72c90624	162	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
57a43018cf58f11204e17fe0	434	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55baa3b5e1382373b63b89e7	159	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54b4328ee138239d86855f01	280	Tripoli Fm	5.332	7.246	Rouchy, Jean Marie and Caruso, Antonio	The Messinian salinity crisis in the Mediterranean basin: A reassessment of the data and an integrated scenario	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.02.005
54b43246e138239d86849872	334	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55b83d31e13823bd29ba865c	5436	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557b7daee1382390b43c774b	204	Kalahari mention	0	100.5	Mees, Florias	Salt mineral distribution patterns in soils of the Otjomongwa pan, Namibia	CATENA	54	2003	Elsevier	10.1016/S0341-8162(03)00135-8
54b43276e138239d86851d3b	144	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
557ff66ee13823bc80ba2925	1312	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
5c2b5da21faed655488b16ed	271	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
56259ba1cf58f13437de53d5	151	TEM Hematite Dolomite			Kandler, Konrad et al.	Chemical composition and complex refractive index of Saharan Mineral Dust at Izaña, Tenerife (Spain) derived by electron microscopy	Atmospheric Environment	41	2007	Elsevier	10.1016/j.atmosenv.2007.06.047
54b4324de138239d8684aba6	328	Gesso Fm			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
59073182cf58f17e24d9c0bb	253	Morrison Formation	145.5	161.2	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
55b83d31e13823bd29ba865c	6595	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43248e138239d86849e30	38	Zaragoza mention	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
55ae0df7e13823763a830928	1445	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
55b83d31e13823bd29ba865c	4542	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	182	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
57f555decf58f17e0fbf38b4	573	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
54b4327fe138239d86853736	191	Basin mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
54bfef15e1382330560e0801	230	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
55b6d6a7e13823bd29ba7dcc	7359	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	220	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5598a6fee1382390cc640ebc	79	Krompachy Group			Radvanec, Martin et al.	Siderite mineralization of the Gemericum superunit (Western Carpathians, Slovakia): review and a revised genetic model	Ore Geology Reviews	24	2004	Elsevier	10.1016/j.oregeorev.2003.07.004
54e865c7e138237cc9150d7f	323	Penrith Sandstone	273.01	298.9	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b7869fe13823bd29ba8231	2062	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fe155e13823109f3eec57	347	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b75a36e13823bd29ba8116	2282	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
5c31c4821faed655488ba064	52	Nong Bok Formation	65.5	99.6	REN, Qianhui et al.	A Multi-fluid Constrain for the Forming of Potash Deposits in the Savannakhet Basin: Geochemical Evidence from Halite	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13552
55b7869fe13823bd29ba8231	2433	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5d35e56c0b45c76caf93f034	1309	Lance Formation	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
56c1c976cf58f15c72c9061b	342	Groden Formation	251	299	SPOTL, CHRISTOPH and BURNS, STEPHEN J.	Magnesite diagenesis in redbeds: a case study from the Permian of the Northern Calcareous Alps (Tyrol, Austria)	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb02010.x
550dedb5e1382369a6f93ba1	94	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
56c1ca16cf58f15c72c90624	70	Zaragoza mention	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
55b83d31e13823bd29ba865c	7409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54c061c1e1382389c54c375d	206	Carillon Formation	460.9	471.8	Dix, George R. and Robinson, George W.	The geochemical record of hydrothermal mineralization and tectonism inboard of the Appalachian Orogen: the Ottawa Embayment	Chemical Geology	197	2003	Elsevier	10.1016/S0009-2541(02)00245-0
55b6d6a7e13823bd29ba7dcc	5567	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5b6f081fcf58f1539ffa6761	76	Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
54e8ae2de138237cc9150ec9	313	Bunter mention	245	251	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
55f5d3d0cf58f16256a22df9	95	Maikop Fm			Kokh, Svetlana N. et al.	Heavy carbon travertine related to methane generation: A case study of the Big Tarkhan cold spring, Kerch Peninsula, Crimea	Sedimentary Geology		2015	Elsevier	10.1016/j.sedgeo.2015.05.005
55b6d6a7e13823bd29ba7dcc	3871	EXPLANATION Limestone			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	4543	Gypsum Sandstone			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
585b644ecf58f1a722daada6	92	Fort Union Formation	55.8	65.5	McMahon, P.B. et al.	Chemical Considerations for an Updated National Assessment of Brackish Groundwater Resources	Groundwater	54	2016	Wiley	10.1111/gwat.12367
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3357	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5743f3cacf58f16102c3d8df	172	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
558b4ac1e13823109f3ed293	788	Coal mention	251	260.4	Zimmerman, Everett Alfred and Collier, K. R.	Ground-water data, Green River basin, Wyoming	Open-File Report		1985	United States Geological Survey	
55b75a36e13823bd29ba8116	2208	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5a2d0619cf58f19f7117d37a	171	CdB Formation			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
59073182cf58f17e24d9c0bb	995	Bearpaw Shale	70.575	75.9333	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
55b83d31e13823bd29ba865c	4635	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57128432cf58f14a08338b39	112	Castile Formation	253.8	260.4	Manzi, V. et al.	High-Frequency Cyclicity In the Mediterranean Messinian Evaporites: Evidence For Solar-Lunar Climate Forcing	Journal of Sedimentary Research	82	2012	Society for Sedimentary Geology	10.2110/jsr.2012.81
58c1de9acf58f1094097ba52	87	Beacon Sandstone	65.5	251	Gibson, G. W.	Geological Investigations in Southern Victoria Land, Antarctica	New Zealand Journal of Geology and Geophysics	5	1962	Taylor and Francis	10.1080/00288306.1962.10420093
55b7869fe13823bd29ba8231	2062	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55f4877fcf58f16256a22522	610	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56830b14cf58f1479a0ab918	613	Base Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54b43288e138239d86854e95	56	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
56c1d8a6cf58f15c72c9073f	197	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d6a7e13823bd29ba7dcc	9617	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5c3e6d6c1faed655488cd35a	206	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b43246e138239d868497 21	198	Culpeper mention	184.2	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
54b4325ce138239d8684d4cc	60	Base Member			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
55b2c402e138231cbdd6ce3e	697	Hermosa Formation	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55988dfce1382390cc640e32	60	Palaeocene Yunlong Formation			Xue, Chunji et al.	Geologic, fluid inclusion and isotopic characteristics of the Jinding Zn–Pb deposit, western Yunnan, South China: A review	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2005.04.007
55087dc1e138237a6f73910e	266	Panoche Formation	65.5	99.6	Presser, Theresa S. and Swain, Walter C.	Geochemical evidence for Se mobilization by the weathering of pyritic shale, San Joaquin Valley, California, U.S.A.	Applied Geochemistry	5	1990	Elsevier	10.1016/0883-2927(90)90066-E
54b4328fe138239d868561aa	125	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b3055ce138231cbdd6cf97	1440	Regima Limestone	5.332	23.03	Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
558fa710e13823109f3eeaeb	897	James Hardie Gypsum Limestone			Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
5599341be1382390cc641189	266	Beuda Gypsum Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
58b7df47cf58f18af629a04c	118	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
575c4f4ecf58f16b97cc4df6	468	Mineral Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
575c4f4ecf58f16b97cc4df6	1	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5599341be1382390cc641189	49	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b7869fe13823bd29ba8231	2869	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	7078	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4757	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1148	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559c3f39e138230816dad2ff	677	Artesia Group	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
56c1b69acf58f15c72c904b3	165	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b83d31e13823bd29ba865c	8584	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57516912cf58f129ff61ef40	113	Horton Group	318.1	359.2	Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
55b33067e138231cbdd6d081	2360	Tropic mention			Gregory, H.E.	The geology and geography of the Paunsaugunt region, Utah	Professional Paper		1951	United States Geological Survey	10.3133/pp226
55b83d31e13823bd29ba865c	3259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ee138239d86855f3a	45	Krzyżanowice Formation			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5712f1aacf58f16fb4cc921a	233	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
54b4328fe138239d868561aa	240	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b4328ee138239d86855fe9	513	Baza Fm			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
567c9105cf58f1b2eac1a357	140	Morelos Formation	65.5	145.5	Talavera Mendoza, Oscar et al.	Water-rock-tailings interactions and sources of sulfur and metals in the subtropical mining region of Taxco, Guerrero (southern Mexico): A multi-isotopic approach	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2015.12.002
55c2ce13cf58f1a8110b8b48	411	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b83d31e13823bd29ba865c	616	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	87	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4324ae138239d8684a2ce	682	Barstow Formation	5.332	23.03	Martínez-Delclòs, Xavier et al.	Taphonomy of insects in carbonates and amber	Palaeogeography, Palaeoclimatology, Palaeoecology	203	2004	Elsevier	10.1016/S0031-0182(03)00643-6
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b78281e13823bd29ba8218	855	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	6624	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c44114cf58f17493f8536e	104	Seven Rivers Formation	251	299	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
579b56dacf58f13d24f0d7ef	99	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
585b656bcf58f1a722daaf49	46	Oligo-Miocene Zaragoza Gypsum Formation			Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
57beed05cf58f1419cfbd6b3	235	Mahalagou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
55b6d6a7e13823bd29ba7dcc	9602	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55f28a1bcf58f16256a2178c	259	Ain Ghrab Formation			Jellalia, Dalila et al.	Hydro-geophysical and geochemical investigation of shallow and deep Neogene aquifer systems in Hajeb Layoun-Jilma-Ouled Asker area, Central Tunisia	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.06.016
56c1ea81cf58f15c72c908aa	148	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54b4327fe138239d868536c9	188	Kalavassos mention			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
54b43246e138239d86849919	736	Passaic Formation	199.6	228	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
55b83d31e13823bd29ba865c	5026	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
590769c6cf58f191e58edf9d	49	Rush Springs Sandstone	251	260.4	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
56c1cb24cf58f15c72c90642	401	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55b6d6a7e13823bd29ba7dcc	5363	Figure mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	4737	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5554499fe138239301770ac0	110	Yesares Fm.	5.332	7.246	Sgavetti, M. et al.	Two geologic systems providing terrestrial analogues for the exploration of sulfate deposits on Mars: Initial spectral characterization	Planetary and Space Science	57	2009	Elsevier	10.1016/j.pss.2008.05.010
55b300e5e138231cbdd6cf7b	6215	Ag Millerite Dolomite			Heyl, Allen V. et al.	The Geology of the Upper Mississippi Valley Zinc-Lead District	Professional Paper		1959	United States Geological Survey	10.3133/pp309
584aa62ccf58f19d6a5f583e	561	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4324ae138239d8684a487	617	Tonggur Formation			Sun, Xiangjun and Wang, Pinxian	How old is the Asian monsoon system?—Palaeobotanical records from China	Palaeogeography, Palaeoclimatology, Palaeoecology	222	2005	Elsevier	10.1016/j.palaeo.2005.03.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43290e138239d86856489	140	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
559e58a2e138230816dadbe2	713	Verde mention	4.1777	8.342	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
56c1cb24cf58f15c72c90642	189	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55917250e13823109f3ef5b1	850	Maha Sarakam mention	65.5	145.5	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
5733b975cf58f124f1cfb8f8	255	Formosa Reef Limestone			J. A. Fagerstrom	Petrology and Regional Significance of a Devonian Carbonate/Evaporite Complex, Eastern Michigan Basin	SEPM Journal of Sedimentary Research	Vol. 53	1983	Society for Sedimentary Geology	10.1306/212f81ac-2b24-11d7-8648000102c1865d
580e3bc6cf58f172dd1b8676	245	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
5897de3fcf58f1081e8c64e1	22	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	425	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
572cdf45cf58f133c4f9d591	185	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
5d35e56c0b45c76caf93f034	710	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
55b83d31e13823bd29ba865c	260	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	78	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	6438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b47dabe138239e89d63a32	198	Space mention			Hildyard, Rebecca C. et al.	Microstructural analysis of anhydrite rocks from the Triassic Evaporites, Umbria-Marche Apennines, Central Italy: An insight into deformation mechanisms and possible slip systems	Journal of Structural Geology	31	2009	Elsevier	10.1016/j.jsg.2008.10.009
55b83d31e13823bd29ba865c	4515	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4597	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	199	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fda65e13823109f3eec30	1267	Ranchester Limestone	319	335	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b7869fe13823bd29ba8231	626	Michigan mention	342.0833	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	347	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
58ccdb01cf58f193ab4b19a8	56	Albert Formation	318.1	359.2	Pickerill, Ron K.	Carboniferous nonmarine invertebrate ichnocoenoses from southern New Brunswick, eastern Canada	Ichnos	2	1992	Taylor and Francis	10.1080/10420949209380072
54b4324ee138239d8684ae63	324	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
579a9456cf58f10c033e0537	24	Lapilli Sandstone			PARK, L. E. and DOWNING, K. F.	Paleoecology of an Exceptionally Preserved Arthropod Fauna from Lake Deposits of the Miocene Barstow Formation, Southern California, U.S.A	PALAIOS	16	2001	SEPM	10.1669/0883-1351(2001)016<0175:poaepa>2.0.co;2
55b7869fe13823bd29ba8231	2061	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	7188	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559147b8e138236ee2217b0d	131	Rock Group			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
558d206fe13823109f3edc62	3075	Barstow mention	13.2725	15.44	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55b83d31e13823bd29ba865c	391	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	553	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	278	Burns mention	23.03	33.9	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b7869fe13823bd29ba8231	2346	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
558d206fe13823109f3edc62	2710	Moenkopi mention	203.175	251.902	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55b83d31e13823bd29ba865c	427	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3edd0e138231cbdd6d498	3018	Horse Spring Formation	5.332	23.03	Winograd, I. J. and Thordarson, William	Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site	Professional Paper		1975	United States Geological Survey	10.3133/pp712C
55b3055ce138231cbdd6cf97	1424	Marada mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
5743f3cacf58f16102c3d8df	158	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
55c01a9ecf58f16e99a37305	505	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b83d31e13823bd29ba865c	4963	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	817	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1e5e7cf58f15c72c90847	15	Lockatong Formation	199.6	251	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
55b2f105e138231cbdd6cf26	4175	Carmel Formation	161.2	175.6	U.S. Geological Survey	Geological Survey research 1967, Chapter D	Professional Paper		1967	United States Geological Survey	10.3133/pp575D
55c3965ccf58f1a8110b90be	153	Heletz mention			Chan, Lui-Heung et al.	The behavior of lithium and its isotopes in oilfield brines: evidence from the Heletz-Kokhav field, Israel	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00800-6
5734b312cf58f14dbc2c579f	462	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	7194	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f28e79cf58f16256a217ad	78	Yolüstü Formation			Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
54ff667de13823a766aa7497	111	Dawsonite Diaspore Diopside Dolomite			Gherbi, Cherif et al.	An experimental study of lake water-sediment interaction rates	Comptes Rendus Geoscience	342	2010	Elsevier	10.1016/j.crte.2009.11.002
5c3540ea1faed655488c1248	100	Basal mention	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
5906dd0fcf58f15fea53aef7	229	Edwards Limestone	99.6	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54b4327fe138239d868536c9	188	Kalavassos mention			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
55b83d31e13823bd29ba865c	5462	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559c3f39e138230816dad2ff	491	Tamarisk mention	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
550fa3bbe1382369a6f942d9	53	Zaragoza Fm	5.332	23.03	Pueyo-Anchuela, Ó. et al.	Multidisciplinary approach for urban planning in alluvial karstic zones Case study from the Central Ebro Basin (Spain)	Engineering Geology	122	2011	Elsevier	10.1016/j.enggeo.2011.05.016
558bbed5e13823109f3ed4f8	184	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
550fa3bbe1382369a6f942d9	483	Zaragoza Gypsum Formation	5.332	23.03	Pueyo-Anchuela, Ó. et al.	Multidisciplinary approach for urban planning in alluvial karstic zones Case study from the Central Ebro Basin (Spain)	Engineering Geology	122	2011	Elsevier	10.1016/j.enggeo.2011.05.016
557ff66ee13823bc80ba2925	1038	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
54b4328ee138239d868561688	108	Base mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
55b83d31e13823bd29ba865c	4037	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579b56dacf58f13d24f0d7ef	62	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55f4877fcf58f16256a22522	73	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5ab90b76cf58f15ad7d7cedf	644	Salt Fm	251	260.4	Lettéron, Alexandre et al.	Reconstruction of a saline, lacustrine carbonate system (Priabonian, St-Chaptes Basin, SE France): Depositional models, paleogeographic and paleoclimatic implications	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2017.12.023
55b83d31e13823bd29ba865c	8264	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558fa710e13823109f3eeaeb	690	Arapien Shale	145.5	199.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
5734b312cf58f14dbc2c579f	512	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b83d31e13823bd29ba865c	1469	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559c3f39e138230816dad2ff	803	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5c19917d1faed655488915d3	619	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b83d31e13823bd29ba865c	3148	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
550bf028e1382369a6f93355	91	Taqiye Formation	55.8	65.5	Arkin, Yaacov and Michaeli, Lucian	Strength and consistency of artificial clay — carbonate mixtures: Simulation of natural sediments	Engineering Geology	26	1989	Elsevier	10.1016/0013-7952(89)90009-4
54b43248e138239d86849e30	54	Alcubierre Formation			Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
54b4328de138239d86855c34	384	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b832b8e13823bd29ba8617	531	Pyrite Kaolinite Dolomite			Hansley, P. L.	Diagenetic and burial history of the Lower Permian White Rim Sandstone in the Tar Sand Triangle, Paradox Basin, southeastern Utah	Bulletin		1995	United States Geological Survey	
54f9553fe138239936c6c748	176	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
54e52d30e138237cc9150011	99	Dakota Sandstone	65.5	145.5	Szynkiewicz, Anna et al.	Efflorescence as a source of hydrated sulfate minerals in valley settings on Mars	Earth and Planetary Science Letters		2014	Elsevier	10.1016/j.epsl.2014.02.035
55b3edd0e138231cbdd6d498	3018	Horse Spring Formation	5.332	23.03	Winograd, I. J. and Thordarson, William	Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site	Professional Paper		1975	United States Geological Survey	10.3133/pp712C
584aa62ccf58f19d6a5f583e	140	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
59069dcecf58f1491d1b327e	77	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
558fe155e13823109f3eec57	830	Culebra mention	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
574ee6e1cf58f1ba70939d9f	46	Windsor Group	318.1	359.2	Roberts, Wyn and Williams, Paul F.	Evidence for early Mesozoic extensional faulting in Carboniferous rocks, southern New Brunswick, Canada	Canadian Journal of Earth Sciences	30	1993	Canadian Science Publishing	10.1139/e93-113
55b6d6a7e13823bd29ba7dcc	4832	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	193	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.525	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c3540ea1faed655488c1248	131	Gypsum mention			Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
56c1d607cf58f15c72c9071a	150	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55a751cee13823757cc6ff3c	1842	Castile mention	259	259.51	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55f2ced1cf58f16256a21973	182	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
58c8ed8ccf58f1a71217fb6b	144	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
57a43018cf58f11204e17fe0	759	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b3edd0e138231cbdd6d498	2949	Nevada mention	386.45	391.9	Winograd, I. J. and Thordarson, William	Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site	Professional Paper		1975	United States Geological Survey	10.3133/pp712C

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5599341be1382390cc641189	273	Val Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55a82328e13823757cc7049a	1189	Gypsum Spring Formation	168.65	174.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
58c8ed8ccf58f1a71217fb6b	15	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5a39ee95cf58f1314cf12808	331	Lisan Formation	0.01143	0.126	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
55b83d31e13823bd29ba865c	5586	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328de138239d86855ceb	131	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b7869fe13823bd29ba8231	2821	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
550dedb5e1382369a6f93ba1	63	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
55b7869fe13823bd29ba8231	2017	Kaibab Formation	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58c8ed8ccf58f1a71217fb6b	15	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b6d6a7e13823bd29ba7dcc	8072	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5712f1aacf58f16fb4cc921a	191	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b7869fe13823bd29ba8231	2003	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
551eecf7e138236e51a99d74	553	Zaragoza Gypsum Formation	5.332	23.03	Pueyo Anchuela, Óscar et al.	Combination of electromagnetic, geophysical methods and sedimentological studies for the development of 3D models in alluvial sediments affected by karst (Ebro Basin, NE Spain)	Journal of Applied Geophysics		2014	Elsevier	10.1016/j.jappgeo.2014.01.002
550a3278e138238460c4fc31	147	Calcite Dolomite			Smolders, A.J.P. et al.	Controls on water chemistry of the Pilcomayo river (Bolivia, South-America)	Applied Geochemistry	19	2004	Elsevier	10.1016/j.apgeochem.2004.05.001
54d2216be13823302d02428b	423	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
5c3e6d6c1faed655488cd35a	338	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
56c1b6a3cf58f15c72c904b4	213	Pasquasia mention			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
5bc9ab66cf58f19de5af1835	4802	Allen Bay mention	424.1	449.25		ABSTRACTS OF PAPERS	Meteoritics	13	1978	Wiley	10.1111/j.1945-5100.1978.tb00088.x
55b6d6a7e13823bd29ba7dcc	7423	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5734b312cf58f14dbc2c579f	373	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
579a9456cf58f10c033e0537	1	Barstow Formation	5.332	23.03	PARK, L. E. and DOWNING, K. F.	Paleoecology of an Exceptionally Preserved Arthropod Fauna from Lake Deposits of the Miocene Barstow Formation, Southern California, U.S.A	PALAIOS	16	2001	SEPM	10.1669/0883-1351(2001)016<0175:poaepa>2.0.co;2
55b83d31e13823bd29ba865c	5089	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2796	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cdf45cf58f133c4f9d591	710	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b2e020e138231cbdd6ced3	1951	Lovell Wash Member	11.995	12.36	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
5b18df21cf58f1049eab0bc8	52	Bayport mention			Blaske, Allan R.	History, Geology, and Mineralogy of the Bayport Limestone Quarries, Bellevue, Eaton County, Michigan	Rocks & Minerals	93	2018	Informa UK Limited	10.1080/00357529.2018.1428860

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d05105cf58f13f39efd424	428	Pillara Formation			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
5c19917d1faed655488915d3	258	Solfifera mention			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b7869fe13823bd29ba8231	1261	Cloud Chief Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c19e2dcf58f16bf61df66a	49	Arab Formation	150.8	155.7	Nader, F. H. et al.	Quantification of diagenesis impact on the reservoir properties of the Jurassic Arab D and C members (Offshore, U.A.E.)	Geofluids	13	2013	Wiley	10.1111/gfl.12022
54b4328de138239d86855c34	163	CßayirhanÌ mention			OrtÌ, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54b43281e138239d86853bfd	3	Khok Kruat Formation	65.5	251	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
56c1c32bcf58f15c72c9059b	18	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
56831341cf58f1479a0ab983	4	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b7869fe13823bd29ba8231	2769	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	4509	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
578aea2bcf58f13920dc7baa	50	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
559afea3e1382390cc641cc4	491	Burano Formation	237	251	Montomoli, Chiara et al.	Fluid source and pressure–temperature conditions of high-salinity fluids in syn-tectonic veins from the Northeastern Apuan Alps (Northern Apennines, Italy)	Physics and Chemistry of the Earth, Parts A/B/C	30	2005	Elsevier	10.1016/j.pce.2005.01.003
55b83d31e13823bd29ba865c	472	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5554499fe138239301770ac0	97	Yesares Fm	5.332	7.246	Sgavetti, M. et al.	Two geologic systems providing terrestrial analogues for the exploration of sulfate deposits on Mars: Initial spectral characterization	Planetary and Space Science	57	2009	Elsevier	10.1016/j.pss.2008.05.010
5732d749cf58f1be482cdc3e	202	Lisan Formation	0.01143	0.126	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
56c1b6a3cf58f15c72c904b4	353	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
55b83b40e1382373b63b7fe6	4	Geoscience Group			Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
58b65c8fcf58f1b2fdd8b58a	50	Loeme Formation	112	125	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
5734b312cf58f14dbc2c579f	101	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
58bf0a5acf58f17947438723	76	Series Depth Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
5765a71ecf58f1b3d71ae1b9	679	Grabfeld Formation	227	242	Törő, Balázs and Pratt, Brian R.	Sedimentary record of seismic events in the Eocene Green River Formation and its implications for regional tectonics on lake evolution (Bridger Basin, Wyoming)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.02.003
55f4877fcf58f16256a22522	223	Calcite Aragonite Dolomite			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
584aa62ccf58f19d6a5f583e	244	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	1699	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4324ee138239d8684ae63	173	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
5597939fe1382390cc6408b6	125	Siltstone Shale	121.4	122.4925	Sahoo, P.K. et al.	Geochemical characterization of coal and waste rocks from a high sulfur bearing coalfield, India: Implication for acid and metal generation	Journal of Geochemical Exploration		2014	Elsevier	10.1016/j.gexplo.2014.05.024

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58b7df47cf58f18af629a04c	112	Vallfogona Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54b4328de138239d86855c34	154	Cßayirhan mention			Ortı, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	4507	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5d35e56c0b45c76caf93f034	1038	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
570fe41dcf58f114a862267f	147	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
557cd3cfe138239225f869e5	2038	Cloud Chief Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
572cdf45cf58f133c4f9d591	825	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b6d6a7e13823bd29ba7dcc	7545	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	455	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b8b7f4e13823bd29ba8982	450	Rustler Formation	251	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55baa3b5e1382373b63b89e7	215	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55f2ced1cf58f16256a21973	83	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
5783caf0cf58f13fb21dfa1a	481	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
558d4970e13823109f3edd1b	260	Kukebai Formation			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
55b2e020e138231cbdd6ced3	263	Thumb Formation	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
57a43018cf58f11204e17fe0	822	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5712f1aacf58f16fb4cc921a	265	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
54b4328ce138239d86855a1e	56	Alfaro mention			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
5732032ecf58f19cbcbc550f	73	Rustler Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b2c402e138231cbdd6ce3e	1127	Kayenta mention	181.825	199.975	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
54b4324ee138239d8684ae63	313	Palaeogene Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
557cd3cfe138239225f869e5	1255	Tansill Formation	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4324de138239d8684aba6	145	Gesso Fm			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
55b83d31e13823bd29ba865c	4584	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1234	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327ee138239d868533ae	98	Calcite Aragonite Dolomite			Xiao, Jun et al.	Geochemistry and solute sources of surface waters of the Tarim River Basin in the extreme arid region, NW Tibetan Plateau	Journal of Asian Earth Sciences		2012	Elsevier	10.1016/j.jseaes.2012.04.009
5579e2a0e138232a625d7143	4943	Feet Limestone			Hewett, D.F. et al.	Mineral resources of the region around Boulder Dam	Bulletin		1936	United States Geological Survey	10.3133/b871
57126a16cf58f140fa5c33f2	128	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5599341be1382390cc641189	182	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54d0272be13823b501cdbc75	49	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
5b6d936dcf58f1a92c2d33b5	23	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
58bf0a5acf58f17947438723	6	Hontomín mention			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
55b83d31e13823bd29ba865c	316	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558cbceae13823109f3eda41	173	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b83d31e13823bd29ba865c	6004	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1779	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55ae0df7e13823763a830928	1428	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
590769c6cf58f191e58edf9d	42	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
57a43018cf58f11204e17fe0	541	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55826ca1e1382390b43c936b	106	Coal Member	251	260.4	Ward, Colin R.	Minerals in bituminous coals of the Sydney basin (Australia) and the Illinois basin (U.S.A.)	International Journal of Coal Geology	13	1989	Elsevier	10.1016/0166-5162(89)90104-3
55b78281e13823bd29ba8218	903	Seven Rivers mention	261.76	264.5725	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	147	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5554499fe138239301770ac0	236	Evaporitic Formation	5.332	7.246	Sgavetti, M. et al.	Two geologic systems providing terrestrial analogues for the exploration of sulfate deposits on Mars: Initial spectral characterization	Planetary and Space Science	57	2009	Elsevier	10.1016/j.pss.2008.05.010
55b83d31e13823bd29ba865c	1463	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
57516912cf58f129ff61ef40	438	Watering Brook Formation			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
54b4324de138239d8684aba6	152	Argille Azzurre Fm	3.6	5.332	Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5734b312cf58f14dbc2c579f	61	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b690a7e138238e2d05483f	3451	Spearfish mention	201.4	269.635	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
5590ec95e13823109f3ef2e5	1060	Paradox Member	299	318.1	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
55b6d6a7e13823bd29ba7dcc	4722	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	6810	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b33375e138231cbdd6d08f	1129	Lisan Formation	0.01143	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
5897de3fcf58f1081e8c64e1	465	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
56831341cf58f1479a0ab983	68	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
579ed180cf58f1030df9c51e	364	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
58c8d892cf58f1a052bddb32	177	Soma mention			Helvaci, Cahit et al.	Presence and Distribution of Lithium in Borate Deposits and Some Recent Lake Waters of West-Central Turkey	International Geology Review	46	2004	Taylor and Francis	10.2747/0020-6814.46.2.177
57c87288cf58f142fe30b3f7	360	Shoemaker Formation			Dixon, Emily M. et al.	Assessing hydrodynamic effects on jarosite dissolution rates, reaction products, and preservation on Mars	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004779
55b83d31e13823bd29ba865c	4629	Mesa Sandstone	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6158	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
578cff68cf58f101e2dda387	171	Atherton Formation	0.6538	5.1164	Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
54b4328ce138239d86855aad	74	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f4877fcf58f16256a22522	244	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55f4877fcf58f16256a22522	8	Sulphur Limestone			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5c3540ea1faed655488c1248	121	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
54b4325ce138239d8684d4cc	106	Gypsum Member			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
55a7bdc9e13823757cc7020e	1895	Colorado mention	90.825	95.55	Collins, Donley S. et al.	Bibliography for update and revision of U.S.G.S. Bulletin 1114, Minerals of Colorado -- a 100 year record, by Edwin B. Eckel, Part A - Paper copy --Bibliography data file disks	Open-File Report		1989	United States Geological Survey	10.3133/ofr89206A
559e58a2e138230816dadbe2	707	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
54b4328de138239d86855dfa	458	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
557cd3cfe138239225f869e5	1247	Rustler Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5b18df21cf58f1049eab0bc8	52	Bayport mention			Blaske, Allan R.	History, Geology, and Mineralogy of the Bayport Limestone Quarries, Bellevue, Eaton County, Michigan	Rocks & Minerals	93	2018	Informa UK Limited	10.1080/00357529.2018.1428860
54bf7e39e13823023e43de1a	269	Bellerophon Formation	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55ad3126e13823763a8303a0	186	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
584aa62ccf58f19d6a5f583e	54	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57613d6fcf58f138292ba937	186	Bayındır Fm			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
558e3447e13823109f3ee1ef	117	Rustler Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
54b43247e138239d86849b52	289	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
551775abe1382394b500d785	41	Calatayud Gypsum Formation			Gutiérrez, Francisco	Gypsum karstification induced subsidence: effects on alluvial systems and derived geohazards (Calatayud Graben, Iberian Range, Spain)	Geomorphology	16	1996	Elsevier	10.1016/0169-555X(96)00004-9
55b2c402e138231cbdd6ce3e	202	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55b735f3e13823bd29ba8028	1701	Flagstaff Limestone	33.9	55.8	Luttrell, Gwendolyn Werth et al.	Lexicon of new formal geologic names of the United States, 1976-1980	Bulletin		1986	United States Geological Survey	
54b4328de138239d86855dfa	9	Dam Formation	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b7869fe13823bd29ba8231	2831	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5ce4c9f20b45c76caf8b3788	4	Francis Group	305.425	305.7125	Korkut, Turgay et al.	Neutron Equivalent Dose Rate Measurements of Gypsum-Waste Tire Rubber Layered Structures	International Journal of Polymer Analysis and Characterization	18	2013	Informa UK Limited	10.1080/1023666X.2013.814025
55b7869fe13823bd29ba8231	1964	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578cff68cf58f101e2dda387	140	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
56831341cf58f1479a0ab983	326	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
578b8ab6cf58f1645f54f0c6	43	Castile mention	259	259.51	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43247e138239d86849b52	204	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
58b8f161cf58f13c4631a064	41	Sample Limestone	332.3182	333.23	Rodríguez, Beatriz Álvarez et al.	Product size distribution function influence on interpolation calculations in the Bond ball mill grindability test	International Journal of Mineral Processing		2016	Elsevier	10.1016/j.minpro.2016.09.004
55b83d31e13823bd29ba865c	3388	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56830b14cf58f1479a0ab918	442	Be'eri Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55185d29e1382394b500db56	457	Fatha Formation	11.608	15.97	Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
55c01a9ecf58f16e99a37305	34	Tamarisk Member	251.902	273.01	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54c15752e1382389c54c3b8f	242	Bunter Sandstone	245	251	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
54e865c7e138237cc9150d7f	341	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5554499fe138239301770ac0	236	Evaporitic Formation	5.332	7.246	Sgavetti, M. et al.	Two geologic systems providing terrestrial analogues for the exploration of sulfate deposits on Mars: Initial spectral characterization	Planetary and Space Science	57	2009	Elsevier	10.1016/j.pss.2008.05.010
55b83d31e13823bd29ba865c	1150	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b7e5cfe138230a74d15b25	259	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
58c8ed8ccf58f1a71217fb6b	9	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
558d206fe13823109f3edc62	1095	Verde Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
557cd3cfe138239225f869e5	1072	Gilliam mention			McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
558e0a16e13823109f3ee0f8	1743	Gila Conglomerate	2.835	4.0333	Marsh, S.P. and Gough, L.P.	4th International Symposium on Environmental Geochemistry; program with abstracts	Open-File Report		1997	United States Geological Survey	10.3133/ofr97496
5897de3fcf58f1081e8c64e1	171	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	1620	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	9659	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58d05f09cf58f143d83df2a0	190	Halite Calcite Dolomite			Acworth, R. I. and Timms, W. A.	Evidence for connected water processes through smectite-dominated clays at Breeza, New South Wales	Australian Journal of Earth Sciences	56	2009	Taylor and Francis	10.1080/08120090802541952
55b83d31e13823bd29ba865c	428	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2bea2e1faed655488b221b	118	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
550a3278e138238460c4fc31	147	Calcite Dolomite			Smolders, A.J.P. et al.	Controls on water chemistry of the Pilcomayo river (Bolivia, South-America)	Applied Geochemistry	19	2004	Elsevier	10.1016/j.apgeochem.2004.05.001
54fc7de5e138239936c6dc25	24	Tripoli Formation	5.332	7.246	Müller, Daniel W. and Mueller, Paul A.	Origin and age of the Mediterranean Messinian evaporites: implications from Sr isotopes	Earth and Planetary Science Letters	107	1991	Elsevier	10.1016/0012-821X(91)90039-K
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57516912cf58f129ff61ef40	279	Kennetcook Limestone			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54b4328ae138239d8685544	221	Salina mention	419.675	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
54b4328fe138239d868561aa	167	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b4328fe138239d868561aa	240	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
5599341be1382390cc641189	266	Beuda Gypsum Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fe25efe138239936c6e7e5	208	Calcite Dolomite			Mayo, Alan L. and Klauk, Robert H.	Contributions to the solute and isotopic groundwater geochemistry, Antelope Island, Great Salt Lake, Utah	Journal of Hydrology	1-4	1991	Elsevier	10.1016/0022-1694(91)90120-7
55b83d31e13823bd29ba865c	7182	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ea81cf58f15c72c908aa	307	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54b4328fe138239d868561aa	125	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
5c3540ea1faed655488c1248	121	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
54b4327fe138239d868536c9	208	Middle Al Nakhsh Member			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
598ba21ccf58f11db7396445	227	Mancos Shale	65.5	145.5	Jones, Colleen P. et al.	Selenium and salt mobilization in wetland and arid upland soils of Pariette Draw, Utah (USA)	Geoderma	305	2017	Elsevier	10.1016/j.geoderma.2017.06.028
55b7b693e13823bd29ba832c	895	See mention			Eckel, Edwin Butt	Minerals of Colorado; a 100-year record	Bulletin		1961	United States Geological Survey	10.3133/b1114
55b83d31e13823bd29ba865c	409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6815	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c19917c1faed65548891586	141	Il Dolomite			The Shipboard Scientific Party	Site 374: Messina Abyssal Plain	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.105.1978
579fd5b3cf58f150b74d1050	619	Zaragoza Gypsum Formation	5.332	23.03	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
55b6d6a7e13823bd29ba7dcc	7552	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328de138239d86855c34	7	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
56830b14cf58f1479a0ab918	227	Tripoli Member	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54bfef15e1382330560e0801	230	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
558d206fe13823109f3edc62	3879	Furnace Creek Formation	1.806	5.332	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
572cdf45cf58f133c4f9d591	707	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b83d31e13823bd29ba865c	3061	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2460	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56830b14cf58f1479a0ab918	419	Base mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
558e0a16e13823109f3ee0f8	1743	Gila Conglomerate	2.835	4.0333	Marsh, S.P. and Gough, L.P.	4th International Symposium on Environmental Geochemistry; program with abstracts	Open-File Report		1997	United States Geological Survey	10.3133/ofr97496
54b4328ae138239d868555655	410	Basque mention			Renaut, Robin W. and Long, Peter R.	Sedimentology of the saline lakes of the Cariboo Plateau, Interior British Columbia, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90051-1
55b3055ce138231cbdd6cf97	1040	Ghanam Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
54b4327fe138239d868536c9	208	Middle Al Nakhsh Member			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
55b2cdb4e138231cbdd6ce74	561	Castile Formation	253.8	260.4	Brown, C. Erwin	Determination of rock properties by borehole-geophysical and physical-testing techniques and ground-water quality and movement in the Durham Triassic basin, North Carolina	Professional Paper		1988	United States Geological Survey	10.3133/pp1432
558e100ae13823109f3ee10f	159	Todilto mention	158.1835	162.45	Soulliere, Sandra J. et al.	Mineral resources of the Ojito and Cabezon Wilderness Study Areas, Sandoval County, New Mexico	Bulletin		1987	United States Geological Survey	10.3133/b1733B
55f4877fcf58f16256a22522	216	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
550901a3e138238460c4f59b	300	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2455	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3840	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	366	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54c0cf26e1382389c54c3932	267	Norseman mention	37.71	47.8	Benison, Kathleen Counter and Bowen, Brenda Beitler	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
5590ec95e13823109f3ef2e5	1063	Paradox Member	299	318.1	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
5ce2f9b20b45c76caf8ae21e	191	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b7e5cfe138230a74d15b25	270	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
55b690a7e138238e2d05483f	3492	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b6d6a7e13823bd29ba7dcc	9182	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	6275	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5897de3fcf58f1081e8c64e1	180	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
550afe00e1382369a6f92ef4	362	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
5748f823cf58f170c57fbbd7	102	Codroy Group	318.1	359.2	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
55b6d6a7e13823bd29ba7dcc	7525	Pecos mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58b7df47cf58f18af629a04c	108	Armancies Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
5abaaa3ecf58f13ea8ecedc1	132	Li Dolomite	23.03	33.9	Poitras, J.T. et al.	Mars analog minerals' spectral reflectance characteristics under Martian surface conditions	Icarus	306	2018	Elsevier	10.1016/j.icarus.2018.01.023
56c1d607cf58f15c72c9071a	150	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
5733b975cf58f124f1cfb8f8	255	Formosa Reef Limestone			J. A. Fagerstrom	Petrology and Regional Significance of a Devonian Carbonate/Evaporite Complex, Eastern Michigan Basin	SEPM Journal of Sedimentary Research	Vol. 53	1983	Society for Sedimentary Geology	10.1306/212f81ac-2b24-11d7-8648000102c1865d
54b4324ee138239d8684ae63	4	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	4621	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f2ced1cf58f16256a21973	182	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b83d31e13823bd29ba865c	4736	Gypsum Limestone			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43284e138239d868544db	171	Calcite mention			Glaccum, Robert A and Prospero, Joseph M	Saharan aerosols over the tropical North Atlantic — Mineralogy	Marine Geology	37	1980	Elsevier	10.1016/0025-3227(80)90107-3
54c15752e1382389c54c3b8f	242	Bunter Sandstone	245	251	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
54b43247e138239d86849b52	194	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5503421ae1382326932d7e6d	503	Rodeo Fm			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b83d31e13823bd29ba865c	7452	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5783caf0cf58f13fb21dfa1a	481	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
584aa62ccf58f19d6a5f583e	505	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57a43018cf58f11204e17fe0	835	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54e8ae2de138237cc9150ec9	1401	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5503421ae1382326932d7e6d	559	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b7869fe13823bd29ba8231	2087	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57a43018cf58f11204e17fe0	752	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4325ce138239d8684d4cc	106	Cattolica Gypsum Member			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54b4328be138239d8685580e	216	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55b83d31e13823bd29ba865c	7402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e97acfe138237cc915120b	71	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b83d31e13823bd29ba865c	1193	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57ec17eccf58f1ac335ac1b3	353	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54bdcd82e138233c8bc4f7a2	135	Lias mention	170.9	208.5	Wignall, P.B.	Sedimentology of the Triassic-Jurassic boundary beds in Pinhay Bay (Devon, SW England)	Proceedings of the Geologists' Association	112	2001	Elsevier	10.1016/S0016-7878(01)80014-6
55067531e1382326932d9171	70	Baza mention			García-Aguilar, José Manuel et al.	A reassessment of the evidence for hydrothermal activity in the Neogene-Quaternary lacustrine environments of the Baza basin (Betic Cordillera, SE Spain) and its paleoecological implications	Quaternary Science Reviews		2015	Elsevier	10.1016/j.quascirev.2015.02.001
5783caf0cf58f13fb21dfa1a	454	Zaragoza Fm	5.332	23.03	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
54b4328be138239d8685580e	7	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
55b83d31e13823bd29ba865c	1202	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6703	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	263	Passaic mention	199.5	237	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b83d31e13823bd29ba865c	8028	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
550c651ce1382369a6f9352b	400	Magnesian Limestone	251	299	BELL, F.G.	Chapter 12 Construction Materials	Engineering Geology and Geotechnics		1980	Elsevier	10.1016/B978-0-408-00355-1.50015-1
57a43018cf58f11204e17fe0	763	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5c19917d1faed655488915e2	283	Tripoli Formation	5.332	7.246	Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
54b43247e138239d86849b52	113	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5503421ae1382326932d7e6d	105	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
558c8afce13823109f3ed928	139	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
559e58a2e138230816dadbe2	571	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b83d31e13823bd29ba865c	7725	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6e66fe13823bd29ba7e28	620	Flagstaff mention	330.9	346.7	Franczyk, K. J. et al.	Cretaceous and Tertiary paleogeographic reconstructions for the Uinta-Piceance Basin Study Area, Colorado and Utah	Bulletin		1992	United States Geological Survey	
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5683349ccf58f1479a0abb4e	33	Fars Formation			Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b7869fe13823bd29ba8231	2761	Michigan mention	342.0833	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b78281e13823bd29ba8218	2052	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	4736	Gypsum Limestone			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	326	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54b4324ee138239d8684ae63	313	Palaeogene Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
59079ad6cf58f1a3f1fe48e7	724	Greenfield Dolomite	422.05	429.8	Carlson, Ernest H.	Ohio Mineral Locality Index	Rocks & Minerals	65	1990	Taylor and Francis	10.1080/00357529.1990.11761719
558d4970e13823109f3edd1b	289	Wulagen Formation			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	78	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b6df25e13823bd29ba7dfe	214	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
579411f4cf58f1a07169666f	249	Creede Formation	23.03	33.9	Finkelstein, D. B. et al.	Origin and diagenesis of lacustrine sediments, upper Oligocene Creede Formation, southwestern Colorado	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1175:oadols>2.3.co;2
55b6d6a7e13823bd29ba7dcc	7571	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	2454	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	381	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	3619	Socorro mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558fa710e13823109f3eeaeb	4853	Carmel Formation	161.2	175.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	8029	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c0c25fe1382389c54c390a	280	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
54b4328de138239d86855c34	351	CßayirhanmentionOrti, Federico et al.				Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	7400	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	533	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4327fe138239d868536c9	311	Kalavassos Formation			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
55b83d31e13823bd29ba865c	5930	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1469	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579b56dacf58f13d24f0d7ef	69	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
59069dcecf58f1491d1b327e	135	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
572cdf45cf58f133c4f9d591	796	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
5945b493cf58f195edc28b3a	360	Keuper mention	266.9	242	Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
574fa5eccf58f14020b9e845	350	Stone Formation	385.3	397.5	Morrow, D. W. et al.	A hypothesis concerning the origin of barite in Devonian carbonate rocks of northeastern British Columbia	Canadian Journal of Earth Sciences	15	1978	Canadian Science Publishing	10.1139/e78-147
5743f3cacf58f16102c3d8df	68	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
55b83d31e13823bd29ba865c	8655	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8092	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57586688cf58f18f01541631	213	Soil Classification Working Group			Miller, J. J. and Brierley, J. A.	Solonetzic soils of Canada: Genesis, distribution, and classification	Canadian Journal of Soil Science	91	2011	Canadian Science Publishing	10.4141/cjss10040
5a210547cf58f18a3170d1f8	1	Reservoir Formation	433.4	438.5	Duan, Piaopiao et al.	Partitioning of hazardous elements during preparation of high uranium coal from Rongyang, Guizhou, China	Journal of Geochemical Exploration	185	2018	Elsevier	10.1016/j.gexplo.2017.10.022

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	25	Lake Inflow Gypsum Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
558fda65e13823109f3eec30	1134	Paradox Member	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
580e3bc6cf58f172dd1b8676	70	Bambata mention	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
5a2d0619cf58f19f7117d37a	171	CdB Formation			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
56a40443cf58f1944252b0ad	447	Planum Boreum mention			Murchie, Scott L. et al.	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2009JE003342
580e3bc6cf58f172dd1b8676	81	Gypsum Bambata Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55f4877fcf58f16256a22522	8	Sulphur Limestone			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54b4327de138239d868530d9	189	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
55b6d6a7e13823bd29ba7dcc	7590	Roswell mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	6740	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43247e138239d86849b52	246	Chaunaca Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
590769c6cf58f191e58edf9d	8	Salt Plains mention	273.01	279.7525	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
578cff68cf58f101e2dda387	25	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6609	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7352	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	428	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
557d3f86e138239225f86b9f	1162	Uinta mention	36.7575	46.15	Liebermann, Timothy D. et al.	Characteristics and trends of streamflow and dissolved solids in the upper Colorado River Basin, Arizona, Colorado, New Mexico, Utah, and Wyoming	Water Supply Paper		1989	United States Geological Survey	10.3133/wsp2358
55c01a9ecf58f16e99a37305	300	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b6d6a7e13823bd29ba7dcc	4146	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
557cd3cfe138239225f869e5	1742	Artesia Group	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
58bd79bdcf58f19837541d0f	611	Shiqiang mention			Jones, Brian and Peng, Xiaotong	Growth and development of spring towers at Shiqiang, Yunnan Province, China	Sedimentary Geology		2017	Elsevier	10.1016/j.sedgeo.2016.11.013
55b83d31e13823bd29ba865c	6142	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7953	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	4736	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1cb24cf58f15c72c90642	92	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55b75a36e13823bd29ba8116	1850	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55a751cee13823757cc6ff3c	1206	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
56830b14cf58f1479a0ab918	252	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d6a7e13823bd29ba7dcc	1992	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b43245e138239d86849681	184	Lagoa Feia Formation	112	125	Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55ae0df7e13823763a830928	1398	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5731caeecf58f192f36c5766	285	Karstryggen mention	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b2c402e138231cbdd6ce3e	300	Dolores mention	222.375	229.5	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b4325ae138239d8684cec7	104	Antalo Limestone			Tadesse, Solomon et al.	Geology and mineral potential of Ethiopia: a note on geology and mineral map of Ethiopia	Journal of African Earth Sciences	36	2003	Elsevier	10.1016/S0899-5362(03)00048-4
557cd3cfe138239225f869e5	2035	Cloud Chief Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5682d639cf58f1479a0ab68d	3	Evaporite mention			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
54c04652e1382389c54c3686	166	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
5c302c581faed655488b7345	36	Fengcheng Formation	251	299	Cao, Yingchang et al.	Geochemical characteristics and origin of sodium carbonates in a closed alkaline basin: The Lower Permian Fengcheng Formation in the Mahu Sag, northwestern Junggar Basin, China	Palaeogeography, Palaeoclimatology, Palaeoecology	511	2018	Elsevier	10.1016/j.palaeo.2018.09.015
56ac2bfdcf58f19442534c89	48	Zaragoza Gypsum Formation	5.332	23.03	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456
55ae0df7e13823763a830928	568	Santa Rosa Sandstone	199.6	228	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	8032	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557cd3cfe138239225f869e5	824	Briggs Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b83d31e13823bd29ba865c	841	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e97acfe138237cc915120b	71	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
58b7df47cf58f18af629a04c	506	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
58c8ed8ccf58f1a71217fb6b	150	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54d0272be13823b501cdbc75	134	Rock mention			Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
55b83d31e13823bd29ba865c	4621	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	325	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
58d05f04cf58f143d83df298	375	Carrols Corner Formation			Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
57131acecf58f17d8d881dcb	207	Belayin Formation			Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
55b7869fe13823bd29ba8231	2396	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57beed05cf58f1419cfbd6b3	235	Mahalagou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
5897de3fcf58f1081e8c64e1	64	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579ed180cf58f1030df9c51e	196	Granule Conglomerate			Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b83d31e13823bd29ba865c	2861	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55ae0df7e13823763a830928	525	Yates Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5c2fe60d1faed655488b6bad	241	Altash Formation			Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
58bc7562cf58f12d483cfce3	351	Mangang Fm			Wu, Chihua et al.	Mid-Cretaceous desert system in the Simao Basin, southwestern China, and its implications for sea-level change during a greenhouse climate	Palaeogeography, Palaeoclimatology, Palaeoecology		2017	Elsevier	10.1016/j.palaeo.2016.12.048
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
56c1cb24cf58f15c72c90642	342	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
5c3e6d6c1faed655488cd35a	271	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b39c73e138231cbdd6d2c1	1059	Cedar Mesa Sandstone	251	299	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
56b99311cf58f14c238d4bdc	203	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
54b43245e138239d8684952a	173	Antalo Limestone			Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
55b6d6a7e13823bd29ba7dcc	4069	Figure mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5743f3cacf58f16102c3d8df	41	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
598b8640cf58f11358c1f60c	86	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
55b83d31e13823bd29ba865c	4037	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ee138239d86855f3a	242	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
5731caeecf58f192f36c5766	118	Huledal mention			Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
5503421ae1382326932d7e6d	135	Evaporite mention			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56c1ea81cf58f15c72c908aa	250	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b83d31e13823bd29ba865c	5922	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ce138239d86855b3a	58	Panoba mention			Saleemi, Akhtar Ali and Ahmed, Zulfiqar	Mineral and chemical composition of Karak mudstone, Kohat Plateau, Pakistan: implications for smectite-illitization and provenance	Sedimentary Geology	130	2000	Elsevier	10.1016/S0037-0738(99)00113-X
57760111cf58f134d11ea726	851	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
54b4327fe138239d868537ad	275	Jindong Formation	65.5	99.6	Paik, In Sung et al.	Traces of evaporites in Upper Cretaceous lacustrine deposits of Korea: Origin and paleoenvironmental implications	Journal of Asian Earth Sciences	30	2007	Elsevier	10.1016/j.jseaes.2006.07.013
5906dd0fcf58f15fea53aef7	167	Wichita Group	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
558d206fe13823109f3edc62	2328	Salt Lake mention	2.58	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
557cdb22e138239225f86a07	3197	Feet mention			Dane, C.H.	Geology of the Salt Valley anticline and adjacent areas, Grand County, Utah	Bulletin		1935	United States Geological Survey	10.3133/b863
5743f3cacf58f16102c3d8df	103	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
5ce2f9b20b45c76caf8ae21e	61	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56c1cb24cf58f15c72c90642	342	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54b43246e138239d86849721	195	Newark mention	192.9	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
55933fbae138236ee2218347	10	Wieliczka Formation			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ee138239d86856168	230	Calcite mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
59f25affcf58f11433595e3e	124	Mission Valley Formation	33.9	55.8	Vavricka, Emily A. and Morrison, Robert D.	Identification of Naturally Occurring and Anthropogenic Sources of Perchlorate	Environmental Claims Journal	17	2005	Informa UK Limited	10.1080/10406020500240046
55b3055ce138231cbdd6cf97	3273	Mizda mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
5d35e56c0b45c76caf93f034	1041	Lance Formation	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
54b4324be138239d8684a669	192	Orce mention			Ortiz, José E. et al.	Pleistocene paleoenvironmental evolution at continental middle latitude inferred from carbon and oxygen stable isotope analysis of ostracodes from the Guadix-Baza Basin (Granada, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	240	2006	Elsevier	10.1016/j.palaeo.2006.03.008
56c1ca03cf58f15c72c90620	130	Quillagua mention	5.332	11.608	Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b6d6a7e13823bd29ba7dcc	3608	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1c32bcf58f15c72c9059b	74	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
579f5bc9cf58f12a53c41a24	259	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
56c1ea81cf58f15c72c908aa	332	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54b4328de138239d86855c34	163	CßayirhanmentionOrti, Federico et al.				Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
57a39568cf58f1a4dc1b1106	161	Paradox Formation	299	318.1	Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
584aa62ccf58f19d6a5f583e	134	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
558fe155e13823109f3eec57	359	Rustler mention	253.9652	256.0278	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
5897de3fcf58f1081e8c64e1	358	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b6d6a7e13823bd29ba7dcc	7909	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5778db2ecf58f147dba48737	116	Continued Formation			LONGWELL, CHESTER R.	STRUCTURE OF THE NORTHERN MUDDY MOUNTAIN AREA, NEVADA	Geol Soc America Bull	60	1949	Geological Society of America	10.1130/0016-7606(1949)60[923:sotnmm]2.0.co;2
572cdf45cf58f133c4f9d591	727	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
584aa62ccf58f19d6a5f583e	142	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5731caeecf58f192f36c5766	61	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
57f555decf58f17e0fbf38b4	568	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
55b83d31e13823bd29ba865c	585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558d206fe13823109f3edc62	2601	Muddy Creek Formation	5.332	23.03	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
5ce4c9f20b45c76caf8b3788	4	Francis Group	305.425	305.7125	Korkut, Turgay et al.	Neutron Equivalent Dose Rate Measurements of Gypsum-Waste Tire Rubber Layered Structures	International Journal of Polymer Analysis and Characterization	18	2013	Informa UK Limited	10.1080/1023666X.2013.814025
55ae0df7e13823763a830928	3171	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54b4328de138239d86855c34	152	Kirmir Formation	5.332	23.03	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
57a43018cf58f11204e17fe0	693	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
57e29267cf58f111dc2a628f	163	Barite Cerussite Dolomite			Roxburgh, Nigel	The resource base and mercury — a fresh perspective	Resources Policy	5	1979	Elsevier	10.1016/0301-4207(79)90055-2
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55800703e13823bc80ba297d	1319	Alapah Limestone	322.15	342.75	Cecil, C. B. and Edgar, N. Terence.	Predictive stratigraphic analysis; concept and application	Bulletin		1994	United States Geological Survey	
55b2c402e138231cbdd6ce3e	201	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5a3dff46cf58f12be0bde56e	653	Zaragoza Gypsum Formation	5.332	23.03	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1cb24cf58f15c72c90642	189	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
572cf1fccf58f13accaa0e61	44	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
558fa710e13823109f3eeaeb	716	Carmel Formation	161.2	175.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
5506a9ebe1382326932d924e	369	Middle Member			Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55b7869fe13823bd29ba8231	2962	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56a4ab7ccf58f1944252bd48	77	Transmission Deconvolution Mineral Group			Hamilton, Victoria E. et al.	Mineralogy of Martian atmospheric dust inferred from thermal infrared spectra of aerosols	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2005JE002501
55b7869fe13823bd29ba8231	2401	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324fe138239d8684b069	243	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
55b83d31e13823bd29ba865c	2905	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
580e3bc6cf58f172dd1b8676	88	Bambata Gypsum Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
557b6c66e138239225f863ff	575	See mention			Sanford, Samuel and Stone, Ralph Walter	Useful minerals of the United States	Bulletin		1914	United States Geological Survey	10.3133/b585
54b4324be138239d8684a5e1	1	Engineering Geosciences Group			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55b3dfb4e138231cbdd6d442	1688	Minnekahta mention	266.9	283.5	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
57ec17eccf58f1ac335ac1b3	73	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5ce2f9b20b45c76caf8ae21e	286	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b6d6a7e13823bd29ba7dcc	7562	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1c470cf58f15c72c905bd	203	Fenfeng Formation	443.7	488.3	Rodriguez-Aranda, Juan P. et al.	Lower Miocene gypsum palaeokarst in the Madrid Basin (central Spain): dissolution diagenesis, morphological relics and karst end-products	Sedimentology	49	2002	Wiley-Blackwell	10.1046/j.1365-3091.2002.00504.x
55f4877fcf58f16256a22522	216	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55ba8334e1382373b63b8963	213	Anglesite Gypsum Calcite Dolomite			Al, Tom A et al.	Carbonate-mineral/water interactions in sulfide-rich mine tailings	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00483-X
55b7869fe13823bd29ba8231	1236	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ae138239d868553d8	29	Gypsum Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55b8484be13823bd29ba869d	178	Tenderfoot Member	201.4	251.902	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
55b6d6a7e13823bd29ba7dcc	7918	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ee138239d86855f3a	129	Wieliczka mention			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
5897de3fcf58f1081e8c64e1	320	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
584aa62ccf58f19d6a5f583e	180	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2fd6ad1faed655488b6a10	170	Background Dolomite			Mondillo, N. et al.	The Cristal Zn prospect (Amazonas region, Northern Peru). Part II: An example of supergene enrichments in tropical areas	Ore Geology Reviews	95	2018	Elsevier	10.1016/j.oregeorev.2017.11.022
54b4324ee138239d8684ae63	173	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
55b6df25e13823bd29ba7dfe	226	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55b39c73e138231cbdd6d2c1	1166	Todilto mention	158.1835	162.45	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	4027	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a850dffcf58f13f065e41c5	61	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55b83d31e13823bd29ba865c	2694	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c61f5ccf58f17493f87854	77	Feldspar Dolomite			Naftz, David L.	PREDICTIVE CAPABILITIES OF BATCH-EXTRACT EXPERIMENTS USING WATER FROM A COAL MINE	Journal of the American Water Resources Association	24	1988	Wiley-Blackwell	10.1111/j.1752-1688.1988.tb00939.x
55ae0df7e13823763a830928	328	Artesia Group	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	8601	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a2f778acf58f10a775a37f3	2	Zaragoza mention	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b6d6a7e13823bd29ba7dcc	7725	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	5705	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	1369	Rustler mention	253.9652	256.0278	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328be138239d86855631	243	Zaviye Member			İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
54b43245e138239d8684952a	156	Khorat Group	65.5	251	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
58b86c42cf58f1055db5c6fa	312	Burano Formation	237	251	Marion, G.M. et al.	Modeling calcium sulfate chemistries with applications to Mars	Icarus		2016	Elsevier	10.1016/j.icarus.2016.05.016
574cc5f5cf58f107bf55f9c6	86	Gypsum Formation			Hewton, M.L. et al.	Colombian-style emerald mineralization in the northern Canadian Cordillera: integration into a regional Paleozoic fluid flow regime 1	Canadian Journal of Earth Sciences	50	2013	Canadian Science Publishing	10.1139/cjes-2012-0128
584aa178cf58f19c3c0fb294	81	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5ad11373cf58f12f1060740c	79	Lead Limestone			Calvo, Guiomar et al.	Material flow analysis for Europe: An exergoecological approach	Ecological Indicators	60	2016	Elsevier	10.1016/j.ecolind.2015.08.005
558cbceae13823109f3eda41	176	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
56c1c32bcf58f15c72c9059b	32	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
56c61f5ccf58f17493f87854	77	Feldspar Dolomite			Naftz, David L.	PREDICTIVE CAPABILITIES OF BATCH-EXTRACT EXPERIMENTS USING WATER FROM A COAL MINE	Journal of the American Water Resources Association	24	1988	Wiley-Blackwell	10.1111/j.1752-1688.1988.tb00939.x
55a7c745e13823757cc70251	17	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
557cd3cfe138239225f869e5	1798	Hustler Formation			McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6df25e13823bd29ba7dfe	226	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
5743e12ccf58f15a87556580	49	Coal Huangmaqing Fm			Mianping, ZHENG et al.	Regional Distribution and Prospects of Potash in China	Acta Geologica Sinica - English Edition	85	2011	Wiley-Blackwell	10.1111/j.1755-6724.2011.00376.x
54e4d444e138237cc914feb2	16	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54f9553fe138239936c6c748	94	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b7869fe13823bd29ba8231	2008	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57beed05cf58f1419cfbd6b3	135	Honggou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
557cd3cfe138239225f869e5	863	Pease River Group	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4328de138239d86855c34	7	CßayirhanmentionOrti, Federico et al.				Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	1754	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1463	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56831341cf58f1479a0ab983	300	Gypsum Formation			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
559147b8e138236ee2217b0d	57	Rock Group			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
58b95b1bcf58f166c35f1298	169	Aleg Formation			Dhahri, Ferid and Boukadi, Noureddine	Triassic salt sheets of Mezzouna, Central Tunisia: New comments on Late Cretaceous halokinesis and geodynamic evolution of the northern African margin	Journal of African Earth Sciences		2017	Elsevier	10.1016/j.jafrearsci.2017.01.016
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54b4324ee138239d8684ae63	99	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
580e3bc6cf58f172dd1b8676	276	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55a7c745e13823757cc70251	49	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
57a43018cf58f11204e17fe0	356	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b6d6a7e13823bd29ba7dcc	7560	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54d0272be13823b501cdbc75	176	Calcite Dolomite			Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
575c4f4ecf58f16b97cc4df6	468	Mineral Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5c2f443f1faed655488b5ed9	301	Cal Dol Qz Gp			Santo, A. et al.	Deep seated fault-related volcanogenic H 2 S as the key agent of high sinkhole concentration areas	Earth Surface Processes and Landforms			Wiley	10.1002/esp.4526
55b83d31e13823bd29ba865c	4655	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43281e138239d86853bfd	194	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b6d6a7e13823bd29ba7dcc	5981	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54c04e8fe1382389c54c36c6	82	Abu Dhabi mention	-5.5012E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55b6d6a7e13823bd29ba7dcc	1986	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55976535e1382390cc6407cd	41	Shengli River Formation			Fu, Xiugen et al.	Mineralogy and geochemical anomalies of Lower Cretaceous marine oil shale from Changshe Mountain West, northern Tibet, China	Journal of Geochemical Exploration		2015	Elsevier	10.1016/j.gexplo.2015.04.006
5c98a6ee4e85ba2e7cc08a76	238	Branscombe Mudstone Formation	201.4	227	Ivanovski, Nikola et al.	Microvertebrates from the basal Rhaetian Bone Bed (latest Triassic) at Aust Cliff, S.W. England	Proceedings of the Geologists' Association	129	2018	Elsevier	10.1016/j.pgeola.2018.06.002
57ec17eccf58f1ac335ac1b3	5	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b83d31e13823bd29ba865c	428	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56dfe4ebcf58f149817f5b4d	289	Phyllosilicate Formation			Story, Stacy et al.	Authigenic phyllosilicates in modern acid saline lake sediments and implications for Mars	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2010JE003687
55b7869fe13823bd29ba8231	1728	Todilto mention	158.1835	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	1970	Hennessey Shale	273.01	279.7525	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4328ee138239d86855f01	116	Abad mention			Rouchy, Jean Marie and Caruso, Antonio	The Messinian salinity crisis in the Mediterranean basin: A reassessment of the data and an integrated scenario	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.02.005

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f2ced1cf58f16256a21973	261	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
55b83d31e13823bd29ba865c	4342	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7769	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
559dbdc9e138230816dad971	1303	JPs Sandstone			Conrad, J.E.	Mineral summaries for Nevada; U.S. Bureau of Land Management wilderness study areas	Open-File Report		1990	United States Geological Survey	10.3133/ofr90638
578cff68cf58f101e2dda387	119	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	8807	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	667	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	8693	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557f199ce13823bc80ba25a0	854	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
559c3f39e138230816dad2ff	599	Rustler Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
575019eacf58f1696f3ea50a	6	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
579411f4cf58f1a07169666f	239	Creede Formation	23.03	33.9	Finkelstein, D. B. et al.	Origin and diagenesis of lacustrine sediments, upper Oligocene Creede Formation, southwestern Colorado	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1175:oadols>2.3.co;2
55b2c402e138231cbdd6ce3e	666	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
558fa710e13823109f3eeaeb	489	Arapien Shale	145.5	199.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	399	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b3dfb4e138231cbdd6d442	1732	Ervay mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
54b43247e138239d86849b52	111	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b7869fe13823bd29ba8231	2082	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578cff68cf58f101e2dda387	25	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55ae0df7e13823763a830928	503	Artesia Group	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54b4328de138239d86855dfa	529	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
54b4325ce138239d8684d4cc	178	Gypsum mention			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b4324de138239d8684aba6	145	Gesso Fm			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
57131acecf58f17d8d881dcb	207	Belayin Formation			Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
57760111cf58f134d11ea726	923	Red mention	324.4643	324.8857	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
57321bc8cf58f1a0ac39199e	46	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
5598dfe1e1382390cc640fbc	88	Huanglong Formation	299	359.2	Du, Yilun et al.	Petrology and geochemistry of Silurian–Triassic sedimentary rocks in the Tongling region of Eastern China: Their roles in the genesis of large stratabound skarn ore deposits	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.11.021
58c8ed8ccf58f1a71217fb6b	65	Bayindir Formation			GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b2bc12e138231cbdd6ce12	473	Maha Sarakam Formation	65.5	145.5	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
57484ab3cf58f13effae7ac5	80	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
574372e7cf58f13435c1c112	204	Dingyuan mention			Weiping, Tao	The Minerogenetic Series of Nonmetallic Mineral Deposits of China	Acta Geologica Sinica - English Edition	3	1990	Wiley-Blackwell	10.1111/j.1755-6724.1990.mp3002004.x
55b83d31e13823bd29ba865c	3889	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5b18df21cf58f1049eab0bc8	52	Bayport mention			Blaske, Allan R.	History, Geology, and Mineralogy of the Bayport Limestone Quarries, Bellevue, Eaton County, Michigan	Rocks & Minerals	93	2018	Informa UK Limited	10.1080/00357529.2018.1428860
5c3e6d6c1faed655488cd35a	131	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b78281e13823bd29ba8218	1965	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	15	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5906c7e5cf58f1587481407b	44	Salina Group	416	443.7	Dietrich, R. V.	Rocks Rock Chips: What is the Niagara Escarpment?	Rocks & Minerals	69	1994	Taylor and Francis	10.1080/00357529.1994.9925589
54b4324de138239d8684aba6	344	Gesso mention			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
564da7c8cf58f141b60ca916	314	Hl Thn Gp			Battler, Melissa M. et al.	Mineralogy of saline perennial cold springs on Axel Heiberg Island, Nunavut, Canada and implications for spring deposits on Mars	Icarus	224	2013	Elsevier	10.1016/j.icarus.2012.08.031
57a43018cf58f11204e17fe0	822	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b7869fe13823bd29ba8231	258	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55f4877fcf58f16256a22522	568	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b6d6a7e13823bd29ba7dcc	6619	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
550af24ee1382369a6f92ec3	122	IUSS Working Group			Clarke, Catherine E. et al.	The role of evaporation on the formation of secondary Cu-hydroxy minerals in the arid Namaqualand soil system of South Africa	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2014.05.013
55b2e020e138231cbdd6ced3	247	Moenkopi Formation	199.6	251	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
55b7277de13823bd29ba7fc3	2502	Colorado mention	90.825	95.55	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7290	Alamogordo mention	351.5	358.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56830b14cf58f1479a0ab918	266	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
558d4970e13823109f3edd1b	303	Suweiyi mention			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
54f9553fe138239936c6c748	40	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b83d31e13823bd29ba865c	8807	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c19917d1faed655488915d3	952	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
56c1d8a6cf58f15c72c9073f	197	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b83d31e13823bd29ba865c	1699	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b75a36e13823bd29ba8116	2059	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55ae0df7e13823763a830928	1404	Rustler Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
558cbceae13823109f3eda41	163	Moenkopi Formation	199.6	251	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1b69acf58f15c72c904b3	5	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b83d31e13823bd29ba865c	7402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b8b7f4e13823bd29ba8982	450	Rustler mention	253.9652	256.0278	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
590769c6cf58f191e58edf9d	49	Rush Springs Sandstone	251	260.4	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
578b8ab6cf58f1645f54f0c6	106	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
57613d6fcf58f138292ba937	482	Bozkır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
55b7869fe13823bd29ba8231	2087	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	5035	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	5015	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58cd1a59cf58f1aa1f369152	92	Dibdibah Formation			Grealish, Gerard et al.	Assisting Non-Soil Experts to Identify Soil Types for Land Management to Support Restoration of Arid Rangeland Native Vegetation in Kuwait	Arid Land Research and Management	29	2015	Taylor and Francis	10.1080/15324982.2014.973620
54beddace13823023e43d931	209	Furnace Creek Formation	1.806	5.332	Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
54b4328ae138239d86855393	110	Dibdibba Formation			Khalaf, Fikry I. et al.	Mineralogical composition and potential sources of dust fallout deposits in Kuwait, Northern Arabian Gulf	Sedimentary Geology	42	1985	Elsevier	10.1016/0037-0738(85)90047-8
55b7869fe13823bd29ba8231	735	Wapsipinicon mention	381.775	389.1	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	421	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56a40443cf58f1944252b0ad	447	Planum Boreum mention			Murchie, Scott L. et al.	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2009JE003342
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55cbfc16cf58f1b01e42470e	557	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
5712f1aacf58f16fb4cc921a	263	Passaic mention	199.5	237	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b3055ce138231cbdd6cf97	1026	Bu Ghaylan Limestone	145.5	199.6	Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
54b4328ae138239d86855525	60	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55ae0df7e13823763a830928	441	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b852e3e1382373b63b802d	405	Beacon Supergroup	145.5	199.6	(Harry)Keys, J.R. and Williams, Karen	Origin of crystalline, cold desert salts in the McMurdo region, Antarctica	Geochimica et Cosmochimica Acta	45	1981	Elsevier	10.1016/0016-7037(81)90084-3
54d2216be13823302d02428b	356	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
54b4324de138239d8684aba6	75	Gessoso Solfifera Formation	5.332	7.246	Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
58565bd0cf58f11562436097	218	Bay Fiord Formation	459.975	478.47	Greenberger, Rebecca N. et al.	Hyperspectral mapping of alteration assemblages within a hydrothermal vug at the Haughton impact structure, Canada	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12716
55b83d31e13823bd29ba865c	841	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54f9553fe138239936c6c748	90	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
5908198ccf58f116699a13db	392	General Shale			Goldstein, Alan	Kentucky Mineral: Locality Index	Rocks & Minerals	81	2006	Taylor and Francis	10.3200/RMIN.81.6.420-440
55ae0df7e13823763a830928	2356	Todilto Formation	145.5	199.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	116	Wordiekammen Formation	251	299	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43249e138239d8684a19a	50	Tripoli Formation	5.332	7.246	Blanc-Valleron, M.-M et al.	Sedimentary, stable isotope and micropaleontological records of paleoceanographic change in the Messinian Tripoli Formation (Sicily, Italy)	Palaeogeography, Palaeoclimatology, Palaeoecology	185	2002	Elsevier	10.1016/S0031-0182(02)00302-4
55f4877fcf58f16256a22522	78	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54b4328ee138239d86855fe9	91	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
55b6df25e13823bd29ba7dfe	222	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55b83d31e13823bd29ba865c	3342	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58bc7562cf58f12d483cfce3	64	Mengyejing Fm	65.5	99.6	Wu, Chihua et al.	Mid-Cretaceous desert system in the Simao Basin, southwestern China, and its implications for sea-level change during a greenhouse climate	Palaeogeography, Palaeoclimatology, Palaeoecology		2017	Elsevier	10.1016/j.palaeo.2016.12.048
559e58a2e138230816dadbe2	1239	Mogollon Rim Formation	33.9	56	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55099f05e138238460c4f9b0	155	Calcite Dolomite			Cravotta, Charles A.	Dissolved metals and associated constituents in abandoned coal-mine discharges, Pennsylvania, USA. Part 2: Geochemical controls on constituent concentrations	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.10.003
57c8716acf58f1429a428969	148	Mineral Group	65.5	251	Thorpe, Michael T. et al.	Quantitative compositional analysis of sedimentary materials using thermal emission spectroscopy: 1. Application to sedimentary rocks	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2015JE004863
54b43246e138239d86849872	319	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
57ec17eccf58f1ac335ac1b3	439	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b43246e138239d86849872	124	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55b83d31e13823bd29ba865c	4635	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557cd3cfe138239225f869e5	3244	Minnekahta Limestone	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56a40443cf58f1944252b0ad	452	Planum Boreum Formation			Murchie, Scott L. et al.	A synthesis of Martian aqueous mineralogy after 1 Mars year of observations from the Mars Reconnaissance Orbiter	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2009JE003342
55b83d31e13823bd29ba865c	3664	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54fe25efe138239936c6e7e5	129	Calcite Dolomite			Mayo, Alan L. and Klauk, Robert H.	Contributions to the solute and isotopic groundwater geochemistry, Antelope Island, Great Salt Lake, Utah	Journal of Hydrology	1-4	1991	Elsevier	10.1016/0022-1694(91)90120-7
5906dd0fcf58f15fea53aef7	266	Briggs Formation	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5c19917d1faed655488915e2	451	Gessoso-solfifera Formation			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
57604755cf58f1b8d035814d	49	Sujiahe Gp	251	542	Chen, Yan-Jing et al.	The collision-type porphyry Mo deposits in Dabie Shan, China	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2016.03.025
55b83d31e13823bd29ba865c	430	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c04652e1382389c54c3686	230	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
5b6f081fcf58f1539ffa6761	192	Yapılar Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
550dedb5e1382369a6f93ba1	94	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
57ec17eccf58f1ac335ac1b3	110	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5712f1aacf58f16fb4cc921a	287	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
54b43284e138239d868544db	171	Calcite mention			Glaccum, Robert A and Prospero, Joseph M	Saharan aerosols over the tropical North Atlantic — Mineralogy	Marine Geology	37	1980	Elsevier	10.1016/0025-3227(80)90107-3
55b83d31e13823bd29ba865c	1469	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	25	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b2e020e138231cbdd6ced3	263	Thumb Formation	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
56c1c470cf58f15c72c905bd	480	Kirschberg Evaporite Member	100.5	113	Rodriguez-Aranda, Juan P. et al.	Lower Miocene gypsum palaeokarst in the Madrid Basin (central Spain): dissolution diagenesis, morphological relics and karst end-products	Sedimentology	49	2002	Wiley-Blackwell	10.1046/j.1365-3091.2002.00504.x
54e9f64ee138237cc9151412	373	Purbeck mention	139.8	149.2	West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
54beea51e13823023e43d994	5	Zechstem Evaponte Group			Fabricius, Johannes	Natural Na□K□M g□□ solutions and solid derivatives trapped in euhedral quartz from Danish Zechstein salt	Chemical Geology	61	1987	Elsevier	10.1016/0009-2541(87)90031-3
54f9553fe138239936c6c748	68	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
54b43288e138239d86854e95	104	Fats mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
54d25bffe138235369fe011c	93	Aragonite Bloedite Calcite Dolomite			Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
578d341ecf58f10f11b89145	56	Cloud Chief Formation	251	299	REYNOLDS, RICHARD L. et al.	Iron sulfide minerals at Cement oil field, Oklahoma: Implications for magnetic detection of oil fields	Geological Society of America Bulletin	102	1990	GSA	10.1130/0016-7606(1990)102<0368:ismaco>2.3.co;2
57613d6fcf58f138292ba937	482	Bozkır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
558d4970e13823109f3edd1b	127	Awatage Formation			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
57a43018cf58f11204e17fe0	588	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b83d31e13823bd29ba865c	8391	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4327fe138239d86853736	593	Basin mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
5590ec95e13823109f3ef2e5	1083	Paradox Member	299	318.1	Lohman, Stanley William	The Geologic Story of Canyonlands National Park	Bulletin		1974	United States Geological Survey	10.3133/b1327
5906dd0fcf58f15fea53aef7	211	Woodbine Sandstone	65.5	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5598f6b0e1382390cc64103f	176	Daye Formation	245	251	Xie, Guiqing et al.	Geochemical constraints on Cu–Fe and Fe skarn deposits in the Edong district, Middle–Lower Yangtze River metallogenic belt, China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.08.005
55b7869fe13823bd29ba8231	629	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57321bc8cf58f1a0ac39199e	168	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
575019eacf58f1696f3ea50a	98	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55b6d4bfe13823bd29ba7dc0	554	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1730	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	4963	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e865c7e138237cc9150d7f	323	Penrith Sandstone	273.01	298.9	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
590769c6cf58f191e58edf9d	49	Rush Springs Sandstone	251	260.4	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
55c01a9ecf58f16e99a37305	1043	Rustler Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b6d4bfe13823bd29ba7dc0	1140	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	2290	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43281e138239d86853bfd	154	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
54b43245e138239d8684952a	249	Salina Formation	416	443.7	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
58c8ed8ccf58f1a71217fb6b	101	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c4005801faed655488cf82c	622	Shoemaker mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
579f5bc9cf58f12a53c41a24	189	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5ab90b76cf58f15ad7d7cedf	142	Evaporite mention			Lettéron, Alexandre et al.	Reconstruction of a saline, lacustrine carbonate system (Priabonian, St-Chaptes Basin, SE France): Depositional models, paleogeographic and paleoclimatic implications	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2017.12.023
55b83d31e13823bd29ba865c	3764	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2861	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	741	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5aba3998cf58f110658059ec	116	Location Calcite Dolomite			Walter, Benjamin F. et al.	Multi-reservoir fluid mixing processes in rift-related hydrothermal veins, Schwarzwald, SW-Germany	Journal of Geochemical Exploration	186	2018	Elsevier	10.1016/j.gexplo.2017.12.004
55b83d31e13823bd29ba865c	4735	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2485	Blaine Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57464969cf58f165ff103f08	97	Blomidon Formation	203.6	216.5	Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
578b8ab6cf58f1645f54f0c6	106	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
558eb5d6e13823109f3ee517	1276	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5712f1aacf58f16fb4cc921a	191	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5aba3998cf58f110658059ec	116	Location Calcite Dolomite			Walter, Benjamin F. et al.	Multi-reservoir fluid mixing processes in rift-related hydrothermal veins, Schwarzwald, SW-Germany	Journal of Geochemical Exploration	186	2018	Elsevier	10.1016/j.gexplo.2017.12.004
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf26f8e13823023e43db6f	188	Laventille Formation	99.6	145.5	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b83d31e13823bd29ba865c	1530	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	1965	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	5905	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	374	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54f9553fe138239936c6c748	92	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
5a0493edcf58f1b96402aae7	144	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b83d31e13823bd29ba865c	7939	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b7e5cfe138230a74d15b25	270	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
54b43247e138239d86849b52	331	El Molino Fm	61.6	70.1938	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5897de3fcf58f1081e8c64e1	171	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54b4324ee138239d8684ae63	271	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
55b83d31e13823bd29ba865c	835	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3055ce138231cbdd6cf97	3077	Ghanam mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
57177ecdcf58f1637fb099ed	73	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55b7869fe13823bd29ba8231	2779	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5674a234cf58f12215607647	142	Volterra Formation			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57177ecdcf58f1637fb099ed	140	Wellington Group	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55b2d05ce138231cbdd6ce7f	1971	Bird Spring Formation	279.7525	326.15	Hewett, D.F.	Geology and mineral resources of the Ivanpah quadrangle, California and Nevada	Professional Paper		1956	United States Geological Survey	10.3133/pp275
55831d49e1382390b43c96c1	425	Prairie Evaporite Formation	385.3	397.5	Beaton, Andrew P. et al.	The petrography, mineralogy and geochemistry of a paleocene lignite from southern Saskatchewan, Canada	International Journal of Coal Geology	17	1991	Elsevier	10.1016/0166-5162(91)90007-6
5c3540ea1faed655488c1248	121	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
5945bc17cf58f198bc7dcbd8	68	Ettringite mention			Rajasekaran, G. and Narasimha Rao, S.	Sulphate Attack in Lime-Treated Marine Clay	Marine Georesources & Geotechnology	23	2005	Taylor and Francis	10.1080/10641190590944926
55b690a7e138238e2d05483f	3555	Minnelusa mention	282	320.05	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55990e4de1382390cc6410c3	153	Sp mention			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
55b83d31e13823bd29ba865c	4635	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	15	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	4297	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54f9553fe138239936c6c748	164	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b83d31e13823bd29ba865c	5917	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	508	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4324ce138239d8684a8ac	232	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
55b83d31e13823bd29ba865c	698	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8304	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55baa3b5e1382373b63b89e7	413	Louann Formation	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557b2664e138239225f86285	9391	Lovelock mention	166.025	171.85	Luttrell, Gwendolyn Lewise Werth et al.	Lexicon of geologic names of the United States for 1968-1975	Bulletin		1981	United States Geological Survey	10.3133/b1520
57beed05cf58f1419cfbd6b3	235	Mahalagou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
55b83d31e13823bd29ba865c	3643	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	564	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5a0493edcf58f1b96402aae7	128	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54b4328de138239d86855c34	501	Gypsiferous Claystone Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	3829	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	1851	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
584aa62ccf58f19d6a5f583e	127	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	8595	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54b4328ce138239d86855aad	28	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
58d05f04cf58f143d83df298	221	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
5897de3fcf58f1081e8c64e1	314	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	6859	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	78	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	5992	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c48dc6cf58f1a8110b94db	59	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5756ab9ecf58f19941112e26	211	Sands Formation			Farid, Intissar et al.	Geochemical and isotopic study of surface and groundwaters in Ain Bou Mourra basin, central Tunisia	Quaternary International		2013	Elsevier	10.1016/j.quaint.2013.04.021
55b83d31e13823bd29ba865c	4714	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328fe138239d86856237	43	Zaragoza Gypsum Formation	5.332	23.03	Mees, Florias et al.	Bloedite sedimentation in a seasonally dry saline lake (Salada Mediana, Spain)	Sedimentary Geology	238	2011	Elsevier	10.1016/j.sedgeo.2011.04.006
5897de3fcf58f1081e8c64e1	28	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5a0493edcf58f1b96402aae7	198	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b78281e13823bd29ba8218	2018	Rustler mention	253.9652	256.0278	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
550ae586e138238460c4ff17	429	Opalinus Clay Formation			Fernández, A.M. et al.	Applying the squeezing technique to highly consolidated clayrocks for pore water characterisation: Lessons learned from experiments at the Mont Terri Rock Laboratory	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2014.07.003
54b4328ce138239d86855b5a	39	Hondo Formation			Taberner, C. et al.	The use of environmental markers to distinguish marine vs. continental deposition and to quantify the significance of recycling in evaporite basins	Sedimentary Geology	137	2000	Elsevier	10.1016/S0037-0738(00)00105-6
54b4328ee138239d86855f3a	232	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
590785cdcf58f19bf342565e	306	Maquoketa Shale	443.7	488.3	Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54e9f64ee138237cc9151412	373	Purbeck mention	139.8	149.2	West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
57d03153cf58f151be16553d	124	Chalk Magnesite Dolomite			Nieć, Marek et al.	Main challenges of mineral resources policy of Poland	Resources Policy		2014	Elsevier	10.1016/j.resourpol.2014.10.010
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b83d31e13823bd29ba865c	1789	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8668	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c18a44cf58f1a6ba4ea494	65	Clear Fork Formation	270.6	299	Simon, Sharane S.T. and Gibling, Martin R.	Pedogenic Mud Aggregates Preserved In A Fine-Grained Meandering Channel In the Lower Permian Clear Fork Formation, North-Central Texas, U.S.A.	Journal of Sedimentary Research	87	2017	Society for Sedimentary Geology	10.2110/jsr.2017.12
5c19917d1faed655488915d3	865	Lapatkos Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
57c86f1bcf58f141c6f7b1f8	496	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55b6d6a7e13823bd29ba7dcc	7946	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
550f21dce1382369a6f940aa	52	Zaragoza Gypsum Formation	5.332	23.03	Guinea, Ander et al.	Geoelectrical prospecting of glauberite deposits in the Ebro basin (Spain)	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.03.007
55b75a36e13823bd29ba8116	2049	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
59069dcecf58f1491d1b327e	135	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
56c1ea81cf58f15c72c908aa	352	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5734b312cf58f14dbc2c579f	78	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
550af900e1382369a6f92edb	167	Niobrara mention	83.6	97.233	Tuttle, Michele L.W. et al.	Contaminants from cretaceous black shale: II. Effect of geology, weathering, climate, and land use on salinity and selenium cycling, Mancos Shale landscapes, southwestern United States	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.011
590769c6cf58f191e58edf9d	45	Salt Plains mention	273.01	279.7525	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
5a2f778acf58f10a775a37f3	72	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
558eb5d6e13823109f3ee517	351	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b6d6a7e13823bd29ba7dcc	8072	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5598dfe1e1382390cc640fbc	50	Huanglong Formation	299	359.2	Du, Yilun et al.	Petrology and geochemistry of Silurian–Triassic sedimentary rocks in the Tongling region of Eastern China: Their roles in the genesis of large stratabound skarn ore deposits	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.11.021
5c3e6d6c1faed655488cd35a	260	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b83d31e13823bd29ba865c	3809	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e8ae2de138237cc9150ec9	1398	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
55b6d6a7e13823bd29ba7dcc	7553	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
598b8640cf58f11358c1f60c	55	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5c31d1fe1faed655488ba1bd	126	White Gp	175.6	199.6	Simonov, O.N. et al.	The source of sulfur in sulfide deposits in the Siberian Platform traps (from isotope data)	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.07.015
54c15752e1382389c54c3b8f	242	Bunter Sandstone	245	251	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b78281e13823bd29ba8218	2052	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
58c18a44cf58f1a6ba4ea494	65	Clear Fork Formation	270.6	299	Simon, Sharane S.T. and Gibling, Martin R.	Pedogenic Mud Aggregates Preserved In A Fine-Grained Meandering Channel In the Lower Permian Clear Fork Formation, North-Central Texas, U.S.A.	Journal of Sedimentary Research	87	2017	Society for Sedimentary Geology	10.2110/jsr.2017.12
559d88f0e138230816dad87c	4130	Continued Alluvium Topsoil Conglomerate			Bjorklund, Louis Jay and Motts, Ward Sundt	Geology and water resources of the Carlsbad area, Eddy County, New Mexico	Open-File Report		1959	United States Geological Survey	10.3133/ofr599
5599341be1382390cc641189	220	Valdeprado Formation	99.6	145.5	Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
578d341ecf58f10f11b89145	296	Hennessey Shale	273.01	279.7525	REYNOLDS, RICHARD L. et al.	Iron sulfide minerals at Cement oil field, Oklahoma: Implications for magnetic detection of oil fields	Geological Society of America Bulletin	102	1990	GSA	10.1130/0016-7606(1990)102<0368:ismaco>2.3.co;2
57c9f7a1cf58f1bbcffcfdff	8	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
56ac2bfdcf58f19442534c89	49	Zaragoza Formation	23.03	33.9	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456
55b64a4de1382314227d0039	11	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
558e100ae13823109f3ee10f	159	Todilto mention	158.1835	162.45	Soulliere, Sandra J. et al.	Mineral resources of the Ojito and Cabezon Wilderness Study Areas, Sandoval County, New Mexico	Bulletin		1987	United States Geological Survey	10.3133/b1733B
55b83d31e13823bd29ba865c	472	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57ec17eccf58f1ac335ac1b3	64	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
56c1d607cf58f15c72c9071a	517	Bell Canyon Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
579411f4cf58f1a07169666f	2	Creede Formation	23.03	33.9	Finkelstein, D. B. et al.	Origin and diagenesis of lacustrine sediments, upper Oligocene Creede Formation, southwestern Colorado	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1175:oadols>2.3.co;2
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5734b312cf58f14dbc2c579f	361	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
5734b312cf58f14dbc2c579f	413	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
598ba21ccf58f11db7396445	245	Mancos Shale	65.5	145.5	Jones, Colleen P. et al.	Selenium and salt mobilization in wetland and arid upland soils of Pariette Draw, Utah (USA)	Geoderma	305	2017	Elsevier	10.1016/j.geoderma.2017.06.028
55b83d31e13823bd29ba865c	3646	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5ce2f9b20b45c76caf8ae21e	193	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
557cd3cfe138239225f869e5	2064	Cloud Chief Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4327fe138239d868536c9	171	Kalavassos mention			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ee138239d86855f3a	232	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
57c9f7a1cf58f1bbcffcfdff	251	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
54b4328ce138239d86855aad	505	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b7869fe13823bd29ba8231	2508	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c4f4ecf58f16b97cc4df6	467	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55ad3126e13823763a8303a0	213	Rustler mention	253.9652	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b83d31e13823bd29ba865c	5438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55990036e1382390cc641074	157	Uragen mention			Xue, Chunji et al.	Geology, geochemistry and genesis of the Cretaceous and Paleocene sandstone- and conglomerate-hosted Uragen Zn–Pb deposit, Xinjiang, China: A review	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.06.005
55b7869fe13823bd29ba8231	2055	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559dcd1ae138230816dad9be	2870	Moab mention	161.5	165.3	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
54f9553fe138239936c6c748	88	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
5c2f443f1faed655488b5ed9	301	Cal Dol Qz Gp			Santo, A. et al.	Deep seated fault-related volcanogenic H 2 S as the key agent of high sinkhole concentration areas	Earth Surface Processes and Landforms			Wiley	10.1002/esp.4526
557cc6e1e138239225f869b5	184	Pierre mention	71.0935	84.275	Boettcher, Arnold J. and Horr, C. Albert	Geology and ground-water resources in eastern Cheyenne and Kiowa Counties, Colorado	Water Supply Paper		1964	United States Geological Survey	10.3133/wsp1779N
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b83d31e13823bd29ba865c	8128	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e00699e138238a47f97251	245	Phase Dolomite	65.5	251	Ledesma-Ruiz, Rogelio et al.	Investigation of the geochemical evolution of groundwater under agricultural land: A case study in northeastern Mexico	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2014.12.026
559dcd1ae138230816dad9be	347	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
5897de3fcf58f1081e8c64e1	470	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54b4328de138239d86855c34	47	Kirmir Formation	5.332	23.03	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
5906cf0dcf58f15ad9553b8a	96	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
580e3bc6cf58f172dd1b8676	59	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
54b4328de138239d86855dfa	9	Dam Formation	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
557f7360e13823bc80ba26f4	1477	Yeso Formation	251	299	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
55b7277de13823bd29ba7fc3	2468	Leadville Limestone	318.1	359.2	Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
55f4877fcf58f16256a22522	492	Gypsum Mbr			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b83d31e13823bd29ba865c	3830	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55c2ce13cf58f1a8110b8b48	406	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57a43018cf58f11204e17fe0	25	Lake Inflow Gypsum Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5981f724cf58f18c3530aa71	2	Francis Group	305.425	305.7125	Islam, Muhammad et al.	Relative Efficiency of Two Sulfur Sources Regarding Nitrogen Fixation and Yield of Chickpea	Communications in Soil Science and Plant Analysis	43	2012	Taylor and Francis	10.1080/00103624.2012.648358

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57320585cf58f19d17198262	35	Mineral mention	307	315.2	Gerald M. Friedman	Methane-Generated Lithified Dolostone of Holocene Age: Eastern Mediterranean	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c7-2b26-11d7-8648000102c1865d
558c6b00e13823109f3ed87c	1378	Parachute Creek Member	33.9	55.8	Brobst, Donald Albert and Tucker, Jerry D.	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803
584aa62ccf58f19d6a5f583e	134	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
57c86f1bcf58f141c6f7b1f8	496	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55b75a36e13823bd29ba8116	2687	Red Bed	100.5	145	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
54e7a556e138237cc9150a6b	11	Floral Formation			Van Stempvoort, Dale R. et al.	Sources and dynamics of sulfur in weathered till, Western Glaciated Plains of North America	Chemical Geology	1-4	1994	Elsevier	10.1016/0009-2541(94)90081-7
54b4328de138239d86855dfa	461	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b83d31e13823bd29ba865c	8714	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
5a39ee95cf58f1314cf12808	224	Lisan Formation	0.01143	0.126	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
5a047804cf58f1b964029407	509	Vastitas Borealis Formation			Pan, Lu et al.	The stratigraphy and history of Mars' northern lowlands through mineralogy of impact craters: A comprehensive survey	Journal of Geophysical Research: Planets	122	2017	Wiley-Blackwell	10.1002/2017JE005276
55b83d31e13823bd29ba865c	5967	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b6d6a7e13823bd29ba7dcc	6081	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5502c2cae1382326932d7ae8	278	Solfifera Formation			Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55b3055ce138231cbdd6cf97	3280	Ghanam Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
558e100ae13823109f3ee10f	159	Todilto mention	158.1835	162.45	Soulliere, Sandra J. et al.	Mineral resources of the Ojito and Cabezon Wilderness Study Areas, Sandoval County, New Mexico	Bulletin		1987	United States Geological Survey	10.3133/b1733B
54b4328ae138239d868555525	130	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
54c04652e1382389c54c3686	210	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
558eb5d6e13823109f3ee517	434	Rustler mention	253.9652	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b6d6a7e13823bd29ba7dcc	7731	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
584aa62ccf58f19d6a5f583e	49	Gypsum Formation			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
558ecdcbe13823109f3ee5af	319	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55b83d31e13823bd29ba865c	3668	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56b60579cf58f14c238d3700	135	Daisy Bed	470	485.4	KING, R. J.	Minerals explained 13: Gypsum	Geology Today	6	1990	Wiley-Blackwell	10.1111/j.1365-2451.1990.tb00742.x
57bedb9ccf58f13bf01999e9	326	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55b83d31e13823bd29ba865c	5447	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	622	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	508	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b75a36e13823bd29ba8116	2687	Red Bed	100.5	145	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
57c87288cf58f142fe30b3f7	360	Shoemaker Formation			Dixon, Emily M. et al.	Assessing hydrodynamic effects on jarosite dissolution rates, reaction products, and preservation on Mars	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004779
55b6df25e13823bd29ba7dfe	315	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b83d31e13823bd29ba865c	8032	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	55	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4328de138239d86855dfa	180	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
54c04652e1382389c54c3686	166	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
5a21527bcf58f1a7a6b3677b	98	SCII Formation			Préat, Alain et al.	Paleoenvironments, δ13C and δ18O signatures in the Neoproterozoic carbonates of the Comba Basin, Republic of Congo: Implications for regional correlations and Marinoan event	Journal of African Earth Sciences	137	2018	Elsevier	10.1016/j.jafrearsci.2017.09.002
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b83d31e13823bd29ba865c	7409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	622	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55ae0df7e13823763a830928	1398	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5a2f778acf58f10a775a37f3	220	Longares Formation			Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
56830b14cf58f1479a0ab918	266	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55a7354fe13823757cc6fe82	850	A/R mention			Diment, William H. and Pratt, Howard R.	Thermal conductivity of some rock-forming minerals: a tabulation	Open-File Report		1988	United States Geological Survey	10.3133/ofr88690
557cd3cfe138239225f869e5	1983	Haystack Gypsum Member	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b83d31e13823bd29ba865c	2758	Red Bed	100.5	145	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54b43247e138239d86849b52	155	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
584a9819cf58f19999526ff5	641	Denizli mention			Desouky, Hamdy El et al.	Novel applications of fluid inclusions and isotope geochemistry in unravelling the genesis of fossil travertine systems	Sedimentology	62	2015	Wiley	10.1111/sed.12137
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
56ac2bfdcf58f19442534c89	51	Zaragoza Formation	23.03	33.9	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456
54b4328ee138239d86855fe9	66	Baza Fm			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
5c2b5da21faed655488b16ed	391	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
54bf26f8e13823023e43db6f	603	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b78281e13823bd29ba8218	4213	Santa Rosa mention	268.4275	320.2999	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
559e58a2e138230816dadbe2	702	Harrisburg mention	273.01	282	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
57c19e14cf58f16bf61df64c	171	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55b388d6e138231cbdd6d25d	1103	Gamma Member			Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
55b83d31e13823bd29ba865c	147	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f42547cf58f16256a222a4	108	Benassal Fm	99.6	112	Martín-Martín, J.D. et al.	Fault-controlled and stratabound dolostones in the Late Aptian–earliest Albian Benassal Formation (Maestrat Basin, E Spain): Petrology and geochemistry constrains	Marine and Petroleum Geology		2015	Elsevier	10.1016/j.marpetgeo.2015.03.019
558c8afce13823109f3ed928	41	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
57f555decf58f17e0fbf38b4	810	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	179	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c01a9ecf58f16e99a37305	505	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54b4324ee138239d8684ae63	256	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54f9553fe138239936c6c748	77	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b83d31e13823bd29ba865c	3117	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579b56dacf58f13d24f0d7ef	80	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54fb03c7e138239936c6d1e1	195	Baogutu Group			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
56c1c32bcf58f15c72c9059b	169	Bellerophon mention	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55c01a9ecf58f16e99a37305	581	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b7869fe13823bd29ba8231	2455	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43273e138239d8685157e	374	Minto Point Formation			Narbonne, Guy M. and Aitken, James D.	Neoproterozoic of the Mackenzie Mountains, northwestern Canada	Precambrian Research	73	1995	Elsevier	10.1016/0301-9268(94)00073-Z
58cd1a59cf58f1aa1f369152	173	Dibdibah Formation			Grealish, Gerard et al.	Assisting Non-Soil Experts to Identify Soil Types for Land Management to Support Restoration of Arid Rangeland Native Vegetation in Kuwait	Arid Land Research and Management	29	2015	Taylor and Francis	10.1080/15324982.2014.973620
55b83d31e13823bd29ba865c	3594	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54d25bffe138235369fe011c	134	Flaxville Formation	1.806	5.332	Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
54b4328fe138239d868561aa	158	Solfifera Formation			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
590769c6cf58f191e58edf9d	145	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
55c01a9ecf58f16e99a37305	389	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b83d31e13823bd29ba865c	1174	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5731caeecf58f192f36c5766	67	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
5906dd0fcf58f15fea53aef7	136	Pen Shale	83.6	87.175	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b83d31e13823bd29ba865c	3167	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57177ecdcf58f1637fb099ed	467	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
56c1ea81cf58f15c72c908aa	138	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b64a4de1382314227d0039	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b6d6a7e13823bd29ba7dcc	5981	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55ae0df7e13823763a830928	442	Yeso mention	275.2575	286.225	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b3d511e138231cbdd6d40e	233	Morrison Formation	145.5	161.2	Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	3592	Socorro mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5599341be1382390cc641189	229	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54dc2da6e138238a47f96228	187	Edwards mention	100.5	103.625	Land, Lynton S. and Prezbindowski, Dennis R.	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
557cd3cfe138239225f869e5	3305	Saude Formation	145	251.902	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b7e5cfe138230a74d15b25	270	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
55f4877fcf58f16256a22522	767	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55a751cee13823757cc6ff3c	577	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54b4324ee138239d8684ae63	299	Palaeogene Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54b4328de138239d86855c34	208	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
559e58a2e138230816dadbe2	717	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
57a43018cf58f11204e17fe0	931	Bouse Formation	1.806	5.332	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56e353e7cf58f16de8a2e1bf	385	Minas Viejas Formation			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
559e58a2e138230816dadbe2	667	Kaibab Formation	270.6	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b88a09e13823bd29ba883a	3590	Edwards Limestone	99.6	145.5	Edited by Gohn, Gregory S.	Proceedings of the 1988 U.S. Geological Survey Workshop on the Geology and geohydrology of the Atlantic Coastal Plain	Circular		1992	United States Geological Survey	
558ecdcbe13823109f3ee5af	323	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
54b97a75e1382369e57e4cef	99	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
55f4877fcf58f16256a22522	49	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
54be7fc1e13823299564b0b3	305	Carmel Formation	161.2	175.6	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b3055ce138231cbdd6cf97	1064	Bu Ghaylan Limestone	145.5	199.6	Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
590777cbcf58f196b33265eb	205	Beekmantown Group	443.7	488.3	Robinson, George W. et al.	Minerals of the Beekmantown Group, Southeastern Ontario, Southern Quebec, and Northwestern New York	Rocks & Minerals	86	2011	Taylor and Francis	10.1080/00357529.2011.622227
54b4328de138239d86855c34	163	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54b4328ee138239d86855f01	304	Colombacci mention	5.332	7.246	Rouchy, Jean Marie and Caruso, Antonio	The Messinian salinity crisis in the Mediterranean basin: A reassessment of the data and an integrated scenario	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.02.005
56831341cf58f1479a0ab983	76	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4328ce138239d86855b3a	48	Kuldana Formation			Saleemi, Akhtar Ali and Ahmed, Zulfiqar	Mineral and chemical composition of Karak mudstone, Kohat Plateau, Pakistan: implications for smectite-illitization and provenance	Sedimentary Geology	130	2000	Elsevier	10.1016/S0037-0738(99)00113-X
5734b312cf58f14dbc2c579f	47	Pozuelos Formation			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
56831341cf58f1479a0ab983	323	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b6d6a7e13823bd29ba7dcc	7543	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b43246e138239d86849872	104	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58b6558bcf58f1b09c25b181	157	Marizal Formation	99.6	145.5	Varejão, Filipe Giovanini et al.	Upper Aptian mixed carbonate-siliciclastic sequences from Tucano Basin, Northeastern Brazil: Implications for paleogeographic reconstructions following Gondwana break-up	Cretaceous Research		2016	Elsevier	10.1016/j.cretres.2016.06.014
54b43246e138239d86849919	743	Portland Formation	175.6	199.6	Smoot, Joseph P.	Sedimentary facies and depositional environments of early Mesozoic Newark Supergroup basins, eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90055-V
580e3bc6cf58f172dd1b8676	55	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
550af900e1382369a6f92edb	293	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from cretaceous black shale: II. Effect of geology, weathering, climate, and land use on salinity and selenium cycling, Mancos Shale landscapes, southwestern United States	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.011
579b56dacf58f13d24f0d7ef	104	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5906dd0fcf58f15fea53aef7	266	Briggs Formation	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b83d31e13823bd29ba865c	8807	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558bbed5e13823109f3ed4f8	243	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
5c19917d1faed655488915d3	619	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b83d31e13823bd29ba865c	1698	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55099f05e138238460c4f9b0	155	Calcite Dolomite			Cravotta, Charles A.	Dissolved metals and associated constituents in abandoned coal-mine discharges, Pennsylvania, USA. Part 2: Geochemical controls on constituent concentrations	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.10.003
575019eacf58f1696f3ea50a	28	Salina mention	419.675	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
5d35e56c0b45c76caf93f034	474	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
54b43280e138239d868538ff	33	Campanian-Maestrichtian Harami Formation			Türkmen, Ibrahim	Facies and evaporite genesis of the Kuşcular Formation (Lower Paleocene) saline playa complex, Eastern Turkey	Journal of Asian Earth Sciences	24	2004	Elsevier	10.1016/j.jseaes.2003.09.007
54d0272be13823b501cdbc75	244	Bear Rock Formation	359.2	416	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
55a82328e13823757cc7049a	1212	Gypsum Spring Formation	168.65	174.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
5c19917d1faed655488915d3	424	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
54b4328fe138239d868561aa	121	Vakıflı Formation			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
55b6d6a7e13823bd29ba7dcc	7769	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
579f5bc9cf58f12a53c41a24	90	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
56c1cb24cf58f15c72c90642	189	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
54d2216be13823302d02428b	356	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
58b7df47cf58f18af629a04c	117	Vallfogona Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
57ec17eccf58f1ac335ac1b3	433	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
58c8ed8ccf58f1a71217fb6b	150	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
550ee523e1382369a6f93f9e	205	Oligocene-Miocene Zaragoza Formation			Gutiérrez, Francisco et al.	Leakage problems in dams built on evaporites. The case of La Loteta Dam (NE Spain), a reservoir in a large karstic depression generated by interstratal salt dissolution	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2014.12.009
55b78281e13823bd29ba8218	3158	Bliss mention	477.7	497.85	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1215	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c4f4ecf58f16b97cc4df6	31	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5906cf0dcf58f15ad9553b8a	214	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
559e58a2e138230816dadbe2	714	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
56c1d607cf58f15c72c9071a	373	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
56c1b6a3cf58f15c72c904b4	135	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
54c046b4e1382389c54c3689	350	Sevier River Formation	2.58	13.09	Cunningham, Charles G. et al.	Supergene destruction of a hydrothermal replacement alunite deposit at Big Rock Candy Mountain, Utah: mineralogy, spectroscopic remote sensing, stable-isotope, and argon-age evidences	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.055
55b30ea3e138231cbdd6cfcd	481	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
550e9025e1382369a6f93e44	69	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Paleosubsidence and active subsidence due to evaporite dissolution in the Zaragoza area (Huerva River valley, NE Spain): processes, spatial distribution and protection measures for transport routes	Engineering Geology	72	2004	Elsevier	10.1016/j.enggeo.2003.10.002
54b4328ce138239d86855aad	660	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56c1c32bcf58f15c72c9059b	74	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
558fe155e13823109f3eec57	350	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
551775abe1382394b500d785	41	Calatayud Gypsum Formation			Gutiérrez, Francisco	Gypsum karstification induced subsidence: effects on alluvial systems and derived geohazards (Calatayud Graben, Iberian Range, Spain)	Geomorphology	16	1996	Elsevier	10.1016/0169-555X(96)00004-9
55b83d31e13823bd29ba865c	3594	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2e020e138231cbdd6ced3	132	Rainbow Gardens Member	15.98	17.095	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
57ec17eccf58f1ac335ac1b3	439	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b2e020e138231cbdd6ced3	718	Thumb Member	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
559ba888e1382390cc642116	665	Calcite Dolomite			Kosakowski, Georg and Berner, Urs	The evolution of clay rock/cement interfaces in a cementitious repository for low- and intermediate level radioactive waste	Physics and Chemistry of the Earth, Parts A/B/C		2013	Elsevier	10.1016/j.pce.2013.01.003
54bf26f8e13823023e43db6f	603	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b83d31e13823bd29ba865c	6105	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2b5da21faed655488b16ed	391	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
54f9553fe138239936c6c748	140	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
5a39ee95cf58f1314cf12808	215	Sedom mention	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
5c3540ea1faed655488c1248	251	Arenazzolo mention	5.332	7.246	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
56ac2964cf58f19442534c5c	84	Bear Rock mention	391.9	408.4	Krawczyk, Wiesława Ewa and Ford, Derek C.	Correlating specific conductivity with total hardness in gypsum karst waters	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1409
57c19e14cf58f16bf61df64c	269	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
54b4324de138239d8684aba6	75	Gessoso Solfifera Formation	5.332	7.246	Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
54d2216be13823302d02428b	475	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
55b75a36e13823bd29ba8116	1851	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
575c4f4ecf58f16b97cc4df6	467	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54b4324ee138239d8684ae63	51	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
54c04652e1382389c54c3686	184	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54b43276e138239d86851d3b	224	Terravecchia Formation	7.246	11.608	Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
54e9f64ee138237cc9151412	308	Purbeck mention	139.8	149.2	West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
56c1b69acf58f15c72c904b3	141	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
5a2cf7f0cf58f19a331caf3c	309	Zechstein mention	251.902	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
54b4324ee138239d8684ae63	247	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
57177ecdcf58f1637fb099ed	3	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
584aa178cf58f19c3c0fb294	156	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
558eb5d6e13823109f3ee517	351	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55a751cee13823757cc6ff3c	866	Rustler Formation	251	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
56831341cf58f1479a0ab983	24	Gypsum Fm			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55b8484be13823bd29ba869d	396	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
55b83d31e13823bd29ba865c	5967	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2402	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578cff68cf58f101e2dda387	137	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
578b8ab6cf58f1645f54f0c6	106	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
58c8ed8ccf58f1a71217fb6b	78	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54e4d444e138237cc914feb2	50	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
5897de3fcf58f1081e8c64e1	310	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5c2ba4161faed655488b1c7d	159	Leederville Formation	65.5	145.5	Donn, Michael et al.	Fluoride and phosphate release from carbonate-rich fluorapatite during managed aquifer recharge	Journal of Hydrology	562	2018	Elsevier	10.1016/j.jhydrol.2018.05.043
54e66657e138237cc915052a	20	Cathedral Limestone	382.7	407.6	Yonge, C.J. and Krouse, H. Roy	The origin of sulphates in Castleguard Cave, Columbia Icefields, Canada	Chemical Geology: Isotope Geoscience section	65	1987	Elsevier	10.1016/0168-9622(87)90018-2
55b83d31e13823bd29ba865c	5026	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55917250e13823109f3ef5b1	874	Mae Sot mention			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
55ad3126e13823763a8303a0	186	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
557cd3cfe138239225f869e5	1082	Artesia Group	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b83d31e13823bd29ba865c	7767	CO mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5900d92bcf58f169295f6afb	147	Guanzhuang Formation			Tan, H-B. et al.	Fractionation of hydrogen and oxygen isotopes of gypsum hydration water and assessment of its geochemical indications	Australian Journal of Earth Sciences	61	2014	Taylor and Francis	10.1080/08120099.2014.921242
54c04652e1382389c54c3686	175	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55b83d31e13823bd29ba865c	260	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca16cf58f15c72c90624	159	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
57177ecdcf58f1637fb099ed	414	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55f38765cf58f16256a21e5e	28	Barbastro Gypsum Formation			Moret-Fernández, D. and Herrero, J.	Effect of gypsum content on soil water retention	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.06.030
54b43247e138239d86849b52	142	Molino Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54f9553fe138239936c6c748	38	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
57760111cf58f134d11ea726	907	Chugwater mention	201.4	247.2	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
54b4328ee138239d86856168	70	Trubi Formation	1.806	5.332	Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
5599341be1382390cc641189	229	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55f4877fcf58f16256a22522	432	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b6d6a7e13823bd29ba7dcc	6089	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1fcefcf58f15c72c90a17	511	Khorat Group	65.5	251	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
56c1ea81cf58f15c72c908aa	217	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
579f5bc9cf58f12a53c41a24	265	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
558ecdcbe13823109f3ee5af	297	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55ae4f4be13823763a830ada	522	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55b3edd0e138231cbdd6d498	3022	Horse Spring Formation	5.332	23.03	Winograd, I. J. and Thordarson, William	Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site	Professional Paper		1975	United States Geological Survey	10.3133/pp712C
55ae0df7e13823763a830928	1402	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5a2f778acf58f10a775a37f3	71	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55184839e1382394b500daf7	566	Zaragoza Gypsum Formation	5.332	23.03	Galve, J.P. et al.	Evaluating and comparing methods of sinkhole susceptibility mapping in the Ebro Valley evaporite karst (NE Spain)	Geomorphology	111	2009	Elsevier	10.1016/j.geomorph.2009.04.017
559ce2b4e138230816dad59a	193	Tropic Shale	93.9	95.55	Glanzman, Richard K. and Meier, Allen L.	Preliminary report on samples collected during lithium reconnaissance studies in Utah and Idaho	Open-File Report		1979	United States Geological Survey	10.3133/ofr79279
55b83d31e13823bd29ba865c	409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55a82328e13823757cc7049a	1145	Spearfish Formation	251	299	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
56c1d607cf58f15c72c9071a	394	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55988f24e1382390cc640e38	92	Baizuo Formation	299	359.2	Han, Run-Sheng et al.	Geological features and origin of the Huize carbonate-hosted Zn–Pb–(Ag) District, Yunnan, South China	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2006.03.003
55b83d31e13823bd29ba865c	3441	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	296	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2ce13cf58f1a8110b8b48	411	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b7869fe13823bd29ba8231	2831	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	2356	Todilto Formation	145.5	199.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
579f5bc9cf58f12a53c41a24	245	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
559e58a2e138230816dadbe2	704	Harrisburg Member	273.01	282	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
58c8ed8ccf58f1a71217fb6b	144	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b83d31e13823bd29ba865c	4543	Gypsum Sandstone			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	1867	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
550cfbabe1382369a6f937ae	77	Quartz Calcite Ankerite Dolomite			Wild, S. et al.	Suppression of swelling associated with ettringite formation in lime stabilized sulphate bearing clay soils by partial substitution of lime with ground granulated blastfurnace slag (GGBS)	Engineering Geology	51	1999	Elsevier	10.1016/S0013-7952(98)00069-6
559147b8e138236ee2217b0d	44	Rock mention			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
54b43290e138239d86856489	102	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
55b83d31e13823bd29ba865c	8601	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	2037	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7551	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b43245e138239d8684952a	233	Somerville Formation			Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
57a43018cf58f11204e17fe0	292	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
559d88f0e138230816dad87c	4071	Sand mention			Bjorklund, Louis Jay and Motts, Ward Sundt	Geology and water resources of the Carlsbad area, Eddy County, New Mexico	Open-File Report		1959	United States Geological Survey	10.3133/ofr599
55b83d31e13823bd29ba865c	4757	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5514907ce1382394b500cb75	183	Dibdibba Formation			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
59073182cf58f17e24d9c0bb	479	Bearpaw Shale	70.575	75.9333	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
55b83d31e13823bd29ba865c	6633	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e4d444e138237cc914feb2	2	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
54b43245e138239d86849681	427	Santos mention	66	92.875	Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
558c8afce13823109f3ed928	355	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
56b43ed6cf58f14c238d2c89	164	None Present Sandstone			MAZAHERI, S.A. et al.	A fuzzy allocation scheme for the Australian Great Soil Groups Classification system	European Journal of Soil Science	46	1995	Wiley-Blackwell	10.1111/j.1365-2389.1995.tb01356.x
54b4328ae138239d86855525	6	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55b83d31e13823bd29ba865c	2347	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	29	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b75a36e13823bd29ba8116	2679	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
5579c265e138231c7c52c464	168	Zechstein mention	251.902	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2fe60d1faed655488b6bad	241	Altash Formation			Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b6d6a7e13823bd29ba7dcc	9127	Corona Shale			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55c2ce13cf58f1a8110b8b48	406	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b83d31e13823bd29ba865c	2758	Red Bed	100.5	145	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	332	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b2e020e138231cbdd6ced3	846	Thumb Member	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
5a2d0619cf58f19f7117d37a	108	Calcare Solfifero Formation			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
55b6d6a7e13823bd29ba7dcc	7995	Gypsum Sandstone			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58c8d892cf58f1a052bddb32	86	Kirmir Formation	5.332	23.03	Helvaci, Cahit et al.	Presence and Distribution of Lithium in Borate Deposits and Some Recent Lake Waters of West-Central Turkey	International Geology Review	46	2004	Taylor and Francis	10.2747/0020-6814.46.2.177
55b83d31e13823bd29ba865c	1250	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43245e138239d8684952a	173	Antalo Limestone			Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
56c1cb24cf58f15c72c90642	224	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
5a2d0619cf58f19f7117d37a	171	CdB Formation			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
57de579ecf58f11956b3e520	146	Goethite Quartz Dolomite			Hunter, Hazel M.A. et al.	Examining Ni-laterite leach mineralogy & chemistry – a holistic multi-scale approach	Minerals Engineering		2013	Elsevier	10.1016/j.mineng.2013.05.002
55b83d31e13823bd29ba865c	6810	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54d25bffe138235369fe011c	321	Ravenscrag Formation	55.8	65.5	Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
55b83d31e13823bd29ba865c	590	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57766a89cf58f152fa3473d3	4311	Queenston Shale	443.8	449	Hovey, E. O.	Proceedings of the Thirty-second Annual Meeting of the Geological Society of America, held at Boston, Massachusetts, December 29-31, 1919	Geological Society of America Bulletin	31	1920	Geological Society of America	10.1130/gsab-31-1
55b75a36e13823bd29ba8116	2174	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
590785cdcf58f19bf342565e	284	Aplington Dolomite	360.425	365	Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
55b83d31e13823bd29ba865c	6142	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	414	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5748f823cf58f170c57fbbd7	505	Codroy mention	325.125	345.5	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
579ed180cf58f1030df9c51e	320	Carroza mention	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
54bf26f8e13823023e43db6f	587	Carmel Formation	161.2	175.6	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5502c2cae1382326932d7ae8	128	Salina mention	419.675	429.4	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55b389aae138231cbdd6d262	4190	Khewra mention	488.3	542	U.S. Geological Survey	Geological Survey research 1970, Chapter D	Professional Paper		1970	United States Geological Survey	10.3133/pp700D
5897de3fcf58f1081e8c64e1	310	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55f28a1bcf58f16256a2178c	259	Ain Ghrab Formation			Jellalia, Dalila et al.	Hydro-geophysical and geochemical investigation of shallow and deep Neogene aquifer systems in Hajeb Layoun-Jilma-Ouled Asker area, Central Tunisia	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.06.016
5a39ee95cf58f1314cf12808	220	Lisan Formation	0.01143	0.126	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
56c1cb24cf58f15c72c90642	174	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55917e77e13823109f3ef5e3	151	Mancos Shale	65.5	145.5	Presser, T.S. et al.	Geologic sources, mobilization, and transport of selenium from the California Coast Ranges to the western San Joaquin Valley; a reconnaissance study	Water-Resources Investigations Report		1990	United States Geological Survey	10.3133/wri904070

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558cbceae13823109f3eda41	161	Harrisburg Member	273.01	282	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b83d31e13823bd29ba865c	8362	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55a751cee13823757cc6ff3c	1314	Azotea Dolomite			Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54c0cf26e1382389c54c3932	267	Norseman mention	37.71	47.8	Benison, Kathleen Counter and Bowen, Brenda Beitler	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
5c2fe60d1faed655488b6bad	156	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5743f3cacf58f16102c3d8df	99	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
55b7869fe13823bd29ba8231	1263	Moccasin Creek Gypsum Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	8077	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	6779	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1215	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	7462	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3364	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
570fe41dcf58f114a862267f	147	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b6d6a7e13823bd29ba7dcc	8148	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
58bf2d90cf58f1867eb10946	228	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5674a234cf58f12215607647	142	Volterra Formation			Speranza, Giulio et al.	Paleoclimate reconstruction during the Messinian evaporative drawdown of the Mediterranean Basin: Insights from microthermometry on halite fluid inclusions	Geochemistry, Geophysics, Geosystems	14	2013	Wiley-Blackwell	10.1002/2013GC004946
55b7869fe13823bd29ba8231	1211	Canas Member	278.404	279.303	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c86f1bcf58f141c6f7b1f8	9	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
5945bc17cf58f198bc7dcbd8	68	Ettringite mention			Rajasekaran, G. and Narasimha Rao, S.	Sulphate Attack in Lime-Treated Marine Clay	Marine Georesources & Geotechnology	23	2005	Taylor and Francis	10.1080/10641190590944926
578cff68cf58f101e2dda387	21	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55c01a9ecf58f16e99a37305	353	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b83d31e13823bd29ba865c	4647	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55f4877fcf58f16256a22522	455	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5c3540ea1faed655488c1248	165	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
55b83d31e13823bd29ba865c	1202	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
550901a3e138238460c4f59b	279	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
558df7d7e13823109f3ee082	1144	Evaporite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43246e138239d86849872	318	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55ae0df7e13823763a830928	2356	Todilto Formation	145.5	199.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5734b312cf58f14dbc2c579f	453	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
5b6eb3c5cf58f13c68e2d5dc	45	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
55b83d31e13823bd29ba865c	430	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55baa3b5e1382373b63b89e7	508	Dead Sea mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c2ce13cf58f1a8110b8b48	399	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b78281e13823bd29ba8218	3158	Bliss mention	477.7	497.85	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54bf7e39e13823023e43de1a	145	Bellerophon mention	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
58c8ed8ccf58f1a71217fb6b	158	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
557cc6e1e138239225f869b5	40	Ogallala Formation	-5.5012E-05	23.03	Boettcher, Arnold J. and Horr, C. Albert	Geology and ground-water resources in eastern Cheyenne and Kiowa Counties, Colorado	Water Supply Paper		1964	United States Geological Survey	10.3133/wsp1779N
55b7869fe13823bd29ba8231	1730	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	378	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
557ff66ee13823bc80ba2925	1312	Fox Hills Sandstone	65.5	99.6	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	101	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b83d31e13823bd29ba865c	402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57126a16cf58f140fa5c33f2	124	Indicators Limestone			Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5c3e6d6c1faed655488cd35a	4	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b7869fe13823bd29ba8231	2076	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7722	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54e2f6d3e138237cc914f6d6	24	Accessories Dolomite			Popp, T. and Kern, H.	Thermal dehydration reactions characterised by combined measurements of electrical conductivity and elastic wave velocities	Earth and Planetary Science Letters	1-2	1993	Elsevier	10.1016/0012-821X(93)90022-2
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5a0493edcf58f1b96402aae7	281	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54b43248e138239d86849e26	48	Oficina Viz Fm.			Chong Ɗıaz, Guillermo et al.	Evolution and geochemical signatures in a Neogene forearc evaporitic basin: the Salar Grande (Central Andes of Chile)	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00014-0
58cfcb79cf58f112dea75ae1	2	Francis Group	305.425	305.7125	Orescanin, Visnja et al.	Characterization and treatment of the phosphoric gypsum transport water	Journal of Environmental Science and Health, Part A	44	2009	Taylor and Francis	10.1080/10934520902847802
55b7869fe13823bd29ba8231	635	EXPIANATION mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b2c402e138231cbdd6ce3e	795	Cutler mention	269.635	298.9	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5514907ce1382394b500cb75	55	Kuwait Group			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
55ae0df7e13823763a830928	519	Seven Rivers Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5c19917d1faed655488915d3	865	Lapatkos Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324ee138239d8684ae63	276	Palaeogene Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
565f6ebfcf58f148c57ec29d	200	Tunisian Chemical Group			Boumnijel, Ibtissem et al.	Effect of calcinated and activated perlite on improving efficiency of dihydrate process for phosphoric acid	International Journal of Mineral Processing		2013	Elsevier	10.1016/j.minpro.2013.10.005
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
56c1b6a3cf58f15c72c904b4	353	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
558ec3e3e13823109f3ee570	48	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
54b43246e138239d86849872	104	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
56a1ac99cf58f19442528389	1984	Aragonite Monohydrocalcite Dolomite			Gibson, Everett K. et al.	Chemical weathering and diagenesis of a cold desert soil from Wright Valley, Antarctica: An analog of Martian weathering processes	Journal of Geophysical Research	88	1983	Wiley-Blackwell	10.1029/JB088iS02p0A912
55b7869fe13823bd29ba8231	2082	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57a43018cf58f11204e17fe0	756	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b83d31e13823bd29ba865c	1699	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328de138239d86855dfa	333	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55c01a9ecf58f16e99a37305	236	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5712f1aacf58f16fb4cc921a	221	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b7869fe13823bd29ba8231	2232	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c01a9ecf58f16e99a37305	300	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
5c3540ea1faed655488c1248	251	Arenazzolo mention	5.332	7.246	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
59158ececf58f199789c4257	76	AFm mention			Chaunsali, Piyush and Mondal, Paramita	Hydration and early-age expansion of calcium sulfoaluminate cement-based binders: experiments and thermodynamic modeling	Journal of Sustainable Cement-Based Materials	5	2015	Taylor and Francis	10.1080/21650373.2015.1060184
55b83d31e13823bd29ba865c	572	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a3dceccf58f1b8b5b032b5	264	Castile Formation	253.8	260.4	Kiro, Yael et al.	Environmental implications of salt facies in the Dead Sea	Geological Society of America Bulletin	128	2015	Geological Society of America	10.1130/b31357.1
54b4328ee138239d86855fe9	91	Baza mention			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
558c8afce13823109f3ed928	1656	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
54b43259e138239d8684cd98	414	Red Bed	100.5	145	Milesi, J.P. et al.	An overview of the geology and major ore deposits of Central Africa: Explanatory note for the 1:4,000,000 map “Geology and major ore deposits of Central Africa”	Journal of African Earth Sciences	44	2006	Elsevier	10.1016/j.jafrearsci.2005.10.016
57ec17eccf58f1ac335ac1b3	64	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
57760111cf58f134d11ea726	932	Chugwater mention	201.4	247.2	DARTON, N. H.	Paleozoic and Mesozoic of central Wyoming	Geological Society of America Bulletin	19	1908	Geological Society of America	10.1130/gsab-19-403
55b690a7e138238e2d05483f	3445	Minnelusa mention	282	320.05	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
57a43018cf58f11204e17fe0	647	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4328ae138239d868555597	22	Pak Reichenhall Fm			Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
55b6d6a7e13823bd29ba7dcc	8061	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	6155	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55917250e13823109f3ef5b1	1622	Loei mention			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ce138239d86855a1e	421	Puente La Reina Formation			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b83d31e13823bd29ba865c	391	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d868555255	188	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
55b78281e13823bd29ba8218	911	Yates mention	259.51	273.01	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
558cbceae13823109f3eda41	225	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
54b43245e138239d8684952a	156	Khorat Group	65.5	251	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
5c2ad1181faed655488b08a2	75	Razzaqi Formation			Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
56c1d8a6cf58f15c72c9073f	523	Castile Formation	253.8	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b83d31e13823bd29ba865c	5894	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8213	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	182	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5906dd0fcf58f15fea53aef7	437	Del Rio Formation	65.5	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b7869fe13823bd29ba8231	376	Johnson Shale	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558c8afce13823109f3ed928	1760	Gypsum Spring Formation	168.65	174.7	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
55b75a36e13823bd29ba8116	1799	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55f4877fcf58f16256a22522	40	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54b4328ce138239d86855a1e	580	Puente La Reina Formation			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
56831341cf58f1479a0ab983	388	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
584aa62ccf58f19d6a5f583e	49	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55f4877fcf58f16256a22522	539	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b6d6a7e13823bd29ba7dcc	6610	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4324ee138239d8684ae63	4	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
5906dd0fcf58f15fea53aef7	50	Wichita Group	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5734b312cf58f14dbc2c579f	462	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55a75662e13823757cc6ff58	2151	Sand mention			Dutcher, L.C.	Data on water wells in the Fremont Valley area, Kern County, California	Open-File Report		1959	United States Geological Survey	10.3133/ofr59135
5683349ccf58f1479a0abb4e	33	Fars Formation			Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
572cdf45cf58f133c4f9d591	258	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
54b84626e138230a74d15cc6	438	Old Red Sandstone	359.2	416	Strahan, Aubrey	Chapter XXXIII. South Wales	Proceedings of the Geologists' Association	1–20	1908	Elsevier	10.1016/S0016-7878(10)80026-4
55a69d57e13823757cc6fac4	38	Gypsum Shale			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
579f5bc9cf58f12a53c41a24	346	Tripoli Fm	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5597e2c3e1382390cc640a6d	144	Cu mention			García-Lorenzo, M.L. et al.	Trace elements contamination in an abandoned mining site in a semiarid zone	Journal of Geochemical Exploration		2012	Elsevier	10.1016/j.gexplo.2011.07.001
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b43246e138239d86849721	211	Pekin Formation	199.6	251	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
5907a8f7cf58f1a944ce7ed3	58	Warsaw Shale	339	341	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
54b4328ae138239d868553d8	394	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
57516912cf58f129ff61ef40	46	Watering Brook Formation			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
579f5bc9cf58f12a53c41a24	338	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
57321bc8cf58f1a0ac39199e	122	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
56830ae3cf58f1479a0ab915	15	Winnipegosis Formation	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
5906dd0fcf58f15fea53aef7	215	Claytonville Dolomite	259.51	273.01	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54b4324ee138239d8684ae63	324	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
572f9e49cf58f1399347bfef	148	Cayman Formation	5.332	23.03	Brian Jones	Processes Associated with Microbial Biofilms in the Twilight Zone of Caves: Examples from the Cayman Islands	SEPM Journal of Sedimentary Research	Vol. 65A	1995	Society for Sedimentary Geology	10.1306/d426812b-2b26-11d7-8648000102c1865d
57126a16cf58f140fa5c33f2	128	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
54b4328de138239d86855dfa	526	Al Nakhsh Member	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b83d31e13823bd29ba865c	6740	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	736	Fort Dodge Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57beed05cf58f1419cfbd6b3	188	Honggou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
55b6bd25e13823bd29ba7d29	4089	Kyanite mention			Tooker, Edwin Wilson and Beeby, David J.	Industrial minerals in California; economic importance, present availability, and future development	Bulletin		1990	United States Geological Survey	10.3133/b1958
580e3bc6cf58f172dd1b8676	86	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
54b4324be138239d8684a5e0	150	Gessoso-Solfifera Formation			Fauquette, Séverine et al.	How much did climate force the Messinian salinity crisis? Quantified climatic conditions from pollen records in the Mediterranean region	Palaeogeography, Palaeoclimatology, Palaeoecology	238	2006	Elsevier	10.1016/j.palaeo.2006.03.029
55b7869fe13823bd29ba8231	2052	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d607cf58f15c72c9071a	150	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
58c8ed8ccf58f1a71217fb6b	54	Sariyar Limestone			GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55a751cee13823757cc6ff3c	965	Seven Rivers Fm	251	299	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54e8ae2de138237cc9150ec9	487	Pebble Bed	99.6	145.5	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1735	Todilto mention	158.1835	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328de138239d86855c34	163	Cßayirhan mention			Orꝉ, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b2e020e138231cbdd6ced3	136	Thumb Member	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
5a3b865dcf58f103a802eed2	82	Karayün Formation			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
57484ab3cf58f13effae7ac5	261	Mabou Group	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
55090c7ee138238460c4f5ec	8	Eastend mention	68.2875	71.0833	Dowuona, G.N. et al.	Stable isotope geochemistry of sulfate in relation to hydrogeology in southern Saskatchewan, Canada	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90040-N
55b83d31e13823bd29ba865c	1449	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5733004ccf58f1066ffdaeaa	77	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	8268	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c19917d1faed655488915d3	381	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
5906cf0dcf58f15ad9553b8a	96	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b2bc12e138231cbdd6ce12	2668	Khorat mention	33.9	237	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
5ce2f9b20b45c76caf8ae21e	223	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5c2ad1181faed655488b08a2	103	Red mention	324.4643	324.8857	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
55b7869fe13823bd29ba8231	2831	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327fe138239d86853736	459	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
558fe155e13823109f3eec57	567	Culebra Dolomite	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	1986	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558c8afce13823109f3ed928	41	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
55b83d31e13823bd29ba865c	4650	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5ce2f9b20b45c76caf8ae21e	455	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
584aa62ccf58f19d6a5f583e	170	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55f4877fcf58f16256a22522	108	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b83d31e13823bd29ba865c	817	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5743f3cacf58f16102c3d8df	172	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
5833ce7ecf58f1110fa956dd	191	Stratigraphic Depth Calcite Dolomite			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
55b75a36e13823bd29ba8116	1867	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
56c1ca16cf58f15c72c90624	159	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
5682fa41cf58f1479a0ab846	29	Facha Member	33.9	55.8	AMIRI-GARROUSSI, K.	Eocene spheroidal dolomite from the western Sirte Basin, Libya	Sedimentology	35	1988	Wiley-Blackwell	10.1111/j.1365-3091.1988.tb01237.x
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
56c1b69acf58f15c72c904b3	203	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b83d31e13823bd29ba865c	7370	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5509217ee138238460c4f689	88	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b83d31e13823bd29ba865c	1467	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43247e138239d86849b52	186	Cayara Fm	45.6	53.95	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5506a9ebe1382326932d924e	247	Lisan Fm	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
574cc5f5cf58f107bf55f9c6	185	Gypsum Formation			Hewton, M.L. et al.	Colombian-style emerald mineralization in the northern Canadian Cordillera: integration into a regional Paleozoic fluid flow regime 1	Canadian Journal of Earth Sciences	50	2013	Canadian Science Publishing	10.1139/cjes-2012-0128
55b6d6a7e13823bd29ba7dcc	7590	Roswell mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	1641	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43246e138239d86849872	324	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
57a43018cf58f11204e17fe0	827	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b6d6a7e13823bd29ba7dcc	9182	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	7771	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4327fe138239d86853736	168	Gypsum mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
54e736c1e138237cc915089d	325	Mirage Point Formation	359.2	416	Bottomley, D.J. et al.	The origin and evolution of Canadian Shield brines: evaporation or freezing of seawater? New lithium isotope and geochemical evidence from the Slave craton	Chemical Geology	155	1999	Elsevier	10.1016/S0009-2541(98)00166-1
55b83d31e13823bd29ba865c	4528	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2ad1181faed655488b08a2	372	Zaragoza Gypsum Formation	5.332	23.03	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
56831341cf58f1479a0ab983	26	Zaragoza Gypsum Fm	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4328fe138239d86856237	43	Zaragoza Gypsum Formation	5.332	23.03	Mees, Florias et al.	Bloedite sedimentation in a seasonally dry saline lake (Salada Mediana, Spain)	Sedimentary Geology	238	2011	Elsevier	10.1016/j.sedgeo.2011.04.006
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54b4327fe138239d86853736	257	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
56c1ea81cf58f15c72c908aa	250	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
58ccf735cf58f19e732284e4	66	Prygorodok Fm			Kaljo, Dimitri et al.	Upper Silurian stratigraphy of Podolia revisited: carbon isotopes, bentonites and biostratigraphy	GFF	136	2013	Taylor and Francis	10.1080/11035897.2013.862850
56c1c32bcf58f15c72c9059b	74	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
55f4877fcf58f16256a22522	455	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55f49c5bcf58f16256a225c4	816	Gypsum Formation			Muscente, A.D. and Xiao, Shuhai	New occurrences of Sphenothallus in the lower Cambrian of South China: Implications for its affinities and taphonomic demineralization of shelly fossils	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.041
584aa62ccf58f19d6a5f583e	55	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
59073182cf58f17e24d9c0bb	914	Colorado Shale	93.9	100.5	Gobla, Michael J.	Montana Mineral Locality Index	Rocks & Minerals	87	2012	Taylor and Francis	10.1080/00357529.2012.67682
550afe00e1382369a6f92ef4	218	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
55b3dfb4e138231cbdd6d442	1693	Blaine mention	268.51	275.2575	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b83d31e13823bd29ba865c	7840	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	425	Serrat Fm.			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b6d6a7e13823bd29ba7dcc	9650	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	6011	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	2208	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
558fa710e13823109f3eeaeb	692	Arapien Shale	145.5	199.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
54b4324de138239d8684aa17	312	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56c1d9bbcf58f15c72c9075f	370	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55ae0df7e13823763a830928	1405	Dewey Lake Formation	251.902	253.9652	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5c19917d1faed655488915d3	238	Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b83d31e13823bd29ba865c	3157	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559cd25ee138230816dad548	332	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
5c2b5da21faed655488b16ed	271	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
55b83d31e13823bd29ba865c	6011	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5599341be1382390cc641189	2	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
550afe00e1382369a6f92ef4	104	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
55990e4de1382390cc6410c3	107	Madbi Formation			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
55b83d31e13823bd29ba865c	5002	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8207	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ee138239d86855f3a	273	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
54b4328ee138239d86855f3a	232	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
56c1cb24cf58f15c72c90642	41	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55990e4de1382390cc6410c3	104	Madbi Formation			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
54b4328ee138239d86855edf	69	Yesares Member	5.332	7.246	Marie Rouchy, Jean et al.	The Messinian Salinity Crisis revisited	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.02.003
54fb51c0e138239936c6d400	313	Hisarcık mention	11.608	15.97	García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
55f4877fcf58f16256a22522	480	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.525	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a39ee95cf58f1314cf12808	335	Sedom mention	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
54b43290e138239d868564889	217	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
579b56dacf58f13d24f0d7ef	62	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5518b748e1382394b500dcce	59	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559e58a2e138230816dadbe2	667	Kaibab Formation	270.6	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
5c3540ea1faed655488c1248	168	Arenazzolo mention	5.332	7.246	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
54f9553fe138239936c6c748	45	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b83d31e13823bd29ba865c	5002	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	175	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
57ec17eccf58f1ac335ac1b3	64	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
59080b6ccf58f111237d82af	71	Glen Rose mention	100.5	113	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463
598b8640cf58f11358c1f60c	192	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
58d05105cf58f13f39efd424	437	Passaic Formation	199.6	228	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54d3bc73e13823811a06902d	132	DISSOLVE Siderite Dolomite			Eckstein, Yoram and Hau, Joseph A.	Modeling the neutralizing processes of acid precipitation in soils and glacial sediments of northern Ohio	Journal of Hydrology	131	1992	Elsevier	10.1016/0022-1694(92)90226-L
558fa710e13823109f3eeaeb	693	Carmel Formation	161.2	175.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
55ae0df7e13823763a830928	2274	Bliss mention	477.7	497.85	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
572ce093cf58f1342d44a0ff	306	Furnace Creek Formation	1.806	5.332	Calzia, J.P. et al.	Geology of the Greenwater Range, and the Dawn of Death Valley, California	Open-File Report		2016	USGS	10.3133/ofr20161064
55b83d31e13823bd29ba865c	8204	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
578b8ab6cf58f1645f54f0c6	106	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b6d6a7e13823bd29ba7dcc	8351	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328de138239d86855c34	3	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
57613d6fcf58f138292ba937	452	Bayındır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
55b83d31e13823bd29ba865c	3804	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6df25e13823bd29ba7dfe	2957	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
55b83d31e13823bd29ba865c	3389	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
550aa1a2e138238460c4fdf5	198	Baza Formation			Hidalgo, M.Carmen and Cruz-Sanjulián, Javier	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
558d206fe13823109f3edc62	993	Moenkopi Formation	199.6	251	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
57ec17eccf58f1ac335ac1b3	419	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b43247e138239d86849b52	212	Santa-Lucia Fm.			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
55b6d6a7e13823bd29ba7dcc	650	Red Bluff mention	0.0117	33.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	1191	Briggs Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	590	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	1530	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56ac24facf58f19442534c08	621	Zaragoza mention	23.03	33.9	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57321bc8cf58f1a0ac39199e	103	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	622	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55908e79e13823109f3ef08e	1800	Feet mention			Hewett, D.F.	Geology and ore deposits of the Goodsprings quadrangle, Nevada	Professional Paper		1931	United States Geological Survey	10.3133/pp162
55b7869fe13823bd29ba8231	1481	Gypsum Spring Formation	168.65	174.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ee138239d8684ae71	255	Gracilis Fm			Stefani, Marco et al.	The changing climate framework and depositional dynamics of Triassic carbonate platforms from the Dolomites	Palaeogeography, Palaeoclimatology, Palaeoecology	290	2010	Elsevier	10.1016/j.palaeo.2010.02.018
5906dd0fcf58f15fea53aef7	315	Jackson Group	33.9	55.8	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54e4d444e138237cc914feb2	16	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55973e40e1382390cc6406e7	43	Otto Fiord Formation	299	359.2	Grasby, Stephen E. et al.	Biogeochemical sulphur cycle in an extreme environment—lifebeneath a high arctic glacier, Nunavut, Canada	Journal of Geochemical Exploration		2003	Elsevier	10.1016/S0375-6742(03)00026-8
5b6d936dcf58f1a92c2d33b5	22	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
55b6d6a7e13823bd29ba7dcc	5051	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
584aa62ccf58f19d6a5f583e	127	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
572cdf45cf58f133c4f9d591	830	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b7620be13823bd29ba814c	3086	See mention			Evans, L. P.	Contributions to economic geology, 1913, Part I, Metals and nonmetals except fuels--Publications by Survey authors on metals and nonmetals except fuels	Bulletin		1915	United States Geological Survey	10.3133/b580P
55b6d6a7e13823bd29ba7dcc	7909	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58b7df47cf58f18af629a04c	110	Besalu mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
58bf0a5acf58f17947438723	76	Series Depth Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
55b83d31e13823bd29ba865c	2704	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5599341be1382390cc641189	283	Caños Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b7c5a4e13823bd29ba8382	37	SOUTH AMERICA mention			Harrington, James Foster et al.	Sources of fertilizer minerals in South America; a preliminary study	Bulletin		1966	United States Geological Survey	10.3133/b1240
56c1b69acf58f15c72c904b3	199	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
54b4328fe138239d868561aa	125	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
54b43276e138239d86851d3b	74	Tripoli Formation	5.332	7.246	Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
59080b6ecf58f111237d82b7	310	Plattville Limestone			Smith, Arthur E.	Illinois Mineral Locality Index	Rocks & Minerals	85	2010	Taylor and Francis	10.1080/00357521003727199
579f5bc9cf58f12a53c41a24	68	Terravecchia Formation	7.246	11.608	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b4328fe138239d868561aa	158	Solfifera Formation			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55b690a7e138238e2d05483f	3508	Minnelusa mention	282	320.05	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b6d6a7e13823bd29ba7dcc	5027	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
578cff68cf58f101e2dda387	137	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	6140	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5582e346e1382390b43c9589	77	Kimir Formation			Querol, X. et al.	Geological controls on the mineralogy and geochemistry of the Beypazari lignite, central Anatolia, Turkey	International Journal of Coal Geology	33	1997	Elsevier	10.1016/S0166-5162(96)00044-4
55b83d31e13823bd29ba865c	2887	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bc3d4dcf58f1173a73e22e	198	Coal mention	251	260.4	Dai, Shifeng et al.	Enrichment of U-Re-V-Cr-Se and rare earth elements in the Late Permian coals of the Moxinpo Coalfield, Chongqing, China: Genetic implications from geochemical and mineralogical data	Ore Geology Reviews		2017	Elsevier	10.1016/j.oregeorev.2016.06.015
55b3055ce138231cbdd6cf97	5159	Abld mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b83d31e13823bd29ba865c	5921	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
578cff68cf58f101e2dda387	124	Gypsum Formation			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
56830b14cf58f1479a0ab918	769	Tripoli Formation	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b7869fe13823bd29ba8231	1507	Big Snowy Group	326.15	335	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c061c1e1382389c54c375d	206	Carillon Formation	460.9	471.8	Dix, George R. and Robinson, George W.	The geochemical record of hydrothermal mineralization and tectonism inboard of the Appalachian Orogen: the Ottawa Embayment	Chemical Geology	197	2003	Elsevier	10.1016/S0009-2541(02)00245-0
55a751cee13823757cc6ff3c	1748	Capitan Limestone	251	299	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55b7869fe13823bd29ba8231	2203	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
584aa62ccf58f19d6a5f583e	208	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5a047804cf58f1b964029407	509	Vastitas Borealis Formation			Pan, Lu et al.	The stratigraphy and history of Mars' northern lowlands through mineralogy of impact craters: A comprehensive survey	Journal of Geophysical Research: Planets	122	2017	Wiley-Blackwell	10.1002/2017JE005276
56ac24facf58f19442534c08	169	Zaragoza Gypsum Formation	5.332	23.03	Castañeda, Carmen et al.	DInSAR measurements of ground deformation by sinkholes, mining subsidence, and landslides, Ebro River, Spain	Earth Surface Processes and Landforms	34	2009	Wiley-Blackwell	10.1002/esp.1848
54b4324ce138239d8684a8ac	232	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
55b83d31e13823bd29ba865c	3259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d86855393	110	Dibdibba Formation			Khalaf, Fikry I. et al.	Mineralogical composition and potential sources of dust fallout deposits in Kuwait, Northern Arabian Gulf	Sedimentary Geology	42	1985	Elsevier	10.1016/0037-0738(85)90047-8
578f2c07cf58f19aabebdf04	286	San Andres mention	150.6	154.8	BEIN, AMOS and DUTTON, ALAN R.	Origin, distribution, and movement of brine in the Permian Basin (U.S.A.): A model for displacement of connate brine	Geol Soc America Bull	105	1993	GSA	10.1130/0016-7606(1993)105<0695:odamob>2.3.co;2
5682dd16cf58f1479a0ab6de	399	Laga mention			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
5509217ee138238460c4f689	728	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55988dfce1382390cc640e32	59	Guolang Formation	55.8	65.5	Xue, Chunji et al.	Geologic, fluid inclusion and isotopic characteristics of the Jinding Zn–Pb deposit, western Yunnan, South China: A review	Ore Geology Reviews	31	2007	Elsevier	10.1016/j.oregeorev.2005.04.007
54b4324be138239d8684a669	192	Orce mention			Ortiz, José E. et al.	Pleistocene paleoenvironmental evolution at continental middle latitude inferred from carbon and oxygen stable isotope analysis of ostracodes from the Guadix-Baza Basin (Granada, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	240	2006	Elsevier	10.1016/j.palaeo.2006.03.008
55b83d31e13823bd29ba865c	8029	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579b56dacf58f13d24f0d7ef	104	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5c19917d1faed655488915d3	239	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
54e865c7e138237cc9150d7f	341	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b83d31e13823bd29ba865c	3181	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1ca16cf58f15c72c90624	159	Zaragoza Formation	23.03	33.9	Valero-GarcEs, Blas L. et al.	Quaternary palaeohydrological evolution of a playa lake: Salada Mediana, central Ebro Basin, Spain	Sedimentology	47	2000	Wiley-Blackwell	10.1046/j.1365-3091.2000.00346.x
54b4328ae138239d868555225	6	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b75a36e13823bd29ba8116	2206	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
56c1d607cf58f15c72c9071a	150	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55ae0df7e13823763a830928	3171	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5712f1aacf58f16fb4cc921a	215	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55ada974e13823763a830682	413	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
55b7869fe13823bd29ba8231	632	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57a43018cf58f11204e17fe0	759	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55541d92e138239301770a0e	226	Burns mention	23.03	33.9	West, Michael D. et al.	The geology of Australian Mars analogue sites	Planetary and Space Science	58	2010	Elsevier	10.1016/j.pss.2009.06.012
56831341cf58f1479a0ab983	64	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4328ee138239d86855f3a	235	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
5945b493cf58f195edc28b3a	298	Keuper mention	266.9	242	Pérez-Valera, Fernando et al.	An evaporite-bearing accretionary complex in the northern front of the Betic-Rif orogen	Tectonics		2017	Wiley-Blackwell	10.1002/2016TC004414
55b6d6a7e13823bd29ba7dcc	6612	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57464969cf58f165ff103f08	94	Blornidon Formation			Ackermann, Rolf V. et al.	Synsedimentary collapse of portions of the lower Blomidon Formation (Late Triassic), Fundy rift basin, Nova Scotia	Canadian Journal of Earth Sciences	32	1995	Canadian Science Publishing	10.1139/e95-150
5517568be1382394b500d6fd	207	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
54f9553fe138239936c6c748	60	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b7869fe13823bd29ba8231	1563	Minturn Formation	299	318.1	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	179	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55bbaa3fe1382373b63b8e28	336	Anglesite Gypsum Calcite Dolomite			Al, T.A. et al.	Aqueous geochemistry and analysis of pyrite surfaces in sulfide-rich mine tailings	Geochimica et Cosmochimica Acta	61	1997	Elsevier	10.1016/S0016-7037(97)00113-0
55917e77e13823109f3ef5e3	456	Panoche Formation	65.5	99.6	Presser, T.S. et al.	Geologic sources, mobilization, and transport of selenium from the California Coast Ranges to the western San Joaquin Valley; a reconnaissance study	Water-Resources Investigations Report		1990	United States Geological Survey	10.3133/wri904070
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
558d206fe13823109f3edc62	2710	Moenkopi mention	203.175	251.902	Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55b7869fe13823bd29ba8231	1728	Todilto mention	158.1835	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b33375e138231cbdd6d08f	1107	Lisan Formation	0.01143	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560l
54b4328ee138239d86855f01	383	Trubi Fm	3.6	5.332	Rouchy, Jean Marie and Caruso, Antonio	The Messinian salinity crisis in the Mediterranean basin: A reassessment of the data and an integrated scenario	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.02.005
55828a31e1382390b43c93ba	191	Kirmir Formation	5.332	23.03	Yağmurlu, Fuzuli et al.	Depositional setting and geometric structure of the Beypazari lignite deposits, Central Anatolia, Turkey	International Journal of Coal Geology	10	1988	Elsevier	10.1016/0166-5162(88)90009-2
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55ae0df7e13823763a830928	679	Cub Mountain Formation	1.806	65.5	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54df1abce138238a47f96e75	190	Gypsum Magnesite Quartz Group			Portugal, Enrique et al.	The geochemistry and isotope hydrology of the Southern Mexicali Valley in the area of the Cerro Prieto, Baja California (Mexico) geothermal field	Journal of Hydrology	313	2005	Elsevier	10.1016/j.jhydrol.2005.02.027
58b7df47cf58f18af629a04c	162	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
580e3bc6cf58f172dd1b8676	286	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
54b4328de138239d86855dfa	463	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c04652e1382389c54c3686	127	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
579f5bc9cf58f12a53c41a24	90	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
56faac60cf58f15186bf46cd	171	Calcite mention			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
55b83d31e13823bd29ba865c	6911	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c6917cf58f171f87e5f3e	57	USCS Group			Aldaood, Abdulrahman et al.	Effect of water during freeze–thaw cycles on the performance and durability of lime-treated gypseous soil	Cold Regions Science and Technology		2016	Elsevier	10.1016/j.coldregions.2015.12.008
54f660dce13823054496acd0	79	Calcite Dolomite			Ruan, Chuan-De and Ward, Colin R	Quantitative X-ray powder diffraction analysis of clay minerals in Australian coals using Rietveld methods	Applied Clay Science	5-6	2002	Elsevier	10.1016/S0169-1317(01)00103-X
55b6d6a7e13823bd29ba7dcc	4112	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55baa3b5e1382373b63b89e7	75	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55a7c745e13823757cc70251	53	Culebra Dolomite	251	299	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b75a36e13823bd29ba8116	2049	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
54b43276e138239d86851d3b	144	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
55b83d31e13823bd29ba865c	8119	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57c9f7a1cf58f1bbcffcfdff	348	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
55b83d31e13823bd29ba865c	7997	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
580e3bc6cf58f172dd1b8676	276	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
56830b14cf58f1479a0ab918	419	Base mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54e7c15ae138237cc9150ae2	78	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b6e66fe13823bd29ba7e28	620	Flagstaff mention	330.9	346.7	Franczyk, K. J. et al.	Cretaceous and Tertiary paleogeographic reconstructions for the Uinta-Piceance Basin Study Area, Colorado and Utah	Bulletin		1992	United States Geological Survey	
59079ad6cf58f1a3f1fe48e7	227	Tymochtee mention	419.2	429.2	Carlson, Ernest H.	Ohio Mineral Locality Index	Rocks & Minerals	65	1990	Taylor and Francis	10.1080/00357529.1990.11761719
558ec3e3e13823109f3ee570	48	Salado mention	256.0278	262.2168	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
55b83d31e13823bd29ba865c	8072	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5945bc17cf58f198bc7dcbd8	68	Ettringite mention			Rajasekaran, G. and Narasimha Rao, S.	Sulphate Attack in Lime-Treated Marine Clay	Marine Georesources & Geotechnology	23	2005	Taylor and Francis	10.1080/10641190590944926
559c3f39e138230816dad2ff	195	Magenta Dolomite	251.902	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55b83d31e13823bd29ba865c	6107	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c0c25fe1382389c54c390a	86	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
54b43280e138239d868538ff	43	Harami Formation	70.6	83.5	Türkmen, Ibrahim	Facies and evaporite genesis of the Kuşcular Formation (Lower Paleocene) saline playa complex, Eastern Turkey	Journal of Asian Earth Sciences	24	2004	Elsevier	10.1016/j.jseaes.2003.09.007
55c04787cf58f16e99a3746f	235	Green River mention	34.8525	58.4	Tuttle, Michele L. and Goldhaber, Martin B.	Sedimentary sulfur geochemistry of the Paleogene Green River Formation, western USA: Implications for interpreting depositional and diagenetic processes in saline alkaline lakes	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90291-4
54b4324be138239d8684a5e1	1	Engineering Geosciences Group			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
56c1d8a6cf58f15c72c9073f	288	Castile Formation	253.8	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54b4328de138239d86855c34	408	Gypsiferous Claystone Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b2e020e138231cbdd6ced3	490	Rainbow Gardens Member	15.98	17.095	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
55f4877fcf58f16256a22522	49	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
58b7df47cf58f18af629a04c	1081	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55b83d31e13823bd29ba865c	7938	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557f7360e13823bc80ba26f4	1488	Grayburg Formation	262.885	269.635	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
54b4328ae138239d8685557f	406	Raisby Formation	251.902	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
5743f3cacf58f16102c3d8df	137	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
55b6d6a7e13823bd29ba7dcc	6614	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55c01a9ecf58f16e99a37305	434	Culebra Dolomite	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57126a16cf58f140fa5c33f2	181	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55ae0df7e13823763a830928	443	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54b4328de138239d86855c34	501	Gypsiferous Claystone Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
558c8afce13823109f3ed928	2794	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
558fa710e13823109f3eeaeb	961	James Hardie Gypsum mention			Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	5725	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57177ecdcf58f1637fb099ed	73	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
5ce2f9b20b45c76caf8ae21e	74	Errol Member			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5906dd0fcf58f15fea53aef7	398	Salado Limestone	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
579f5bc9cf58f12a53c41a24	10	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
5731caeecf58f192f36c5766	372	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
57ec17eccf58f1ac335ac1b3	433	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57320585cf58f19d17198262	35	Mineral Dolomite	65.5	251	Gerald M. Friedman	Methane-Generated Lithified Dolostone of Holocene Age: Eastern Mediterranean	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c7-2b26-11d7-8648000102c1865d
55b78281e13823bd29ba8218	2015	San Andres mention	150.6	154.8	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b64a4de1382314227d0039	4	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
584aa62ccf58f19d6a5f583e	180	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
575c4f4ecf58f16b97cc4df6	261	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	1593	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b83d31e13823bd29ba865c	8048	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5906dd0fcf58f15fea53aef7	54	Switch Sandstone			Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5599341be1382390cc641189	49	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
575c4f4ecf58f16b97cc4df6	1	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b83d31e13823bd29ba865c	7438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57126a16cf58f140fa5c33f2	56	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5599341be1382390cc641189	209	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55a82328e13823757cc7049a	1214	Piper Limestone	165.3	170.9	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
54c04652e1382389c54c3686	8	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
557cd3cfe138239225f869e5	1978	Flowerpot Shale	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b83d31e13823bd29ba865c	2068	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c19917d1faed655488915e2	236	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
55b83d31e13823bd29ba865c	7078	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	54	Sariyar Limestone			GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5907e833cf58f10329b4365c	19	Rock Chips Dolomite				Index Volume 69 (1994)	Rocks & Minerals	70	1995	Taylor and Francis	10.1080/00357529.1995.9926603
57ec17eccf58f1ac335ac1b3	5	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b75a36e13823bd29ba8116	1799	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
5b6d936dcf58f1a92c2d33b5	48	Daisy Bed	470	485.4	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54c04652e1382389c54c3686	79	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55b388d6e138231cbdd6d25d	4786	Lockport Dolomite	416	443.7	Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
5554ccdbe138239301770ced	70	Segui Formation			Barbieri, Roberto et al.	Microbial signatures in sabkha evaporite deposits of Chott el Gharsa (Tunisia) and their astrobiological implications	Planetary and Space Science	54	2006	Elsevier	10.1016/j.pss.2006.04.003
55b6d6a7e13823bd29ba7dcc	9617	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5a0493edcf58f1b96402aae7	144	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b83d31e13823bd29ba865c	4915	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2bc12e138231cbdd6ce12	2668	Khorat mention	33.9	237	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
55b6d6a7e13823bd29ba7dcc	10535	FORMATION mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ee138239d86855f3a	152	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
558cbceae13823109f3eda41	176	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b83d31e13823bd29ba865c	7060	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	2171	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55ae4f4be13823763a830ada	510	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
575c4f4ecf58f16b97cc4df6	516	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
559c3f39e138230816dad2ff	203	Forty-niner Member			Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
57ec17eccf58f1ac335ac1b3	5	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b83d31e13823bd29ba865c	4509	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5897de3fcf58f1081e8c64e1	22	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5c2b5da21faed655488b16ed	384	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
54b4328de138239d86855c34	154	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54f9553fe138239936c6c748	50	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
579b56dacf58f13d24f0d7ef	40	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55b83d31e13823bd29ba865c	128	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1c976cf58f15c72c9061b	246	Groden Formation	251	299	SPOTL, CHRISTOPH and BURNS, STEPHEN J.	Magnesite diagenesis in redbeds: a case study from the Permian of the Northern Calcareous Alps (Tyrol, Austria)	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb02010.x
579ab9d5cf58f115a1cd5759	1	Barstow Formation	5.332	23.03	Park, Lisa E. and Downing, Kevin F.	Paleoecology of an Exceptionally Preserved Arthropod Fauna from Lake Deposits of the Miocene Barstow Formation, Southern California, U.S.A.	PALAIOS	16	2001	SEPM	10.2307/3515529
55b7869fe13823bd29ba8231	2027	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
580e3bc6cf58f172dd1b8676	27	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	4635	Mesa mention	2.58	3.6	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7923	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b2bc12e138231cbdd6ce12	2668	Khorat mention	33.9	237	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b83d31e13823bd29ba865c	3726	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1b6a3cf58f15c72c904b4	213	Pasquasia mention			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54df4a35e138238a47f96f37	560	Burano Formation	237	251	Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
54b43276e138239d86851d3b	112	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
55b83d31e13823bd29ba865c	5969	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8799	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d86855525	130	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
5ab92ea3cf58f16811edda29	264	Cl mention			Jones, Samantha Elsie et al.	A multi-proxy approach to understanding complex responses of salt-lake catchments to climate variability and human pressure: A Late Quaternary case study from south-eastern, Spain	Quaternary Science Reviews	184	2018	Elsevier	10.1016/j.quascirev.2017.12.015
54b4324ee138239d8684ae63	156	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
54b4328fe138239d8685635b	41	Zaragoza Fm	5.332	23.03	Gil, H. et al.	Stratigraphic architecture of alluvial–aeolian systems developed on active karst terrains: An Early Pleistocene example from the Ebro Basin (NE Spain)	Sedimentary Geology		2013	Elsevier	10.1016/j.sedgeo.2013.08.009
55c121fdcf58f1a8110b7ddc	29	Lisan mention	0.01143	0.126	Reznik, Itay J. et al.	Kinetics of gypsum nucleation and crystal growth from Dead Sea brine	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.07.018
55b83d31e13823bd29ba865c	7085	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3441	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	5899	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	58	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55cbfc16cf58f1b01e42470e	49	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
56c1c32bcf58f15c72c9059b	68	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
579ed180cf58f1030df9c51e	334	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
558d4970e13823109f3edd1b	304	Jidike Formation			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
56c1b69acf58f15c72c904b3	60	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55c04787cf58f16e99a3746f	237	Green River mention	34.8525	58.4	Tuttle, Michele L. and Goldhaber, Martin B.	Sedimentary sulfur geochemistry of the Paleogene Green River Formation, western USA: Implications for interpreting depositional and diagenetic processes in saline alkaline lakes	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90291-4
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fda65e13823109f3eec30	424	Moenkopi Formation	199.6	251	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
559e58a2e138230816dadbe2	707	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b83d31e13823bd29ba865c	1449	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
57128432cf58f14a08338b39	112	Castile Formation	253.8	260.4	Manzi, V. et al.	High-Frequency Cyclicity In the Mediterranean Messinian Evaporites: Evidence For Solar-Lunar Climate Forcing	Journal of Sedimentary Research	82	2012	Society for Sedimentary Geology	10.2110/jsr.2012.81
579f5bc9cf58f12a53c41a24	243	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55f4877fcf58f16256a22522	622	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55f28e79cf58f16256a217ad	115	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
56831341cf58f1479a0ab983	120	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
598c914bcf58f17206d6eb4d	231	Turkey Bozbel Formation			Pourkaseb, Houshang et al.	The occurrence and origin of celestite in the Abolfares region, Iran: Implications for Sr-mineralization in Zagros fold belt (ZFB)	Journal of African Earth Sciences	134	2017	Elsevier	10.1016/j.jafrearsci.2017.06.010
5906dd0fcf58f15fea53aef7	235	Eagle Ford Shale	65.5	99.6	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5d35e56c0b45c76caf93f034	474	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
55b83d31e13823bd29ba865c	2347	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2c402e138231cbdd6ce3e	655	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5903521bcf58f184bec4336f	44	Zaragoza Gypsum Formation	5.332	23.03	Castañeda, Carmen et al.	Dedicated SAR interferometric analysis to detect subtle deformation in evaporite areas around Zaragoza, NE Spain	International Journal of Remote Sensing	32	2011	Taylor and Francis	10.1080/01431161003631584
56831341cf58f1479a0ab983	134	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b43246e138239d86849872	314	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
54e2f6d3e138237cc914f6d6	24	Accessories Dolomite			Popp, T. and Kern, H.	Thermal dehydration reactions characterised by combined measurements of electrical conductivity and elastic wave velocities	Earth and Planetary Science Letters	1-2	1993	Elsevier	10.1016/0012-821X(93)90022-2
590785cdcf58f19bf342565e	373	Mississippian-age Burlington Limestone			Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
54b43288e138239d86854e95	1	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a43018cf58f11204e17fe0	769	Nellis mention			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54c04652e1382389c54c3686	210	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
55b7869fe13823bd29ba8231	87	Gypsum Spring Formation	168.65	174.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5506a9ebe1382326932d924e	257	Lisan Fm	0.01143	0.126	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55b7869fe13823bd29ba8231	2256	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	1991	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	5	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54f9553fe138239936c6c748	150	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
58bc3655cf58f1147fed76f7	73	Garedu mention	145.5	199.6	Azaraien, Hassan et al.	Metallogenesis of the sediment-hosted stratiform Cu deposits of the Ravar Copper Belt (RCB), Central Iran	Ore Geology Reviews	81	2017	Elsevier	10.1016/j.oregeorev.2016.09.035
572cdf45cf58f133c4f9d591	826	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
580e3bc6cf58f172dd1b8676	276	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
54b4328be138239d8685567e	169	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
55a751cee13823757cc6ff3c	1200	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55b7869fe13823bd29ba8231	2017	Kaibab Formation	270.6	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	386	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	328	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	626	Michigan mention	342.0833	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	1699	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5833ce7ecf58f1110fa956dd	43	Calatrava Limestone			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
55b83d31e13823bd29ba865c	4297	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	3628	Socorro mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ee138239d86855f3a	152	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
58bf0a5acf58f17947438723	76	Series Depth Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
54b43247e138239d86849b52	155	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
550afe00e1382369a6f92ef4	104	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
55b83d31e13823bd29ba865c	4037	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5906dd0fcf58f15fea53aef7	158	Wedge Sandstone			Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2319	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f2130cf58f119c9de4679	199	Lead Limestone			Valero, Antonio et al.	How to account for mineral depletion. The exergy and economic mineral balance of Spain as a case study	Ecological Indicators		2014	Elsevier	10.1016/j.ecolind.2014.07.021
55b83d31e13823bd29ba865c	7085	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c2bea2e1faed655488b221b	115	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
55b83d31e13823bd29ba865c	8692	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56830ae3cf58f1479a0ab915	15	Winnipegosis Formation	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55a751cee13823757cc6ff3c	968	Seven Rivers Formation	251	299	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55f4877fcf58f16256a22522	52	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5506a9ebe1382326932d924e	54	Ze'elim Formation	-5.5012E-05	0.01143	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
55b83d31e13823bd29ba865c	6607	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328be138239d8685580e	216	Mineral mention	307	315.2	Bryant, Robert G. et al.	Marine-like potash evaporite formation on a continental playa: case study from Chott el Djerid, southern Tunisia	Sedimentary Geology	90	1994	Elsevier	10.1016/0037-0738(94)90043-4
54e7c7dae138237cc9150b09	625	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2014.10.028
55b6d6a7e13823bd29ba7dcc	7677	Red Bluff mention	0.0117	33.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b358eee138231cbdd6d158	1389	Agricultural mention			Compiled by Hill, Thelma P.	Chemical composition of sedimentary rocks in California and Hawaii	Professional Paper		1981	United States Geological Survey	
5734b312cf58f14dbc2c579f	412	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	9109	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328fe138239d868561aa	340	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
56c1b69acf58f15c72c904b3	62	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
5a2f778acf58f10a775a37f3	220	Longares Formation			Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b83d31e13823bd29ba865c	6255	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ce138239d86855aad	763	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55b75a36e13823bd29ba8116	2172	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
57ec17eccf58f1ac335ac1b3	97	Pinda Group	99.6	112	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
557c3ccee138239225f86768	141	Platinum Group			compiled by U.S. Geological Survey and Servicio Geologico de Bolivia	Mineral deposits and occurrences of the Bolivian Altiplano and Cordillera Occidental	Open-File Report		1991	United States Geological Survey	
55b83d31e13823bd29ba865c	3357	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56831341cf58f1479a0ab983	70	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
5901cf4bcf58f1b4d0585930	80	Analytical Group			Reidy, Lorlyn et al.	Elemental fingerprinting of gypsum drywall using sector field ICP-MS and multivariate statistics	International Journal of Environmental Analytical Chemistry	94	2014	Taylor and Francis	10.1080/03067319.2014.954561
5c3540ea1faed655488c1248	165	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
558e100ae13823109f3ee10f	159	Todilto mention	158.1835	162.45	Soulliere, Sandra J. et al.	Mineral resources of the Ojito and Cabezon Wilderness Study Areas, Sandoval County, New Mexico	Bulletin		1987	United States Geological Survey	10.3133/b1733B
558ec3e3e13823109f3ee570	110	Salado mention	256.0278	262.2168	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd3cfe138239225f869e5	1309	UNITED STATES mention			McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
57ec17eccf58f1ac335ac1b3	419	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b6d4bfe13823bd29ba7dc0	60	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b2e020e138231cbdd6ced3	263	Thumb Formation	13.2725	15.98	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
55b83d31e13823bd29ba865c	8222	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	738	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2b5da21faed655488b16ed	271	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
55b6d6a7e13823bd29ba7dcc	7493	Figure mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
579f5bc9cf58f12a53c41a24	399	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b4328de138239d86855c34	11	Kirmir Formation	5.332	23.03	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
59ceecc5cf58f14e831adf32	101	Quartz Albite Dolomite			Gharib, Nima et al.	Flow characteristics and wear prediction of Herschel-Bulkley non-Newtonian paste backfill in pipe elbows	The Canadian Journal of Chemical Engineering	95	2017	Wiley-Blackwell	10.1002/cjce.22749
58c8ed8ccf58f1a71217fb6b	44	Kizilçay mention			GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
579402adcf58f19c7e2e0966	93	Pontils Group	33.9	55.8	Taberner, C. et al.	Basin infill architecture and evolution from magnetostratigraphic cross-basin correlations in the southeastern Pyrenean foreland basin	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1155:biaaef>2.3.co;2
55af1c5ce13823763a830fe9	734	Minnelusa mention	282	320.05	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54b4328ee138239d86855fe9	72	Baza Fm			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
57484ab3cf58f13effae7ac5	70	Upperton Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
5732d61ecf58f1be188d2a21	239	Steinsfjord Formation			Snorre Olaussen (2)	Formation of Celestite in the Wenlock, Oslo Region Norway-Evidence for Evaporitic Depositional Environments	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7c02-2b24-11d7-8648000102c1865d
55b78281e13823bd29ba8218	667	Artesia Group	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
57370e95cf58f1ae8dd4e635	59	Red Bed	100.5	145	Hubert, J. F. and Reed, A. A.	Red-bed diagenesis in the East Berlin Formation, Newark Group, Connecticut Valley	Journal of Sedimentary Research	48	1978	Society for Sedimentary Geology	10.1306/212f7423-2b24-11d7-8648000102c1865d
58b7df47cf58f18af629a04c	313	Coubet mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
5b19ab4ecf58f142d348e8d1	207	Metlaoui Group			Dassi, Lassâad et al.	Effect of overpumping and irrigation stress on hydrochemistry and hydrodynamics of a Saharan oasis groundwater system	Hydrological Sciences Journal	63	2018	Informa UK Limited	10.1080/02626667.2017.1417595
55b83d31e13823bd29ba865c	1791	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58b7df47cf58f18af629a04c	310	Beuda Fm			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
590785cdcf58f19bf342565e	264	Ordovician-age Galena Dolomite			Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
5712f07dcf58f16f48f2a812	20	Gyeongsang Supergroup	65.5	145.5	Paik, I. S. and Kim, H. J.	Subaerial lenticular cracks in Cretaceous lacustrine deposits, Korea	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.80
558cbceae13823109f3eda41	17	Kaibab Formation	270.6	299	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
56c1b6a3cf58f15c72c904b4	135	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1b69acf58f15c72c904b3	62	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
54b4324ee138239d8684ae63	247	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
5734b312cf58f14dbc2c579f	462	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
550afe00e1382369a6f92ef4	170	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
55ada974e13823763a830682	384	Yeso Formation	251	299	Nutt, C.J. et al.	Geology and mineral resources of the Cornudas Mountains, New Mexico	Open-File Report		1997	United States Geological Survey	10.3133/ofr97282
55f4877fcf58f16256a22522	244	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
557f199ce13823bc80ba25a0	785	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b3d511e138231cbdd6d40e	769	Moenkopi Formation	199.6	251	Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
5c3540ea1faed655488c1248	165	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	2694	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	3201	Bliss mention	477.7	497.85	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5907fd67cf58f10b6afca834	835	Pierre Shale	65.5	145.5	Smith, Arthur E. and Fritzsch, Eric	SOUTH DAKOTA	Rocks & Minerals	75	2000	Taylor and Francis	10.1080/00357520009605635
558cbceae13823109f3eda41	168	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
5ab92ea3cf58f16811edda29	164	Cl mention			Jones, Samantha Elsie et al.	A multi-proxy approach to understanding complex responses of salt-lake catchments to climate variability and human pressure: A Late Quaternary case study from south-eastern, Spain	Quaternary Science Reviews	184	2018	Elsevier	10.1016/j.quascirev.2017.12.015
5ce2f9b20b45c76caf8ae21e	193	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5a2d0619cf58f19f7117d37a	171	CdB Formation			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
559dcd1ae138230816dad9be	347	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
55a0946ee1382381ff364540	105	Castile mention	259	259.51	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55b83d31e13823bd29ba865c	7840	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2460	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	541	Muddy Creek Formation	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b6d6a7e13823bd29ba7dcc	9127	Corona Shale			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5906cf0dcf58f15ad9553b8a	271	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55ae0df7e13823763a830928	1453	Artesia mention	259.51	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
57613d6fcf58f138292ba937	67	Bozkır Formation			Yavuz, Nurdan et al.	Pollen, ostracod and stable isotope records of palaeoenvironment and climate: Upper Miocene and Pliocene of the Çankırı Basin (Central Anatolia, Turkey)	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2016.04.023
55b83d31e13823bd29ba865c	7402	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
557c4c36e138239225f867b7	197	Mancos mention	72.1	100.5	Stephens, D.W. et al.	Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the middle Green River basin, Utah, 1986-87	Water-Resources Investigations Report		1988	United States Geological Survey	10.3133/wri884011
55b6dc28e13823bd29ba7dec	19474	See mention			Schrader, Frank Charles et al.	Useful minerals of the United States	Bulletin		1917	United States Geological Survey	10.3133/b624

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1972	Muddy Creek Formation	5.332	23.03	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cc6e1e138239225f869b5	175	Smoky Hill Marl Member	85.625	87.175	Boettcher, Arnold J. and Horr, C. Albert	Geology and ground-water resources in eastern Cheyenne and Kiowa Counties, Colorado	Water Supply Paper		1964	United States Geological Survey	10.3133/wsp1779N
55b7277de13823bd29ba7fc3	84	High-Calcium Limestone			Toth, Margo I. et al.	Mineral resource potential and geology of the White River National Forest and the Dillon Ranger District of the Arapaho National Forest, Colorado, with a section on salable commodities	Bulletin		1993	United States Geological Survey	
54b4327de138239d86853024	173	Ghareb mention	65.5	70.6	Sokol, Ella et al.	Geochemical assessment of hydrocarbon migration phenomena: Case studies from the south-western margin of the Dead Sea Basin	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.07.023
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
54b4328de138239d86855dfa	161	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55828a31e1382390b43c93ba	182	Akpmar Formation			Yağmurlu, Fuzuli et al.	Depositional setting and geometric structure of the Beypazari lignite deposits, Central Anatolia, Turkey	International Journal of Coal Geology	10	1988	Elsevier	10.1016/0166-5162(88)90009-2
5907a1fdcf58f1a696dd7d62	107	Blufftown Formation	65.5	99.6	Gordon, Jennings B.	Georgia	Rocks & Minerals	64	1989	Taylor and Francis	10.1080/00357529.1989.11761755
57501d73cf58f16a9feeb329	251	Sainte-Foy mention	531.85	586.9	Bérubé, Marc-André et al.	Black shale heaving at Sainte-Foy, Quebec, Canada	Canadian Journal of Earth Sciences	23	1986	Canadian Science Publishing	10.1139/e86-163
5748f823cf58f170c57fbbd7	102	Codroy Group	318.1	359.2	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
55f48ec1cf58f16256a22559	416	Burano Formation	237	251	Lugli, Stefano et al.	The deep record of the Messinian salinity crisis: Evidence of a non-desiccated Mediterranean Sea	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.05.017
55b6d6a7e13823bd29ba7dcc	7423	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5712f1aacf58f16fb4cc921a	243	Newark mention	192.9	237	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
559e58a2e138230816dadbe2	571	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55b83d31e13823bd29ba865c	4200	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ce138239d8684a8cb	186	Olorgesailie Formation	0.01143	1.806	Owen, R. Bernhart et al.	Quaternary geochemical stratigraphy of the Kedong–Olorgesailie section of the southern Kenya Rift valley	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2014.01.011
55b6d6a7e13823bd29ba7dcc	7561	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55a751cee13823757cc6ff3c	962	Seven Rivers mention	261.76	264.5725	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55b7869fe13823bd29ba8231	2842	Smackover Limestone	154.8	165.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	7182	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57c1ac26cf58f170d60ea55c	230	Namib mention	-5.5012E-05	1.806	Eckardt, Frank D. et al.	The Surface Geology and Geomorphology Around Gobabeb, Namib Desert, Namibia	Geografiska Annaler: Series A, Physical Geography	95	2013	Wiley	10.1111/geoa.12028
55b83d31e13823bd29ba865c	1202	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43276e138239d86851d3b	112	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
580e3bc6cf58f172dd1b8676	276	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55f4877fcf58f16256a22522	480	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55917250e13823109f3ef5b1	1639	Khorat Group	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
58bf0a5acf58f17947438723	501	Hontomín mention			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
54b4328ee138239d868561688	78	Base mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
5907be14cf58f1b18607fd22	59	XS Dolomite			Geyne, A. R. et al.	The Pachuca-Real Del Monte Mining District	Rocks & Minerals	45	1970	Taylor and Francis	10.1080/00357529.1970.11763776
5734b312cf58f14dbc2c579f	78	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5734b312cf58f14dbc2c579f	78	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
579f5bc9cf58f12a53c41a24	184	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b83d31e13823bd29ba865c	3803	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
550afe00e1382369a6f92ef4	3	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
5c3e6d6c1faed655488cd35a	81	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b83d31e13823bd29ba865c	7160	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	9592	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5907a8e9cf58f1a944ce7e96	219	Huron Shale	359.2	385.3	Carlson, Ernest H.	Ohio Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9925652
575c4f4ecf58f16b97cc4df6	236	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54bf26f8e13823023e43db6f	603	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54e97acfe138237cc915120b	34	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b6d4bfe13823bd29ba7dc0	1297	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55a82328e13823757cc7049a	1315	Gypsum Spring Formation	168.65	174.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55b6d6a7e13823bd29ba7dcc	1984	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55f4877fcf58f16256a22522	632	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
58bf0a5acf58f17947438723	57	Hontomín Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
56c1d8a6cf58f15c72c9073f	426	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54b43247e138239d86849b52	246	Chaunaca Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b7869fe13823bd29ba8231	1728	Todilto mention	158.1835	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a04d70ecf58f15890c5523d	755	Travenanzes Formation	199.6	228	Caggiati, Marcello et al.	The start-up of the Dolomia Principale/Hauptdolomit carbonate platform (Upper Triassic) in the eastern Southern Alps	Sedimentology		2017	Wiley-Blackwell	10.1111/sed.12416
5a2cf7f0cf58f19a331caf3c	309	Zechstein mention	251.902	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
55b7869fe13823bd29ba8231	2396	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57484ab3cf58f13effae7ac5	261	Mabou Group	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
550f21dce1382369a6f940aa	84	Lerín Gypsum Formation			Guinea, Ander et al.	Geoelectrical prospecting of glauberite deposits in the Ebro basin (Spain)	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.03.007
54b7e5cfe138230a74d15b25	259	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
58b65c8fcf58f1b2fdd8b58a	67	Madiela Formation	99.6	112	Zhang, Hua et al.	Halite fluid inclusions and the late Aptian sea surface temperatures of the Congo Basin, northern South Atlantic Ocean	Cretaceous Research		2017	Elsevier	10.1016/j.cretres.2016.11.008
5743f3cacf58f16102c3d8df	137	Yaxicuo Group	28.4	33.9	Zhifei, LIU et al.	Paleoclimate Changes during the Early Oligocene in the Hoh Xil Region, Northern Tibetan Plateau	Acta Geologica Sinica - English Edition	77	2003	Wiley-Blackwell	10.1111/j.1755-6724.2003.tb00130.x
55b83d31e13823bd29ba865c	1193	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5598dfe1e1382390cc640fbc	166	Huanglong Formation	299	359.2	Du, Yilun et al.	Petrology and geochemistry of Silurian–Triassic sedimentary rocks in the Tongling region of Eastern China: Their roles in the genesis of large stratabound skarn ore deposits	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.11.021
57ec17eccf58f1ac335ac1b3	399	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
550adbb3e138238460c4fef1	99	Periclase Calcite Dolomite			Wieland, E. et al.	Influence of superplasticizers on the long-term properties of cement pastes and possible impact on radionuclide uptake in a cement-based repository for radioactive waste	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2014.04.002
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55ae9887e13823763a830cad	91	Rustler Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
559c3f39e138230816dad2ff	148	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
550b221de1382369a6f92fa8	140	Calcite Dolomite			Re, V. et al.	Processes affecting groundwater quality in arid zones: The case of the Bou-Areg coastal aquifer (North Morocco)	Applied Geochemistry		2013	Elsevier	10.1016/j.apgeochem.2013.03.011
54b43290e138239d86856489	102	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
55b83d31e13823bd29ba865c	8207	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
590769c6cf58f191e58edf9d	76	Cloud Chief Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
57131885cf58f17cb0fd1f40	10	Belayin Formation			Kovalevich, V. M. et al.	Brine inclusions in halite and the origin of the Middle Devonian Prairie Evaporites of Western Canada; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.228
54b43246e138239d86849872	313	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55b7869fe13823bd29ba8231	2047	Arapien Formation	161.5	165.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fe155e13823109f3eec57	180	Magenta mention	251.902	273.01	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b83d31e13823bd29ba865c	8273	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	616	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57a43018cf58f11204e17fe0	502	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
575c6917cf58f171f87e5f3e	57	USCS Group			Aldaood, Abdulrahman et al.	Effect of water during freeze–thaw cycles on the performance and durability of lime-treated gypseous soil	Cold Regions Science and Technology		2016	Elsevier	10.1016/j.coldregions.2015.12.008
55b6d6a7e13823bd29ba7dcc	7552	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	3357	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5599199ee1382390cc641101	1	Zijin Mining Group			Zhong, Jun et al.	Geology, geochronology, fluid inclusion and H–O isotope geochemistry of the Luoboling Porphyry Cu–Mo deposit, Zijinshan Orefield, Fujian Province, China	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2013.09.004
54b43250e138239d8684b46c	153	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
57a43018cf58f11204e17fe0	508	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5682dd16cf58f1479a0ab6de	144	Gessoso-solfifera Formation			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
55b7869fe13823bd29ba8231	1508	Kibbey mention	326.15	337.125	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558c8afce13823109f3ed928	1656	Dakota mention	98.85	119.3	DeWitt, Ed et al.	BHBIB : bibliography of Black Hills geology, 1852-1988, Part A - Bibliography	Open-File Report		1989	United States Geological Survey	10.3133/ofr89443A
55b7869fe13823bd29ba8231	1730	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57ec17eccf58f1ac335ac1b3	95	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5897de3fcf58f1081e8c64e1	465	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
575c4f4ecf58f16b97cc4df6	31	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1b69acf58f15c72c904b3	203	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
55b83d31e13823bd29ba865c	5059	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5598f6b0e1382390cc64103f	181	Daye Formation	245	251	Xie, Guiqing et al.	Geochemical constraints on Cu–Fe and Fe skarn deposits in the Edong district, Middle–Lower Yangtze River metallogenic belt, China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.08.005
5c19917d1faed655488915d3	381	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b6d6a7e13823bd29ba7dcc	9681	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5a3b865dcf58f103a802eed2	75	Karaman Gypsum Member			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
54b4328de138239d86855dfa	115	Al Nakhsh Member	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
5ce2f9b20b45c76caf8ae21e	339	Leza Formation	65.5	99.6	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b6d6a7e13823bd29ba7dcc	1991	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55f4877fcf58f16256a22522	93	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
590769c6cf58f191e58edf9d	40	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
55b3edd0e138231cbdd6d498	2949	Nevada mention	386.45	391.9	Winograd, I. J. and Thordarson, William	Hydrogeologic and hydrochemical framework, south-central Great Basin, Nevada-California, with special reference to the Nevada Test Site	Professional Paper		1975	United States Geological Survey	10.3133/pp712C
5577018fe138234790a014d3	32	Eq Formation			Peirong, Wang et al.	Geochemical features of light hydrocarbons of typical salt lake oils sourced from Jianghan Basin, China	Organic Geochemistry	39	2008	Elsevier	10.1016/j.orggeochem.2008.05.013
580e3bc6cf58f172dd1b8676	291	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
598c0bc9cf58f14465ea778f	53	Tropico Group	1.806	65.5	Abbey, William J. et al.	Deep UV Raman spectroscopy for planetary exploration: The search for in situ organics	Icarus	290	2017	Elsevier	10.1016/j.icarus.2017.01.039
580e3bc6cf58f172dd1b8676	314	Castile Formation	253.8	260.4	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
5b6d936dcf58f1a92c2d33b5	129	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54b43281e138239d86853bfd	3	Khok Kruat Formation	65.5	251	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
558e3447e13823109f3ee1ef	136	Rustler Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7571	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5502c2cae1382326932d7ae8	156	Salina Formation	416	443.7	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55b83d31e13823bd29ba865c	8132	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	8172	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558d4970e13823109f3edd1b	291	Bashibulake Formation	23.03	33.9	Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
55b83d31e13823bd29ba865c	1530	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e4d444e138237cc914feb2	38	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55b83d31e13823bd29ba865c	6158	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	144	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b43250e138239d8684b46c	381	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
56c1c32bcf58f15c72c9059b	45	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
5906dd0fcf58f15fea53aef7	328	Oakville mention	5.333	20.44	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d8a6cf58f15c72c9073f	197	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b83d31e13823bd29ba865c	7912	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c3540ea1faed655488c1248	95	Tripoli Formation	5.332	7.246	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
5c19917d1faed655488915e2	283	Tripoli Formation	5.332	7.246	Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
55b83d31e13823bd29ba865c	401	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2340	Maccrady Formation	340.525	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	335	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
54b43246e138239d86849872	334	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
54f98125e138239936c6c811	176	Brasso Formation	5.332	23.03	Wilson, Brent	A lagoonal interlude with occasional hypersalinity in the deposition of the Early–Middle Miocene Brasso Formation of Trinidad	Journal of South American Earth Sciences	29	2010	Elsevier	10.1016/j.jsames.2009.10.003
558fe155e13823109f3eec57	326	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b83d31e13823bd29ba865c	37	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328de138239d86855dfa	161	Middle Al Nakhsh Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
56831341cf58f1479a0ab983	473	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b83d31e13823bd29ba865c	3037	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558eb5d6e13823109f3ee517	333	Tamarisk mention	251.902	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
57a43018cf58f11204e17fe0	880	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
54bf7e39e13823023e43de1a	260	Gutenstein Formation			Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
54b43246e138239d86849834	158	Calcite Monohydrocalcite Dolomite			Teller, James T. and Last, Williams M.	Paleohydrological indicators in playas and salt lakes, with examples from Canada, Australia, and Africa	Palaeogeography, Palaeoclimatology, Palaeoecology	76	1990	Elsevier	10.1016/0031-0182(90)90114-M
5731caeecf58f192f36c5766	114	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	3803	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c44114cf58f17493f8536e	110	Salado mention	256.0278	262.2168	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56b43ed6cf58f14c238d2c89	156	None Present Sandstone			MAZAHERI, S.A. et al.	A fuzzy allocation scheme for the Australian Great Soil Groups Classification system	European Journal of Soil Science	46	1995	Wiley-Blackwell	10.1111/j.1365-2389.1995.tb01356.x
56c1d9bbcf58f15c72c9075f	370	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5b289527cf58f1347499025c	156	Aragonitec Calcitec Fluorite Dolomite			Cardoso, Antonio J. et al.	Batch Test Assessment of Waste-to-Energy Combustion Residues Impacts on Precipitate Formation in Landfill Leachate Collection Systems	Journal of the Air & Waste Management Association	58	2008	Informa UK Limited	10.3155/1047-3289.58.1.19
5514907ce1382394b500cb75	222	Kuwait mention			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
579f5bc9cf58f12a53c41a24	149	Trubi Formation	1.806	5.332	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
54b4328ce138239d86855a68	45	Alcubierre Formation			Arenas, C et al.	Dedolomitization and other early diagenetic processes in Miocene lacustrine deposits, Ebro Basin (Spain)	Sedimentary Geology	125	1999	Elsevier	10.1016/S0037-0738(98)00146-8
54fb51c0e138239936c6d400	265	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
5907a8f7cf58f1a944ce7ed3	37	Tebo Formation	306	312	Sherwood, Mark D. and Williams, Glenn A.	Missouri Mineral Locality Index	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603046
55037e64e1382326932d8030	1502	Fatha Formation	11.608	15.97	Gutiérrez, F. et al.	A review on natural and human-induced geohazards and impacts in karst	Earth-Science Reviews		2014	Elsevier	10.1016/j.earscirev.2014.08.002
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b83d31e13823bd29ba865c	741	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
565f6ebfcf58f148c57ec29d	1	Tunisian Chemical Group			Boumnijel, Ibtissem et al.	Effect of calcinated and activated perlite on improving efficiency of dihydrate process for phosphoric acid	International Journal of Mineral Processing		2013	Elsevier	10.1016/j.minpro.2013.10.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5bf90c4dcf58f1a9c3124ad5	87	Calcite Dolomite			Giustetto, Roberto et al.	Deterioration of building materials and artworks in the 'Santa Maria della Stella' church, Saluzzo (Italy): Causes of decay and possible remedies	Studies in Conservation	62	2017	Informa UK Limited	10.1080/00393630.2016.1217694
55b6d6a7e13823bd29ba7dcc	6606	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5c2b5da21faed655488b16ed	384	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
58b7df47cf58f18af629a04c	307	Beuda mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54d0272be13823b501cdbc75	49	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
55b83d31e13823bd29ba865c	2460	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
5903521bcf58f184bec4336f	44	Zaragoza Gypsum Formation	5.332	23.03	Castañeda, Carmen et al.	Dedicated SAR interferometric analysis to detect subtle deformation in evaporite areas around Zaragoza, NE Spain	International Journal of Remote Sensing	32	2011	Taylor and Francis	10.1080/01431161003631584
57ec17eccf58f1ac335ac1b3	147	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5503421ae1382326932d7e6d	135	Evaporite mention			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56e353e7cf58f16de8a2e1bf	387	Minas Viejas mention			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
550ee523e1382369a6f93f9e	717	Zaragoza Gypsum Formation	5.332	23.03	Gutiérrez, Francisco et al.	Leakage problems in dams built on evaporites. The case of La Loteta Dam (NE Spain), a reservoir in a large karstic depression generated by interstratal salt dissolution	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2014.12.009
5682dd16cf58f1479a0ab6de	399	Laga mention			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
55b6d6a7e13823bd29ba7dcc	7561	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
584aa62ccf58f19d6a5f583e	142	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b83d31e13823bd29ba865c	7979	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5683349ccf58f1479a0abb4e	106	Capitan Formation	260.4	270.6	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b83b40e1382373b63b7fe6	4	Geoscience Group			Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
54b4328de138239d86855c34	499	Kirmir Formation	5.332	23.03	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
57484ab3cf58f13effae7ac5	80	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
54f9553fe138239936c6c748	138	Yesares mention	5.332	7.246	Riding, R. et al.	Late Miocene Mediterranean desiccation: topography and significance of the 'Salinity Crisis' erosion surface on-land in southeast Spain: Reply	Sedimentary Geology	3-4	2000	Elsevier	10.1016/S0037-0738(00)00039-7
55b6d4bfe13823bd29ba7dc0	40	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b83d31e13823bd29ba865c	8084	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c3540ea1faed655488c1248	83	Gypsum Formation			Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
58b7df47cf58f18af629a04c	523	Beuda Gypsum mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
5734b312cf58f14dbc2c579f	101	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
579ed180cf58f1030df9c51e	279	Carroza Formation	23.03	65.5	Buck, Brenda J. et al.	Evaporitic paleosols in continental strata of the Carroza Formation, La Popa Basin, Mexico: Record of Paleogene climate and salt tectonics	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30089.1
55b7869fe13823bd29ba8231	2055	Pequop mention	276.0066	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5734b312cf58f14dbc2c579f	373	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
58c8ed8ccf58f1a71217fb6b	15	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
58ac40fdcf58f1946fb5ce65	127	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
5906dd0fcf58f15fea53aef7	266	Briggs Formation	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
572ce192cf58f134a3e8d070	463	Gyp mention			Johnson, Ronald C. et al.	Geology of tight oil and potential tight oil reservoirs in the lower part of the Green River Formation, Uinta, Piceance, and Greater Green River Basins, Utah, Colorado, and Wyoming	Scientific Investigations Report		2016	USGS	10.3133/sir20165008
55b6d6a7e13823bd29ba7dcc	8060	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55f49c5bcf58f16256a225c4	385	Gypsum mention			Muscente, A.D. and Xiao, Shuhai	New occurrences of Sphenothallus in the lower Cambrian of South China: Implications for its affinities and taphonomic demineralization of shelly fossils	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.041
54e4d444e138237cc914feb2	128	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55990036e1382390cc641074	51	Artashi Formation	55.8	65.5	Xue, Chunji et al.	Geology, geochemistry and genesis of the Cretaceous and Paleocene sandstone- and conglomerate-hosted Uragen Zn–Pb deposit, Xinjiang, China: A review	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.06.005
57c19e14cf58f16bf61df64c	171	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
56c1ea81cf58f15c72c908aa	138	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5d458cfc0b45c76cafa31ceb	79	Al-Hiswa Sandstone			Ismeik, Muhannad and Shaqour, Fathi	Effectiveness of lime in stabilising subgrade soils subjected to freeze–thaw cycles	Road Materials and Pavement Design			Informa UK Limited	10.1080/14680629.2018.1479289
57a43018cf58f11204e17fe0	336	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
59069dcecf58f1491d1b327e	77	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
558fa710e13823109f3eeaeb	716	Carmel Formation	161.2	175.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
54cc5427e138236bcc929f92	28	Yeso Formation	251	299	Böhlke, J.K. and Irwin, J.J.	Brine history indicated by argon, krypton, chlorine, bromine, and iodine analyses of fluid inclusions from the Mississippi Valley type lead-fluorite-barite deposits at Hansonburg, New Mexico	Earth and Planetary Science Letters	110	1992	Elsevier	10.1016/0012-821X(92)90038-W
54b4324ce138239d8684a8ac	233	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
55b2c402e138231cbdd6ce3e	488	Slick Rock mention	161.5	174.7	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55b83d31e13823bd29ba865c	414	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	327	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5833ce7ecf58f1110fa956dd	43	Calatrava Limestone			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
5599341be1382390cc641189	47	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b83d31e13823bd29ba865c	8692	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5ce2f9b20b45c76caf8ae21e	286	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
57d03153cf58f151be16553d	81	Magnesite Limestone			Nieć, Marek et al.	Main challenges of mineral resources policy of Poland	Resources Policy		2014	Elsevier	10.1016/j.resourpol.2014.10.010
54b4328ae138239d8685557f	406	Raisby Formation	251.902	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
550af900e1382369a6f92edb	167	Niobrara mention	83.6	97.233	Tuttle, Michele L.W. et al.	Contaminants from cretaceous black shale: II. Effect of geology, weathering, climate, and land use on salinity and selenium cycling, Mancos Shale landscapes, southwestern United States	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.011

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5683349ccf58f1479a0abb4e	103	Castile mention	259	259.51	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
5783caf0cf58f13fb21dfa1a	482	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
54b4327fe138239d868536c9	311	Kalavassos Formation			Dill, Harald G. et al.	Miocene diagenetic and epigenetic strontium mineralization in calcareous series from Cyprus and the Arabian Gulf: Metallogenic perspective on sub- and suprasalt redox-controlled base metal deposits	Journal of Asian Earth Sciences	34	2009	Elsevier	10.1016/j.jseaes.2008.09.001
55b83d31e13823bd29ba865c	4542	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
579f5bc9cf58f12a53c41a24	42	Tripoli Fm	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b78281e13823bd29ba8218	885	Artesia mention	259.51	273.01	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b75a36e13823bd29ba8116	2169	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
5503421ae1382326932d7e6d	959	Castile Fm	253.8	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b88a09e13823bd29ba883a	3372	Tampa mention	23.6288	24.2275	Edited by Gohn, Gregory S.	Proceedings of the 1988 U.S. Geological Survey Workshop on the Geology and geohydrology of the Atlantic Coastal Plain	Circular		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	419	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56831341cf58f1479a0ab983	389	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
590769c6cf58f191e58edf9d	76	Cloud Chief Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
5c29b7d41faed655488ae938	220	Luocheng mention			Ji, Dongping et al.	Mississippian anthracites in Guangxi Province, southern China: Petrological, mineralogical, and rare earth element evidence for high-temperature solutions	International Journal of Coal Geology	197	2018	Elsevier	10.1016/j.coal.2018.08.006
55185d29e1382394b500db56	514	Zaragoza Gypsum Formation	5.332	23.03	Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
557cbb8ae138239225f8697d	1423	Verde Formation	5.332	23.03	Twenter, F. R. and Metzger, D. G.	Geology and ground water in Verde Valley - The Mogollon Rim region, Arizona	Bulletin		1963	United States Geological Survey	
55b83d31e13823bd29ba865c	8381	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ae138239d8685544	202	Detroit River Group	359.2	416	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
578cff68cf58f101e2dda387	124	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	7462	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b43247e138239d86849b52	186	Cayara Fm	45.6	53.95	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
57c19e14cf58f16bf61df64c	140	Opeche mention	273.01	283.5	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
55b83d31e13823bd29ba865c	8146	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
575c4f4ecf58f16b97cc4df6	391	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	1641	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43290e138239d86856489	6	Bellerophon Formation	251	299	Bartel, Esther Maria et al.	A low-temperature ductile shear zone: The gypsum-dominated western extension of the brittle Fella-Sava Fault, Southern Alps	Journal of Structural Geology	69	2014	Elsevier	10.1016/j.jsg.2014.09.016
54b4328ee138239d86855fe9	513	Baza Fm			Gibert, Lluís et al.	Plio-Pleistocene lacustrine evaporites of the Baza Basin (Betic Chain, SE Spain)	Sedimentary Geology	200	2007	Elsevier	10.1016/j.sedgeo.2007.03.003
56c1b69acf58f15c72c904b3	104	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
5a2d0619cf58f19f7117d37a	44	Base mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
54b4324ee138239d8684ae63	256	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
5906dd0fcf58f15fea53aef7	235	Eagle Ford Shale	65.5	99.6	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5906dd0fcf58f15fea53aef7	71	Cap Mountain Limestone	485.4	511	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b83d31e13823bd29ba865c	2938	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56b99311cf58f14c238d4bdc	266	High Arctic Icing Formation			Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
55f2ced1cf58f16256a21973	122	Bandarkas Gypsum Member			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
578cff68cf58f101e2dda387	124	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
558c6b00e13823109f3ed87c	1607	Creek mention			Brobst, Donald Albert and Tucker, Jerry D.	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803
55b6d6a7e13823bd29ba7dcc	8076	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5503421ae1382326932d7e6d	959	Castile Fm	253.8	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
578cff68cf58f101e2dda387	25	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
557cd3cfe138239225f869e5	265	Fort Dodge Formation	145.5	199.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
57c1a08dcf58f16cbd62157f	282	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
55b7869fe13823bd29ba8231	2485	Blaine Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c4f4ecf58f16b97cc4df6	327	Gypsum Dolomite			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55a6f648e13823757cc6fcd7	458	Horse Spring mention	11.63	17.095	Vine, James David and Dooley, J.R.	Where on Earth is all the lithium?; with a section on uranium isotope studies	Open-File Report		1980	United States Geological Survey	10.3133/ofr801234
55ae4f4be13823763a830ada	691	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b4328ae138239d868553d8	221	Gebel El Rusas Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54b4328ce138239d86855a1e	56	Alfaro Formation			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
5897de3fcf58f1081e8c64e1	306	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
558df7d7e13823109f3ee082	2363	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
57a43018cf58f11204e17fe0	25	Lake Inflow Gypsum Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
579f5bc9cf58f12a53c41a24	306	Tripoli Formation	5.332	7.246	Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
56831341cf58f1479a0ab983	491	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b43276e138239d86851d3b	112	Base mention			Roveri, Marco et al.	The Messinian Salinity Crisis: Past and future of a great challenge for marine sciences	Marine Geology		2014	Elsevier	10.1016/j.margeo.2014.02.002
54b4328de138239d86855c34	163	Cßayirhan mention			Orta, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
57a39568cf58f1a4dc1b1106	161	Paradox Formation	299	318.1	Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
55d16099cf58f1b3b25e36c3	623	Zaragoza Gypsum Formation	5.332	23.03	Pueyo Anchuela, Ó. et al.	Three dimensional characterization of complex mantled karst structures. Decision making and engineering solutions applied to a road overlying evaporite rocks in the Ebro Basin (Spain)	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2015.04.022
5599341be1382390cc641189	2	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b75a36e13823bd29ba8116	2208	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
55b6d6a7e13823bd29ba7dcc	4076	Well No.l Shale			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558fda65e13823109f3eec30	420	Tenderfoot Member	201.4	251.902	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b2e020e138231cbdd6ced3	1524	Muddy Creek Formation	5.332	23.03	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
5a2d0619cf58f19f7117d37a	128	Base mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
56830b14cf58f1479a0ab918	252	Laga Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5c2ad1181faed655488b08a2	89	Marl Dozahir mention	33.9	55.8	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
55b6d6a7e13823bd29ba7dcc	7544	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	8077	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e64c66e138237cc91504d3	27	Rustler Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
54d2216be13823302d02428b	356	Mercia Mudstone Group	199.6	251	Tellam, John H.	Hydrochemistry of the saline groundwaters of the lower Mersey Basin Permo-Triassic sandstone aquifer, UK	Journal of Hydrology	165	1995	Elsevier	10.1016/0022-1694(94)02583-W
5503421ae1382326932d7e6d	184	Hirka Fm	5.332	23.03	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54b43245e138239d8684952a	177	Arab Formation	150.8	155.7	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
54b4328ae138239d8685557f	398	Raisby Formation	251.902	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
55b6d6a7e13823bd29ba7dcc	7525	Pecos mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558bbd56e13823109f3ed4ef	350	Rustler mention	253.9652	256.0278	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
55908e79e13823109f3ef08e	1800	Feet mention			Hewett, D.F.	Geology and ore deposits of the Goodsprings quadrangle, Nevada	Professional Paper		1931	United States Geological Survey	10.3133/pp162
55b2c402e138231cbdd6ce3e	682	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
598be17bcf58f135058096f7	298	Yesares Member	5.332	7.246	Li, Jiao et al.	Isotopic composition of gypsum hydration water in deep Core SG-1, western Qaidam basin (NE Tibetan Plateau), implications for paleoclimatic evolution	Global and Planetary Change	155	2017	Elsevier	10.1016/j.gloplacha.2017.06.006
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
57a43018cf58f11204e17fe0	390	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
598b8640cf58f11358c1f60c	55	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
57ec17eccf58f1ac335ac1b3	116	Wordiekammen Formation	251	299	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55f4877fcf58f16256a22522	108	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54e97acfe138237cc915120b	113	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
57a39568cf58f1a4dc1b1106	41	Paradox Formation	299	318.1	Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
54b4328de138239d86855c34	391	Gypsiferous Claystone Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
57c9f7a1cf58f1bbcffcfdff	251	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
580e3bc6cf58f172dd1b8676	84	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55b2f105e138231cbdd6cf26	4171	Carmel Formation	161.2	175.6	U.S. Geological Survey	Geological Survey research 1967, Chapter D	Professional Paper		1967	United States Geological Survey	10.3133/pp575D
557ff66ee13823bc80ba2925	474	Kootenai Formation	99.6	145.5	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
55baa3b5e1382373b63b89e7	174	Lithology Member			Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2258	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3925	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	7912	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	4186	Yes mention			Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b7869fe13823bd29ba8231	2329	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b33375e138231cbdd6d08f	1106	Zarqa mention			Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
54b4325ce138239d8684d4cc	299	Arenazzolo Fm	5.332	7.246	Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
58d05f04cf58f143d83df298	230	Prewitt Shale	251	299	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
574822d9cf58f13411b192a3	174	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
5599341be1382390cc641189	160	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
54e7a556e138237cc9150a6b	11	Floral Formation			Van Stempvoort, Dale R. et al.	Sources and dynamics of sulfur in weathered till, Western Glaciated Plains of North America	Chemical Geology	1-4	1994	Elsevier	10.1016/0009-2541(94)90081-7
54b4328de138239d86855c34	529	Cßayirhan mention			Orß, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
579f5bc9cf58f12a53c41a24	163	Cattolica Eraclea Formation			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
558fa710e13823109f3eeaeb	961	James Hardie Gypsum mention			Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b83d31e13823bd29ba865c	3890	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b7e5cfe138230a74d15b25	264	Arden Sandstone	227	237	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
55b83d31e13823bd29ba865c	553	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b75a36e13823bd29ba8116	2174	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
54b4327fe138239d86853736	505	Gypsum Member			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
5907a1fdcf58f1a696dd7d62	106	Satilla Formation	0.01143	1.806	Gordon, Jennings B.	Georgia	Rocks & Minerals	64	1989	Taylor and Francis	10.1080/00357529.1989.11761755
5833ce7ecf58f1110fa956dd	191	Stratigraphic Depth Calcite Dolomite			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
5ad11373cf58f12f1060740c	79	Lead Limestone			Calvo, Guiomar et al.	Material flow analysis for Europe: An exergoecological approach	Ecological Indicators	60	2016	Elsevier	10.1016/j.ecolind.2015.08.005
5ce2f9b20b45c76caf8ae21e	148	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4328de138239d86855c34	72	Evaporite Member			Orß, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
578cff68cf58f101e2dda387	121	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
55b83d31e13823bd29ba865c	8586	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	2140	Red Bluff mention	0.0117	33.9	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328fe138239d8685635b	671	Fatha Formation	11.608	15.97	Gil, H. et al.	Stratigraphic architecture of alluvial–aeolian systems developed on active karst terrains: An Early Pleistocene example from the Ebro Basin (NE Spain)	Sedimentary Geology		2013	Elsevier	10.1016/j.sedgeo.2013.08.009
5d1527e70b45c76caf9053a2	22	Francis Group	305.425	305.7125	Dal Molin, Sulian Junkes et al.	Polyhalite as a potassium and multinutrient source for plant nutrition	Archives of Agronomy and Soil Science			Informa UK Limited	10.1080/03650340.2019.1631451
55184839e1382394b500daf7	64	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Evaluating and comparing methods of sinkhole susceptibility mapping in the Ebro Valley evaporite karst (NE Spain)	Geomorphology	111	2009	Elsevier	10.1016/j.geomorph.2009.04.017
54c04e8fe1382389c54c36c6	139	Abu Dhabi mention	-5.5012E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
54b4328de138239d86855dfa	330	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
54b43250e138239d8684b46c	53	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f4877fcf58f16256a22522	634	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
575c4f4ecf58f16b97cc4df6	467	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54b4328be138239d86855631	367	Sarlyar Limestone			İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
5734b312cf58f14dbc2c579f	101	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55b6d6a7e13823bd29ba7dcc	9681	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1b6a3cf58f15c72c904b4	195	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
590769c6cf58f191e58edf9d	40	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
559147b8e138236ee2217b0d	44	Rock mention			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
57a43018cf58f11204e17fe0	505	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5734b312cf58f14dbc2c579f	373	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
5c3540ea1faed655488c1248	121	Basal Limestone	488.3	542	Decima, A. and Wezel, F.C.	Late Miocene Evaporites of the Central Sicilian Basin, Italy	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.144-1.1973
54e9f64ee138237cc9151412	380	Great Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
55b83d31e13823bd29ba865c	3585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5b6f081fcf58f1539ffa6761	142	Yapılar Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1d8a6cf58f15c72c9073f	426	Zechstein mention	251.902	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54c04652e1382389c54c3686	210	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
58c8ed8ccf58f1a71217fb6b	186	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
578cff68cf58f101e2dda387	129	Monongaheia Formation			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
5712f1aacf58f16fb4cc921a	221	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
57ec17eccf58f1ac335ac1b3	220	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
575c4f4ecf58f16b97cc4df6	222	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	3387	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57436148cf58f12dd96016ef	42	Sanhedong mention	199.6	228	GAO, Lan et al.	New Progress in Study of the Ore-bearing Black Limestone of Jinding Giant Zn-Pb Deposit, Yunnan, Southwest China	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12368_6
5a2f778acf58f10a775a37f3	2	Zaragoza mention	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b7869fe13823bd29ba8231	2005	Kaibab Limestone	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b33067e138231cbdd6d081	2045	Tropic mention			Gregory, H.E.	The geology and geography of the Paunsaugunt region, Utah	Professional Paper		1951	United States Geological Survey	10.3133/pp226
5682e272cf58f1479a0ab716	3	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4324de138239d8684aba6	197	Gesso Formation			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
584aa62ccf58f19d6a5f583e	25	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5599341be1382390cc641189	182	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
5599341be1382390cc641189	190	Miravet Gypsum Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55f4877fcf58f16256a22522	575	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
57c19e14cf58f16bf61df64c	269	Nippewalla mention	273.01	279.7525	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
579f5bc9cf58f12a53c41a24	81	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
559147b8e138236ee2217b0d	44	Rock mention			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
5897de3fcf58f1081e8c64e1	183	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	5969	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558e0a16e13823109f3ee0f8	1743	Gila Conglomerate	2.835	4.0333	Marsh, S.P. and Gough, L.P.	4th International Symposium on Environmental Geochemistry; program with abstracts	Open-File Report		1997	United States Geological Survey	10.3133/ofr97496
55b83d31e13823bd29ba865c	7409	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55bfa1b1cf58f16e99a36f42	300	Maynardville mention	490.725	496.8	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
55b83d31e13823bd29ba865c	3167	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3669	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	2855	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b43250e138239d8684b46c	53	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55bfa1b1cf58f16e99a36f42	300	Maynardville mention	490.725	496.8	Nativ, Ronit	The brine underlying the Oak Ridge Reservation, Tennessee, USA: Characterization, genesis, and environmental implications	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(95)00428-9
55c2ce13cf58f1a8110b8b48	411	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b7869fe13823bd29ba8231	2396	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579b56dacf58f13d24f0d7ef	40	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55b7869fe13823bd29ba8231	629	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550aa1a2e138238460c4fdf5	128	Baza Formation			Hidalgo, M.Carmen and Cruz-Sanjulián, Javier	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
59079ad6cf58f1a3f1fe48e7	623	Detroit River mention	388.6334	392.3666	Carlson, Ernest H.	Ohio Mineral Locality Index	Rocks & Minerals	65	1990	Taylor and Francis	10.1080/00357529.1990.11761719
574822d9cf58f13411b192a3	195	Queenston Formation	443.7	460.9	Brogly, P J et al.	The Queenston Formation: shale-dominated, mixed terrigenous-carbonate deposits of Upper Ordovician, semiarid, muddy shores in Ontario, Canada	Canadian Journal of Earth Sciences	35	1998	Canadian Science Publishing	10.1139/e98-021
579f5bc9cf58f12a53c41a24	243	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55ad1d69e13823763a83031a	128	Rustler Formation	251	260.4	Cooper, J. B.	Road log from Carlsbad, New Mexico, to Project Gnome site	Open-File Report		1962	United States Geological Survey	10.3133/ofr6230
57c19e14cf58f16bf61df64c	171	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
57ab0cc9cf58f19c57ed9df4	1617	Ajax Dolomite	485.4	493.575	Dill, Harald G.	Kaolin: Soil, rock and ore from the mineral to the magmatic, sedimentary, and metamorphic environments	Earth-Science Reviews		2016	Elsevier	10.1016/j.earscirev.2016.07.003
55b7869fe13823bd29ba8231	2769	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578b8ab6cf58f1645f54f0c6	283	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54e865c7e138237cc9150d7f	214	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578cff68cf58f101e2dda387	58	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
57bedb9ccf58f13bf01999e9	299	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
575c4f4ecf58f16b97cc4df6	1	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
55b83d31e13823bd29ba865c	4736	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
57ca1161cf58f10278760d05	249	Mineral Group	65.5	251	Rogers, A. Deanne and Hamilton, Victoria E.	Compositional provinces of Mars from statistical analyses of TES, GRS, OMEGA and CRISM data	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004690
55b7869fe13823bd29ba8231	1265	Moccasin Creek Gypsum Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5ce4c9f20b45c76caf8b3788	4	Francis Group	305.425	305.7125	Korkut, Turgay et al.	Neutron Equivalent Dose Rate Measurements of Gypsum-Waste Tire Rubber Layered Structures	International Journal of Polymer Analysis and Characterization	18	2013	Informa UK Limited	10.1080/1023666X.2013.814025
54b4328ee138239d86855f3a	232	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
559e58a2e138230816dadbe2	1239	Mogollon Rim Formation	33.9	56	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
558fe155e13823109f3eec57	567	Culebra mention	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	184	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b6df25e13823bd29ba7dfe	2912	Gypsum mention			Tooker, Edwin Wilson	Arizona's industrial rock and mineral resources; workshop proceedings	Bulletin		1989	United States Geological Survey	10.3133/b1905
5514907ce1382394b500cb75	1	Kuwait mention			Khalaf, Fikry I. et al.	Petrography and genesis of Quaternary coastal gypcrete in North Kuwait, Arabian Gulf	Geoderma		2014	Elsevier	10.1016/j.geoderma.2014.02.018
5b541d97cf58f120001757f5	591	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology	399	2015	Elsevier	10.1016/j.chemgeo.2014.10.028
55b83d31e13823bd29ba865c	1857	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c04652e1382389c54c3686	140	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54e8ae2de138237cc9150ec9	1401	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
5509217ee138238460c4f689	235	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b83d31e13823bd29ba865c	6609	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3726	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558ecdcbe13823109f3ee5af	346	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
54b4324ee138239d8684ae63	256	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
58d05105cf58f13f39efd424	376	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55b6d6a7e13823bd29ba7dcc	8158	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55c04787cf58f16e99a3746f	231	Green River Formation	33.9	55.8	Tuttle, Michele L. and Goldhaber, Martin B.	Sedimentary sulfur geochemistry of the Paleogene Green River Formation, western USA: Implications for interpreting depositional and diagenetic processes in saline alkaline lakes	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90291-4
55b75a36e13823bd29ba8116	2283	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
558df7d7e13823109f3ee082	2953	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
558cbceae13823109f3eda41	176	Verde Formation	5.332	23.03	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
5517568be1382394b500d6fd	114	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
558fa710e13823109f3eeaeb	690	Arapien Shale	145.5	199.6	Compiled and edited by Tooker, Edwin Wilson	Industrial minerals in the Basin and Range region; workshop proceedings	Bulletin		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57177ecdcf58f1637fb099ed	3	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
55b75831e13823bd29ba8108	2310	Mauri Formation	5.332	23.03	Edited by Scott, Richard W., Jr. et al.	Advances related to United States and international mineral resources; developing frameworks and exploration technologies	Bulletin		1993	United States Geological Survey	
55b83d31e13823bd29ba865c	4826	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4327fe138239d86853736	191	Basin mention			Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
558d206fe13823109f3edc62	2449	Tularosa mention			Feth, John Henry Frederick	Review and annotated bibliography of ancient lake deposits (Precambrian to Pleistocene) in the Western States	Bulletin		1964	United States Geological Survey	10.3133/b1080
55b2c402e138231cbdd6ce3e	1037	Chinle mention	201.4	242.8667	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
584aa62ccf58f19d6a5f583e	79	Zaragoza Gypsum Formation	5.332	23.03	ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b6d6a7e13823bd29ba7dcc	7553	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5a3b865dcf58f103a802eed2	82	Karayün Formation			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
558d4970e13823109f3edd1b	264	Tuyiluoke Formation			Lee, K. Y.	Geology of the Tarim Basin with special emphasis on petroleum deposits, Xinjiang Uygur Zizhiqu, Northwest China	Open-File Report		1985	United States Geological Survey	
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
558cbceae13823109f3eda41	125	Coconino Sandstone	251	299	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7543	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c44114cf58f17493f8536e	104	Seven Rivers Formation	251	299	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
55b6d6a7e13823bd29ba7dcc	7169	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	580	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fda65e13823109f3eec30	1050	Belden Formation	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b7869fe13823bd29ba8231	2835	Michigan mention	342.0833	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c4f4ecf58f16b97cc4df6	261	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
58b7df47cf58f18af629a04c	366	Beuda mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
580e3bc6cf58f172dd1b8676	245	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
56c1c32bcf58f15c72c9059b	45	Bellerophon Formation	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
550aa1a2e138238460c4fdf5	91	Step Calcite Gypsum Dolomite			Hidalgo, M.Carmen and Cruz-Sanjulián, Javier	Groundwater composition, hydrochemical evolution and mass transfer in a regional detrital aquifer (Baza basin, southern Spain)	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00078-0
55b83d31e13823bd29ba865c	4651	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328ee138239d86855f3a	152	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55b7869fe13823bd29ba8231	2076	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5908046fcf58f10e2159437f	90	Diopside Dolomite			Wight, Quintin and Chao, George Y.	Mont Saint-Hilaire Revisited	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11762710

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f4877fcf58f16256a22522	78	Gypsum mention			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
55990e4de1382390cc6410c3	472	Madbi mention			Mondillo, N. et al.	The Jabali nonsulfide Zn–Pb–Ag deposit, western Yemen	Ore Geology Reviews		2014	Elsevier	10.1016/j.oregeorev.2014.02.003
559e58a2e138230816dadbe2	717	Verde Formation	5.332	23.03	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
55c2a9cacf58f1a8110b8a1e	291	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5c19917d1faed655488915d3	242	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55917250e13823109f3ef5b1	1618	Khorat Group	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
55184839e1382394b500daf7	64	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Evaluating and comparing methods of sinkhole susceptibility mapping in the Ebro Valley evaporite karst (NE Spain)	Geomorphology	111	2009	Elsevier	10.1016/j.geomorph.2009.04.017
55b7869fe13823bd29ba8231	2336	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
54b4328de138239d86855c34	158	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
574cc5f5cf58f107bf55f9c6	83	Gypsum Formation			Hewton, M.L. et al.	Colombian-style emerald mineralization in the northern Canadian Cordillera: integration into a regional Paleozoic fluid flow regime 1	Canadian Journal of Earth Sciences	50	2013	Canadian Science Publishing	10.1139/cjes-2012-0128
5906cf0dcf58f15ad9553b8a	159	Penfield mention	423	433.4	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
57320585cf58f19d17198262	35	Mineral Dolomite	65.5	251	Gerald M. Friedman	Methane-Generated Lithified Dolostone of Holocene Age: Eastern Mediterranean	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c7-2b26-11d7-8648000102c1865d
57126a16cf58f140fa5c33f2	87	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
54b4328de138239d86855c5f	349	Colton mention	47.8	56.8	Wells, Neil A. et al.	Quantitative evaluation of color measurements II. Analysis of Munsell color values from the Colton and Green River Formations (Eocene, central Utah)	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(01)00205-6
55b83d31e13823bd29ba865c	3432	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	6438	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	173	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
58b7df47cf58f18af629a04c	550	Besalu Fm.			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
54eba4f0e138237cc9151b1e	534	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
54b4327ee138239d868532b9	322	Calcite Dolomite			Xing, Lina et al.	Groundwater hydrochemical characteristics and processes along flow paths in the North China Plain	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.03.017
56830b14cf58f1479a0ab918	442	Be'eri Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55b83d31e13823bd29ba865c	5915	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b31f28e138231cbdd6d027	3021	Funeral Formation	1.806	5.332	Hunt, Charles Butler and Mabey, Don R.	Stratigraphy and structure, Death Valley, California	Professional Paper		1966	United States Geological Survey	10.3133/pp494A
55b83d31e13823bd29ba865c	3670	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2348	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ee138239d8684ae63	318	Bordalba mention			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
55b6d6a7e13823bd29ba7dcc	10535	FORMATION mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	8362	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5734b312cf58f14dbc2c579f	543	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b8484be13823bd29ba869d	399	Chinle Formation	245	251	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
57ec17eccf58f1ac335ac1b3	92	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
550afe00e1382369a6f92ef4	170	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from Cretaceous black shale: I. Natural weathering processes controlling contaminant cycling in Mancos Shale, southwestern United States, with emphasis on salinity and selenium	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.010
54e75c56e138237cc9150930	28	Cafiete Dolostone			Tritlla, J. and Cardellach, E.	Fluid inclusions in pre-ore minerals from the carbonate-hosted mercury deposits in the Espadán Ranges (eastern Spain)	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00158-1
57436724cf58f12ffa388eea	231	Daijiaping Formation	65.5	99.6	Shaozeng, Guan	On the Age of the Dongtang Formation in the Hengyang Basin of Hunan and the Cretaceous and Tertiary Boundary	Acta Geologica Sinica - English Edition	2	1989	Wiley-Blackwell	10.1111/j.1755-6724.1989.mp2003006.x
5712f1aacf58f16fb4cc921a	287	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5509217ee138238460c4f689	728	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5682dd16cf58f1479a0ab6de	77	Laga mention			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5897de3fcf58f1081e8c64e1	321	Shinarump Conglomerate	232	237	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b7869fe13823bd29ba8231	2082	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328de138239d86855dfa	330	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
5907c51bcf58f1b45c88c8fc	209	Columbus Limestone	385.3	397.5	Hanson, Sarah L.	Midwest Places of Geologic Interest	Rocks & Minerals	92	2017	Taylor and Francis	10.1080/00357529.2017.1241696
57c87f71cf58f147df6ab61d	98	TES Dataa Mineral Group			Glotch, Timothy D. and Rogers, A. Deanne	Evidence for magma-carbonate interaction beneath Syrtis Major, Mars	Journal of Geophysical Research: Planets	118	2013	Wiley	10.1029/2012JE004230
5597020ce1382390cc640567	165	Albite Dolomite			Smuda, Jochen et al.	Mineralogical and geochemical study of element mobility at the sulfide-rich Excelsior waste rock dump from the polymetallic Zn–Pb–(Ag–Bi–Cu) deposit, Cerro de Pasco, Peru	Journal of Geochemical Exploration	92	2007	Elsevier	10.1016/j.gexplo.2006.08.001
55b388d6e138231cbdd6d25d	1114	Gamma Member			Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	
55b83d31e13823bd29ba865c	6250	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2769	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1c32bcf58f15c72c9059b	229	Bellerophon mention	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
54b4327fe138239d86853736	257	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
55b7869fe13823bd29ba8231	2008	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e4d444e138237cc914feb2	43	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
54b43248e138239d86849e30	53	Zaragoza Formation	23.03	33.9	Arenas, C and Pardo, G	Latest Oligocene–Late Miocene lacustrine systems of the north-central part of the Ebro Basin (Spain): sedimentary facies model and palaeogeographic synthesis	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00025-5
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
54b4328de138239d86855c34	377	Belayim Formation	11.608	15.97	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54b4324ce138239d8684a8ac	233	Claret mention			Pujalte, Victoriano et al.	Sea-level changes across the Paleocene–Eocene interval in the Spanish Pyrenees, and their possible relationship with North Atlantic magmatism	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.10.016
57c19a92cf58f16ab04df2ec	336	Assuming Lucas Formation			HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328de138239d86855c34	152	Kirmir Formation	5.332	23.03	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
5734b312cf58f14dbc2c579f	361	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
5c2b5da21faed655488b16ed	402	Nar Member			Taghipour, Batoul and Lentz, David R.	The Zn-Pb sulfide and Pb-Zn-Ag non-sulfide Kuh-e-Surmeh ore deposit, Zagros Belt, Iran: Geologic, mineralogical, geochemical, and S isotopic constraints	Journal of Geochemical Exploration	194	2018	Elsevier	10.1016/j.gexplo.2018.07.019
575c4f4ecf58f16b97cc4df6	236	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
54c046b4e1382389c54c3689	38	Sevier River mention	2.58	13.09	Cunningham, Charles G. et al.	Supergene destruction of a hydrothermal replacement alunite deposit at Big Rock Candy Mountain, Utah: mineralogy, spectroscopic remote sensing, stable-isotope, and argon-age evidences	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.055
55c04787cf58f16e99a3746f	290	Flagstaff Formation	55.8	65.5	Tuttle, Michele L. and Goldhaber, Martin B.	Sedimentary sulfur geochemistry of the Paleogene Green River Formation, western USA: Implications for interpreting depositional and diagenetic processes in saline alkaline lakes	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90291-4
57968abbcf58f180d838d23c	29	Clastics Formation	5.332	23.03	Wood, Warren W. et al.	Source of solutes to the coastal sabkha of Abu Dhabi	Geological Society of America Bulletin	114	2002	GSA	10.1130/0016-7606(2002)114<0259:sosttc>2.0.co;2
55b83d31e13823bd29ba865c	6859	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5598f6b0e1382390cc64103f	176	Daye Formation	245	251	Xie, Guiqing et al.	Geochemical constraints on Cu–Fe and Fe skarn deposits in the Edong district, Middle–Lower Yangtze River metallogenic belt, China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.08.005
55b7869fe13823bd29ba8231	2740	Edwards Limestone	99.6	145.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324ee138239d8684ae63	256	Bordalba Formation			Huerta, Pedro et al.	Palaeogroundwater evolution in playa–lake environments Sedimentary facies and stable isotope record (Palaeogene, Almazán basin, Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology	286	2010	Elsevier	10.1016/j.palaeo.2009.12.008
55b83d31e13823bd29ba865c	7779	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b3dfb4e138231cbdd6d442	1722	Difficulty Shale	259.51	273.01	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
55b6d6a7e13823bd29ba7dcc	6003	Wingate mention	199.6	251	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58b7df47cf58f18af629a04c	390	Beuda mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b83d31e13823bd29ba865c	6646	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2974	Gypsum Spring mention	170.225	170.9	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	8061	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b83d31e13823bd29ba865c	6417	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c04652e1382389c54c3686	144	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
5a3b865dcf58f103a802eed2	76	Hafik Formation			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
54e49f08e138237cc914fdcc	76	Bay Fiord Formation	459.975	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
54b43284e138239d868544db	171	Calcite mention			Glaccum, Robert A and Prospero, Joseph M	Saharan aerosols over the tropical North Atlantic — Mineralogy	Marine Geology	37	1980	Elsevier	10.1016/0025-3227(80)90107-3
54b43284e138239d868544db	170	Calcite mention			Glaccum, Robert A and Prospero, Joseph M	Saharan aerosols over the tropical North Atlantic — Mineralogy	Marine Geology	37	1980	Elsevier	10.1016/0025-3227(80)90107-3
5c19917d1faed655488915d3	424	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b83d31e13823bd29ba865c	3387	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b78281e13823bd29ba8218	887	Artesia mention	259.51	273.01	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54b4328ee138239d86855f3a	154	Ratyn Limestone			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55ae2542e13823763a8309bd	167	Maha Sarakam Formation	65.5	145.5	Hite, R. J.	Progress report on the potash deposits of the Khorat Plateau, Thailand	Open-File Report		1982	United States Geological Survey	
55b83d31e13823bd29ba865c	4015	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd3cfe138239225f869e5	3305	Saude Formation	145	251.902	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4324de138239d8684aba6	145	Gesso Fm			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
54e8ae2de138237cc9150ec9	1413	Durham mention			Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
572cf900cf58f13d86a1bdc8	58	Rustler mention	253.9652	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
5682e272cf58f1479a0ab716	562	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5897de3fcf58f1081e8c64e1	27	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
5599341be1382390cc641189	220	Valdeprado Formation	99.6	145.5	Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b83d31e13823bd29ba865c	2309	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
559147b8e138236ee2217b0d	131	Rock Group			Zhang, Chuanda et al.	Observations of acoustic emission of three salt rocks under uniaxial compression	International Journal of Rock Mechanics and Mining Sciences		2015	Elsevier	10.1016/j.ijrmms.2015.03.030
55b83d31e13823bd29ba865c	6609	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	2416	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	8807	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	3764	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5c19917d1faed655488915d3	619	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
56c1ea81cf58f15c72c908aa	164	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5661f4eacf58f11996c3d9ca	132	El Chocón Sandstone			Giambastiani, Mauricio	Soft rocks in Argentina	International Journal of Mining Science and Technology	24	2014	Elsevier	10.1016/j.ijmst.2014.10.023
57321bc8cf58f1a0ac39199e	46	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55b83d31e13823bd29ba865c	5969	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558c4ae2e13823109f3ed7ce	2760	Molas Formation	299	318.1	U.S. Geological Survey	Geological Survey research 1968, Chapter C	Professional Paper		1968	United States Geological Survey	10.3133/pp600C
54c6548ee1382389c54c5052	370	Sijes mention	1.806	65.5	Kasemann, Simone A. et al.	Boron isotope composition of geothermal fluids and borate minerals from salar deposits (central Andes/NW Argentina)	Journal of South American Earth Sciences	16	2004	Elsevier	10.1016/j.jsames.2003.12.004
55a7c745e13823757cc70251	18	Rustler mention	253.9652	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b83d31e13823bd29ba865c	608	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b83d31e13823bd29ba865c	461	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
58c8ed8ccf58f1a71217fb6b	150	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b75a36e13823bd29ba8116	2169	Red mention	324.4643	324.8857	Adams, George Irving	Gypsum desposits in the United States	Bulletin		1904	United States Geological Survey	10.3133/b223
54b43247e138239d86849b52	62	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b7869fe13823bd29ba8231	2254	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	3243	Minnekahta Limestone	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
579f5bc9cf58f12a53c41a24	374	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
5906dd0fcf58f15fea53aef7	315	Jackson Group	33.9	55.8	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b2c402e138231cbdd6ce3e	2743	Mancos mention	72.1	100.5	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55b83d31e13823bd29ba865c	1743	Red mention	324.4643	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b690a7e138238e2d05483f	3663	Panoche Formation	65.5	99.6	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b78281e13823bd29ba8218	1010	Morrison mention	145	174.7	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b83d31e13823bd29ba865c	3830	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	15	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
57a43018cf58f11204e17fe0	429	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55096011e138238460c4f859	305	Winnipeg Formation	443.7	488.3	Desbarats, Alexandre J.	On elevated fluoride and boron concentrations in groundwaters associated with the Lake Saint-Martin impact structure, Manitoba	Applied Geochemistry	24	2009	Elsevier	10.1016/j.apgeochem.2009.02.016
54b4328be138239d8685567e	20	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
55b83d31e13823bd29ba865c	391	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54c0cf26e1382389c54c3932	267	Norseman mention	37.71	47.8	Benison, Kathleen Counter and Bowen, Brenda Beitler	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
54c0cf26e1382389c54c3932	267	Norseman mention	37.71	47.8	Benison, Kathleen Counter and Bowen, Brenda Beitler	Extreme sulfur-cycling in acid brine lake environments of Western Australia	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.018
55b83d31e13823bd29ba865c	8560	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b2e020e138231cbdd6ced3	269	Horse Spring Formation	5.332	23.03	Bohannon, Robert G.	Nonmarine sedimentary rocks of Tertiary age in the Lake Mead region, southeastern Nevada and northwestern Arizona	Professional Paper		1984	United States Geological Survey	10.3133/pp1259
5c3e6d6c1faed655488cd35a	131	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
559cd25ee138230816dad548	393	Verde Formation	5.332	23.03	compiled by Houser, B. B.	Map of industrial mineral occurrences in the National Forests of Arizona	Open-File Report		1992	United States Geological Survey	
579f5bc9cf58f12a53c41a24	332	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
55b690a7e138238e2d05483f	3711	Moreno Formation	65.5	99.6	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
5734b312cf58f14dbc2c579f	482	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
56c61f5ccf58f17493f87854	77	Feldspar Dolomite			Naftz, David L.	PREDICTIVE CAPABILITIES OF BATCH-EXTRACT EXPERIMENTS USING WATER FROM A COAL MINE	Journal of the American Water Resources Association	24	1988	Wiley-Blackwell	10.1111/j.1752-1688.1988.tb00939.x
5783caf0cf58f13fb21dfa1a	536	Sijes Formation	1.806	65.5	Ortí, Federico et al.	Sulfate–Borate Association (Glauberite–Probertite) In the Emet Basin: Implications For Evaporite Sedimentology (Middle Miocene, Turkey)	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.32
54b4328fe138239d868561aa	191	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
5599341be1382390cc641189	1	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
55b6d6a7e13823bd29ba7dcc	7589	Roswell mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
59080b6ecf58f111237d82b7	305	UL Peter Sandstone			Smith, Arthur E.	Illinois Mineral Locality Index	Rocks & Minerals	85	2010	Taylor and Francis	10.1080/00357521003727199
55b83d31e13823bd29ba865c	3667	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b83d31e13823bd29ba865c	8215	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b8484be13823bd29ba869d	197	Chinle mention	201.4	242.8667	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
54be1b30e138233c8bc4f9d7	204	Satanka Evaporite Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54b4328ee138239d86856168	187	Calcite Dolomite			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
55b83d31e13823bd29ba865c	8714	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1b69acf58f15c72c904b3	104	Kirmir Formation	5.332	23.03	YAGMURLU, FUZULI and HELVACI, CAHIT	Sedimentological characteristics and facies of the evaporite-bearing Kirmir Formation (Neogene), Beypazari Basin, central Anatolia, Turkey	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01428.x
5a3b865dcf58f103a802eed2	3	Karaman Gypsum Member			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
57ec17eccf58f1ac335ac1b3	393	Bambata mention	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b7869fe13823bd29ba8231	3065	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577b3daccf58f13110d8e98f	217	Fe mention			OMORI, KEIICHI and KERR, PAUL F.	Infrared Studies of Saline Sulfate Minerals	Geol Soc America Bull	74	1963	Geological Society of America	10.1130/0016-7606(1963)74[709:isossm]2.0.co;2
55b6d6a7e13823bd29ba7dcc	4010	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56831341cf58f1479a0ab983	34	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54fb51c0e138239936c6d400	1	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
57501d73cf58f16a9feeb329	207	Sainte-Foy mention	531.85	586.9	Bérubé, Marc-André et al.	Black shale heaving at Sainte-Foy, Quebec, Canada	Canadian Journal of Earth Sciences	23	1986	Canadian Science Publishing	10.1139/e86-163
5a2f778acf58f10a775a37f3	2	Zaragoza mention	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55b6d6a7e13823bd29ba7dcc	9622	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55cbfc16cf58f1b01e42470e	49	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
54e49f08e138237cc914fdcc	93	Bay Fiord Formation	459.975	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
56831341cf58f1479a0ab983	54	Zaragoza Gypsum Formation	5.332	23.03	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
54b4328de138239d86855c34	152	Kirmir Formation	5.332	23.03	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
550b37f5e1382369a6f9303e	46	McMurray Formation	99.6	145.5	Jasechko, Scott et al.	Quantifying saline groundwater seepage to surface waters in the Athabasca oil sands region	Applied Geochemistry	27	2012	Elsevier	10.1016/j.apgeochem.2012.06.007
54b4328de138239d86855dfa	330	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55f4877fcf58f16256a22522	491	Gypsum Member			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
58344734cf58f1342e34f96d	336	Calcite Dolomite			Serbin, Guy et al.	Effects of soil composition and mineralogy on remote sensing of crop residue cover	Remote Sensing of Environment	113	2009	Elsevier	10.1016/j.rse.2008.09.004
5897de3fcf58f1081e8c64e1	306	Moenkopi mention	203.175	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b83d31e13823bd29ba865c	414	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5712f1aacf58f16fb4cc921a	230	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5a3b865dcf58f103a802eed2	133	Karacaören Formation			Ocakoğlu, Faruk et al.	Orbitally-driven Mid-Burdigalian Coastal Sabkha cycles from the Sivas Basin: Sedimentological, paleontological, and geochemical data	Palaeogeography, Palaeoclimatology, Palaeoecology	490	2018	Elsevier	10.1016/j.palaeo.2017.11.035
579f2130cf58f119c9de4679	199	Lead Limestone			Valero, Antonio et al.	How to account for mineral depletion. The exergy and economic mineral balance of Spain as a case study	Ecological Indicators		2014	Elsevier	10.1016/j.ecolind.2014.07.021
55b83d31e13823bd29ba865c	8222	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328de138239d86855c34	154	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b83d31e13823bd29ba865c	3803	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55af1c5ce13823763a830fe9	528	Tamarisk Member	251.9	273.01	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b3d511e138231cbdd6d40e	286	Tabular mention			Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
55baa3b5e1382373b63b89e7	227	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b7869fe13823bd29ba8231	2591	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559ba888e1382390cc642116	665	Calcite Dolomite			Kosakowski, Georg and Berner, Urs	The evolution of clay rock/cement interfaces in a cementitious repository for low- and intermediate level radioactive waste	Physics and Chemistry of the Earth, Parts A/B/C		2013	Elsevier	10.1016/j.pce.2013.01.003
55b7869fe13823bd29ba8231	2594	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	132	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b43245e138239d8684952a	214	Carmel Formation	161.2	175.6	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
5509217ee138238460c4f689	90	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55b690a7e138238e2d05483f	3492	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
578fb2c8cf58f1bdcd2df236	308	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54b4328ce138239d86855b7a	347	Yeso Formation	251	299	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
54be7fc1e13823299564b0b3	168	Castile Formation	253.8	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
54fab87ce138239936c6cfbb	924	Prairie Evaporite Formation	385.3	397.5	Risacher, François and Fritz, Bertrand	Bromine geochemistry of salar de Uyuni and deeper salt crusts, Central Altiplano, Bolivia	Chemical Geology	3-4	2000	Elsevier	10.1016/S0009-2541(99)00251-X
572ee8a5cf58f11bb5bc1a43	269	Yates Formation	251	299	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	2032	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d03bf3cf58f138516d1200	818	Sanders Group	318.1	359.2	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55f48ec1cf58f16256a22559	416	Burano Formation	237	251	Lugli, Stefano et al.	The deep record of the Messinian salinity crisis: Evidence of a non-desiccated Mediterranean Sea	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.05.017
570fe41dcf58f114a862267f	173	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
54c060fbe1382389c54c3757	218	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
577c41d6cf58f188cebdd1fb	539	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55979088e1382390cc6408a4	119	Mineral Primary Calcite Dolomite			Aghbelagh, Yousef Beiraghdar and Yang, Jianwen	Effect of graphite zone in the formation of unconformity-related uranium deposits: Insights from reactive mass transport modeling	Journal of Geochemical Exploration	144	2014	Elsevier	10.1016/j.gexplo.2014.01.020
54bfef15e1382330560e0801	265	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
58bf2d90cf58f1867eb10946	244	Goyder Formation	485.4	501	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2062	Pequop mention	276.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56830ae3cf58f1479a0ab915	284	Whitkow mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
58d05f04cf58f143d83df298	423	Red Sandstone	423	433.4	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
584aa178cf58f19c3c0fb294	182	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	8111	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	2775	Phosphoria Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1281	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
570fe41dcf58f114a862267f	147	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
557cd3cfe138239225f869e5	2535	Blaine Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55c48dc6cf58f1a8110b94db	171	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b7869fe13823bd29ba8231	2455	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550912cce138238460c4f61b	297	Traverse Formation	379.93	388.54	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
5906dd0fcf58f15fea53aef7	286	Loma Plata Limestone	99.6	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54b4324de138239d8684aa17	190	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57320459cf58f19ced0f7bc5	88	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55a43da1e13823757cc6f19a	304	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
54c04e8fe1382389c54c36c6	139	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
56c1d607cf58f15c72c9071a	517	Bell Canyon Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55ad3126e13823763a8303a0	83	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55ad3126e13823763a8303a0	98	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
58bb7f59cf58f1878850d92a	41	Anhydrite Mbr			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
57321bc8cf58f1a0ac39199e	153	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
54c0c25fe1382389c54c390a	110	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
5c2ad1181faed655488b08a2	89	Marl Dozahir mention	33.9	55.8	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
55a7c745e13823757cc70251	23	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
558fda65e13823109f3eec30	945	Humbug Formation	318.1	326.4	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557f199ce13823bc80ba25a0	1794	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54fb3438e138239936c6d321	123	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b3055ce138231cbdd6cf97	4150	Ghanam mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
55b7869fe13823bd29ba8231	360	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	388	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54e9f64ee138237cc9151412	494	Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
5ab72cf0cf58f18332aac0f6	1	Selective Formation			Tritschler, Ulrich et al.	Controlling the Selective Formation of Calcium Sulfate Polymorphs at Room Temperature	Angewandte Chemie International Edition	54	2015	Wiley-Blackwell	10.1002/anie.201409651
55ad1d69e13823763a83031a	124	Salado Formation	251	260.4	Cooper, J. B.	Road log from Carlsbad, New Mexico, to Project Gnome site	Open-File Report		1962	United States Geological Survey	10.3133/ofr6230
580d82a3cf58f132b679c9de	175	Cupido Formation	112	125	González-Sánchez, Francisco et al.	Geological setting and genesis of stratabound barite deposits at Múzquiz, Coahuila in northeastern Mexico	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.10.008
55b7869fe13823bd29ba8231	1212	Yeso mention	275.26	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328de138239d86855c5f	349	Colton mention	47.8	56.8	Wells, Neil A. et al.	Quantitative evaluation of color measurements II. Analysis of Munsell color values from the Colton and Green River Formations (Eocene, central Utah)	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(01)00205-6
5b541d97cf58f120001757f5	591	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology	399	2015	Elsevier	10.1016/j.chemgeo.2014.10.028
5681b377cf58f1ba274d4854	217	Qom Formation	5.332	23.03	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069
5503421ae1382326932d7e6d	1103	San Andres Fm	251	299	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5b6f0819cf58f1539ffa6759	409	Arab Formation	150.8	155.7	Morad, Daniel et al.	Comparison of the diagenetic and reservoir quality evolution between the anticline crest and flank of an Upper Jurassic carbonate gas reservoir, Abu Dhabi, United Arab Emirates	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2018.02.008
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	441	Magenta Dolomite	251.9	273.01	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b7869fe13823bd29ba8231	363	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a43da1e13823757cc6f19a	309	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	1331	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5503421ae1382326932d7e6d	933	Rus Fm	33.9	55.8	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5a2f1524cf58f1a44cb985a4	120	Nontronite Talc Calcite Dolomite			Salvatore, M.R. et al.	Bulk mineralogy of the NE Syrtis and Jezero crater regions of Mars derived through thermal infrared spectral analyses	Icarus	301	2018	Elsevier	10.1016/j.icarus.2017.09.019
5c3458ec1faed655488bed8f	794	Prairie Evaporite Formation	385.3	397.5	Stoffers, P. and Kuhn, R.	Red Sea Evaporites: A Petrographic and Geochemical Study	Initial Reports of the Deep Sea Drilling Project	23		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.23.122.1974
55b7869fe13823bd29ba8231	545	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5ce2f9b20b45c76caf8ae21e	490	Hathern Anhydrite Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5907fd66cf58f10b6afca82b	72	Curtis Formation	145.5	199.6	Dayvault, Richard D.	Colorful Agate and Jasper of Southeastern Utah	Rocks & Minerals	89	2014	Taylor and Francis	10.1080/00357529.2014.90466
55b6d4bfe13823bd29ba7dc0	193	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572ea708cf58f10f9db0ebad	275	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	1334	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5d3f58060b45c76cafa2004f	111	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55765b42e138234790a011e4	71	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
56e0624ccf58f174e7b198f4	4	Indiana mention			Stephens, D. R.	The hydrostatic compression of eight rocks	Journal of Geophysical Research	69	1964	Wiley-Blackwell	10.1029/JZ069i014p02967
59080b6ccf58f111237d82af	71	Glen Rose mention	100.5	113	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463
5579c265e138231c7c52c464	50	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	993	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b67f4fe1382373b63b7864	44	Magnesian Limestone	251	299	Bath, A.H et al.	18O16O and 2H1H changes during progressive hydration of a Zechstein anhydrite formation	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90122-0
558fda65e13823109f3eec30	1766	Paradox mention	306	319.714	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
572cdf45cf58f133c4f9d591	739	Mancos Shale	65.5	145.5	Robertson, Andrew J. et al.	The source of groundwater and solutes to Many Devils Wash at a former uranium mill site in Shiprock, New Mexico	Scientific Investigations Report		2016	USGS	10.3133/sir20165031
55b7869fe13823bd29ba8231	1927	Phoenix Basin-Luke Salt Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c38a36cf58f17493f84562	84	Anhydrite mention			Fischer, Sebastian et al.	Kinetic modeling of laboratory CO 2 -exposure experiments performed on whole rock reservoir samples	Greenhouse Gases: Science and Technology	4	2014	Wiley-Blackwell	10.1002/ghg.1415
57a43018cf58f11204e17fe0	279	LAKE MEAD REGION Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5b541d97cf58f120001757f5	591	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology	399	2015	Elsevier	10.1016/j.chemgeo.2014.10.028
57ec1ab3cf58f1acfab96941	81	Passaic Formation	199.6	228	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
54be1b30e138233c8bc4f9d7	120	Intersaliferous Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
550f21dce1382369a6f940aa	84	Lerín Gypsum Formation			Guinea, Ander et al.	Geoelectrical prospecting of glauberite deposits in the Ebro basin (Spain)	Engineering Geology		2014	Elsevier	10.1016/j.enggeo.2014.03.007
55a43da1e13823757cc6f19a	304	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
584a428ccf58f17e0e79ec10	4	Oil Shale	471.8	488.3	Milton, Charles	SECTION OF GEOLOGICAL SCIENCES: MINERALOGY AND PETROLOGY OF THE GREEN RIVER FORMATION OF WYOMING, UTAH, AND COLORADO*	Transactions of the New York Academy of Sciences	23	1961	Wiley	10.1111/j.2164-0947.1961.tb01388.x
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
56c38a36cf58f17493f84562	84	Anhydrite mention			Fischer, Sebastian et al.	Kinetic modeling of laboratory CO 2 -exposure experiments performed on whole rock reservoir samples	Greenhouse Gases: Science and Technology	4	2014	Wiley-Blackwell	10.1002/ghg.1415
56c1d9bbcf58f15c72c9075f	37	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5a2cf7f0cf58f19a331caf3c	168	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
578aea2bcf58f13920dc7baa	53	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
557bfbc7e138239225f86664	110	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	1212	Yeso mention	275.26	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d8a6cf58f15c72c9073f	288	Castile Formation	253.8	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54fb3438e138239936c6d321	178	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4324fe138239d8684b069	255	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
559dcd1ae138230816dad9be	6672	Paradox Member	299	318.1	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
55af1c5ce13823763a830fe9	146	Salado Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5abaaa3ecf58f13ea8ecedc1	132	Li Dolomite	23.03	33.9	Poitras, J.T. et al.	Mars analog minerals' spectral reflectance characteristics under Martian surface conditions	Icarus	306	2018	Elsevier	10.1016/j.icarus.2018.01.023
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b7869fe13823bd29ba8231	1992	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ca03cf58f15c72c90620	105	Quillagua mention	5.332	11.608	Pueyo, Juan Jos[illegible] et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b7869fe13823bd29ba8231	418	Preuss Formation	163.59	163.97	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
564e2642cf58f141b60cac40	600	Ca mention			Schröder, S. et al.	Hydrogen detection with ChemCam at Gale crater	Icarus		2015	Elsevier	10.1016/j.icarus.2014.08.029
577c41d6cf58f188cebdd1fb	539	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5683006acf58f1479a0ab88f	58	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
54c0c25fe1382389c54c390a	662	Burano Formation	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55b7869fe13823bd29ba8231	2160	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5b289527cf58f1347499025c	156	Aragonitec Calcitec Fluorite Dolomite			Cardoso, Antonio J. et al.	Batch Test Assessment of Waste-to-Energy Combustion Residues Impacts on Precipitate Formation in Landfill Leachate Collection Systems	Journal of the Air & Waste Management Association	58	2008	Informa UK Limited	10.3155/1047-3289.58.1.19
557cd3cfe138239225f869e5	3244	Minnekahta Limestone	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	1370	Rustler mention	253.97	256.0278	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	835	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
584aa178cf58f19c3c0fb294	65	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5ce2f9b20b45c76caf8ae21e	191	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
57126f9fcf58f142fd277238	32	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55b7869fe13823bd29ba8231	1947	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	315	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d607cf58f15c72c9071a	394	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572ea708cf58f10f9db0ebad	275	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
54b4328ae138239d86855597	219	Alpine Haselgebirge Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
54b4328de138239d86855ceb	215	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b7869fe13823bd29ba8231	1150	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	4835	Red mention	324.46	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
584aa178cf58f19c3c0fb294	137	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b7869fe13823bd29ba8231	612	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55baa3b5e1382373b63b89e7	4	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54b43271e138239d86850ff4	96	Bilara mention	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
55c48dc6cf58f1a8110b94db	156	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55f49f72cf58f16256a225dc	52	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55ae4f4be13823763a830ada	522	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
57c19e2dcf58f16bf61df66a	141	Arab Formation	150.8	155.7	Nader, F. H. et al.	Quantification of diagenesis impact on the reservoir properties of the Jurassic Arab D and C members (Offshore, U.A.E.)	Geofluids	13	2013	Wiley	10.1111/gfl.12022
550912cce138238460c4f61b	297	Traverse Formation	379.93	388.54	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
54b43288e138239d86854e95	96	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
5590d1bfe13823109f3ef23b	187	Castile mention	259	259.51	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
5c2bea2e1faed655488b221b	107	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
58b88f2dcf58f11400b8036b	24	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Vermicular kaolinite relics in fly ash derived from Bokaro and Jharia coals (Jharkhand, India)	International Journal of Coal Geology		2016	Elsevier	10.1016/j.coal.2016.06.011
54b43247e138239d86849b52	247	Molino Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
54c15752e1382389c54c3b8f	272	Magnesian Limestone	251	299	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
56c1d9bbcf58f15c72c9075f	80	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56834db7cf58f1479a0abca3	108	Asmari Formation	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
54b43281e138239d86853bfd	174	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
56c1d8a6cf58f15c72c9073f	50	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b7869fe13823bd29ba8231	1745	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5ce2f9b20b45c76caf8ae21e	567	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56c1d8a6cf58f15c72c9073f	635	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5b634de4cf58f1a428782243	38	GHANNADPOUR Group			Hezarkhani, Ardeshir and Ghannadpour, Seyyed Saeed	Geochemistry of ore-forming fluids, Deh-Salm uneconomic porphyry Mo system, SW Nehbandan, Iran: a fluid inclusion investigation	Geosystem Engineering			Informa UK Limited	10.1080/12269328.2018.1496855
55b6d4bfe13823bd29ba7dc0	1063	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	317	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	874	Rustler mention	253.97	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
57604754cf58f1b8d035814c	58	Quse Group	145.5	199.6	Li, Jin-Xiang et al.	The Nadun Cu–Au mineralization, central Tibet: Root of a high sulfidation epithermal deposit	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2016.04.019
5518b748e1382394b500dcce	59	Zaragoza Formation	23.03	33.9	Guerrero, Jesús et al.	Impact of halite dissolution subsidence on Quaternary fluvial terrace development: Case study of the Huerva River, Ebro Basin, NE Spain	Geomorphology	100	2008	Elsevier	10.1016/j.geomorph.2007.04.040
55b7869fe13823bd29ba8231	1570	Salt Limestone	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57131acecf58f17d8d881dcb	207	Belayin Formation			Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
5c2bea2e1faed655488b221b	117	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
55b7869fe13823bd29ba8231	2203	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a850dffcf58f13f065e41c5	61	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
559c3f39e138230816dad2ff	504	Capitan mention	259.51	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54b43247e138239d86849b52	212	Santa-Lucia Fm.			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54b43288e138239d86854e95	71	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
558fda65e13823109f3eec30	1118	Round Valley Limestone	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55ae4f4be13823763a830ada	260	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5682d639cf58f1479a0ab68d	3	Evaporite mention			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55a0946ee1382381ff364540	278	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
54bfef15e1382330560e0801	230	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
56c1d9bbcf58f15c72c9075f	260	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4328fe138239d868561aa	167	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
578b8ab6cf58f1645f54f0c6	505	Prairie Evaporite Formation	385.3	397.5	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
589ebd9dcf58f101e1d918ac	201	Anhydrite Aragonite Calcite Dolomite			Balci, Nurgül et al.	Reproducing Authigenic Carbonate Precipitation in the Hypersaline Lake Acıgöl (Turkey) with Microbial Cultures	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099763
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54be7fc1e13823299564b0b3	308	Salina Formation	416	443.7	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55a43da1e13823757cc6f19a	235	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
557cd3cfe138239225f869e5	2706	Day Creek Dolomite	261.19	264.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5c3e6d6c1faed655488cd35a	260	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	179	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54db3232e138235b0d06b7b1	289	Eagle Sandstone	65.5	99.6	Henry, D.J. and Dutrow, B.L.	Tourmaline at diagenetic to low-grade metamorphic conditions: Its petrologic applicability	Lithos		2012	Elsevier	10.1016/j.lithos.2012.08.013
55b7869fe13823bd29ba8231	1735	Todilto mention	158.18	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	629	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05f04cf58f143d83df298	152	Orebody TransitionRZootenFeaule Dolomite			Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
57c2e2adcf58f105aaed24f4	133	Gachsaran Formation	5.332	23.03	Mirnejad, H. et al.	Major, minor element chemistry and oxygen and hydrogen isotopic compositions of Marun oil-field brines, SW Iran: Source history and economic potential	Geological Journal	46	2011	Wiley	10.1002/gj.1226
55b7869fe13823bd29ba8231	3063	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57a43018cf58f11204e17fe0	931	Bouse Formation	1.806	5.332	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
557b1abde138239225f86255	1139	Anhydrite Dolostone			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57320459cf58f19ced0f7bc5	83	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
579f1578cf58f1168e64ad7f	79	Cowden Anhydrite Member	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	1749	Todilto mention	158.18	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c36968cf58f1a8110b9014	84	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
57bedb9ccf58f13bf01999e9	299	Paradox mention	306	319.714	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
557cd3cfe138239225f869e5	1183	Castile Formation	253.8	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b31289e138231cbdd6cfe3	691	Muddy Creek mention			Eaton, Gordon P. et al.	Geophysical, geohydrological, and geochemical reconnaissance of the Luke salt body, central Arizona	Professional Paper		1972	United States Geological Survey	10.3133/pp753
557cd3cfe138239225f869e5	1234	Castile Formation	253.8	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
598c914bcf58f17206d6eb4d	2	Asmari Formation	5.332	23.03	Pourkaseb, Houshang et al.	The occurrence and origin of celestite in the Abolfares region, Iran: Implications for Sr-mineralization in Zagros fold belt (ZFB)	Journal of African Earth Sciences	134	2017	Elsevier	10.1016/j.jafrearsci.2017.06.010
56c1d9bbcf58f15c72c9075f	216	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	193	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557bfbc7e138239225f86664	697	Praire Evaporite Formation	385.3	397.5	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55c2a9cacf58f1a8110b8a1e	206	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
557f199ce13823bc80ba25a0	245	Rustler Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
558d0009e13823109f3edbbc	1226	Montgomery mention	0.4398	0.8678	Anderson, R. Ernest et al.	Geologic and hydrologic summary of salt domes in Gulf Coast region of Texas, Louisiana, Mississippi, and Alabama	Open-File Report		1973	United States Geological Survey	
550ab8aae138238460c4fe5e	185	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
55ad3126e13823763a8303a0	108	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56c1ea81cf58f15c72c908aa	327	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54e7c15ae138237cc9150ae2	114	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
557cd3cfe138239225f869e5	1183	Castile Formation	253.8	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56c1d8a6cf58f15c72c9073f	80	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
557cd3cfe138239225f869e5	3109	Minnelusa Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328ce138239d86855aad	314	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55f28e79cf58f16256a217ad	115	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
54bf26f8e13823023e43db6f	572	Hofra Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5734b312cf58f14dbc2c579f	1	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
57320459cf58f19ced0f7bc5	79	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5b6eb3c5cf58f13c68e2d5dc	53	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
55b30ea3e138231cbdd6cfcd	1761	Organic mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54e7c7dae138237cc9150b09	625	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2014.10.028
55b6d4bfe13823bd29ba7dc0	53	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
574c1c0bcf58f1957a2a36f7	224	Clover Hill Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5a2cf7f0cf58f19a331caf3c	3	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
559dbdc9e138230816dad971	2040	Las Vegas Formation	0.0117	2.58	Conrad, J.E.	Mineral summaries for Nevada; U.S. Bureau of Land Management wilderness study areas	Open-File Report		1990	United States Geological Survey	10.3133/ofr90638
56c1fcefcf58f15c72c90a17	480	Maha Sarakham Formation	65.5	145.5	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2714	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	1685	Blaine mention	268.51	275.2575	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
57321bc8cf58f1a0ac39199e	140	Ebhadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55af1c5ce13823763a830fe9	745	MInnelusa mention			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b78281e13823bd29ba8218	933	Salado mention	256.03	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5734b312cf58f14dbc2c579f	504	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
558e3447e13823109f3ee1ef	173	Castile Formation	253.8	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
54f96e27e138239936c6c797	68	Cardona Formation			Miralles, L et al.	3-D rock salt fabrics in a shear zone (Súria Anticline, South-Pyrenees)	Journal of Structural Geology	23	2001	Elsevier	10.1016/S0191-8141(00)00138-3
54b4328de138239d86855ceb	10	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54e865c7e138237cc9150d7f	380	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55ae0df7e13823763a830928	549	Magenta Dolomite	251.9	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1244	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	63	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5c4005801faed655488cf82c	1031	Matijevic mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
559c3f39e138230816dad2ff	511	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
56c1d9bbcf58f15c72c9075f	182	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55f49f72cf58f16256a225dc	52	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
55b7869fe13823bd29ba8231	2415	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58b8ce49cf58f12dec1f62bf	74	Na Cl Celestine Dolomite			Jensen, Gavin K.S.	Weyburn oilfield core assessment investigating cores from pre and post CO2 injection: Determining the impact of CO2 on the reservoir	International Journal of Greenhouse Gas Control	54	2016	Elsevier	10.1016/j.ijggc.2016.09.003
5682d639cf58f1479a0ab68d	3	Evaporite mention			HANDFORD, C. ROBERTSON	Sedimentology and evaporite genesis in a Holocene continental-sabkha playa basin-Bristol Dry Lake, California	Sedimentology	29	1982	Wiley-Blackwell	10.1111/j.1365-3091.1982.tb01721.x
5710e047cf58f16dc5c8824c	432	La Vid Group	397.5	416	Schneider, J. et al.	Fluid Evolution During Burial Diagenesis and Subsequent Orogenetic Uplift: The La Vid Group (Cantabrian Zone, Northern Spain)	Journal of Sedimentary Research	78	2008	Society for Sedimentary Geology	10.2110/jsr.2008.032
56834db7cf58f1479a0abca3	12	Gachsaran mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
55a0946ee1382381ff364540	109	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
57bee020cf58f13d88794bee	214	Windsor Group	318.1	359.2	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
55b7869fe13823bd29ba8231	772	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1034	Smackover mention	150.6	158.8535	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56830b14cf58f1479a0ab918	1608	Winnepegosis Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43288e138239d86854e95	56	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
5509217ee138238460c4f689	244	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56e353e7cf58f16de8a2e1bf	385	Minas Viejas Formation			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
57320459cf58f19ced0f7bc5	133	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
56a038b2cf58f1079fd4ba21	98	Edwards Group	99.6	145.5	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
5906dd0fcf58f15fea53aef7	323	Bluff mention	393.3	419.2	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
558fe155e13823109f3eec57	278	Fletcher Anhydrite Member	259	259.51	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
56c1d607cf58f15c72c9071a	373	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
54b43247e138239d86849b52	246	Chaunaca Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
558e672ce13823109f3ee322	334	Castile mention	259	259.51	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
55b7869fe13823bd29ba8231	1288	Salado Formation	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575019eacf58f1696f3ea50a	96	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
54e865c7e138237cc9150d7f	367	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
54e49f08e138237cc914fdcc	76	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
56c1ea81cf58f15c72c908aa	194	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b6d4bfe13823bd29ba7dc0	72	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579f1578cf58f1168e64ad7f	366	Tamarisk Member	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
55b7869fe13823bd29ba8231	2751	Madison Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c04652e1382389c54c3686	76	Graneros Shale	95.385	100.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54e8ae2de138237cc9150ec9	487	Pebble Bed	99.6	145.5	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
54c04e8fe1382389c54c36c6	42	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55b7869fe13823bd29ba8231	79	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c2e2adcf58f105aaed24f4	145	Asmari Formation	5.332	23.03	Mirnejad, H. et al.	Major, minor element chemistry and oxygen and hydrogen isotopic compositions of Marun oil-field brines, SW Iran: Source history and economic potential	Geological Journal	46	2011	Wiley	10.1002/gj.1226
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
58d0ba71cf58f16368daab02	123	Calcite Dolomite			Kister, Jacky et al.	Analyse Quantitative par Spectroscopie Infrarouge a Transformee de Fourier de la Partie Minerale de Charbons. Mise au Point et Application de la Technique	International Journal of Environmental Analytical Chemistry	22	1985	Taylor and Francis	10.1080/03067318508076428

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578aea2bcf58f13920dc7baa	19	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
56c1a95dcf58f15c72c903aa	477	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56c1d8a6cf58f15c72c9073f	391	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54b4328ae138239d86855525	188	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
57ec17eccf58f1ac335ac1b3	645	Burano Formation	237	251	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55ad3126e13823763a8303a0	163	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
58bf2d90cf58f1867eb10946	182	Illara Sandstone	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5a2dee30cf58f136bc551211	109	Werfen Fm	245	251	Martin, Silvana et al.	Siderite deposits in northern Italy: Early Permian to Early Triassic hydrothermalism in the Southern Alps	Lithos	284–285	2017	Elsevier	10.1016/j.lithos.2017.04.002
575c59dacf58f16e37942a6a	325	Rotliegend mention	251	299	Regenspurg, Simona et al.	Fluid-rock interactions in a geothermal Rotliegend/Permo-Carboniferous reservoir (North German Basin)	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2016.03.010
54b4327ee138239d86853337	57	Middle Member			Zhang, Xiying et al.	Origin of the late Cretaceous potash-bearing evaporites in the Vientiane Basin of Laos: δ11B evidence from borates	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2012.11.036
5ab66103cf58f143ea8f4c06	200	Selective Formation				Graphical Abstract: Angew. Chem. Int. Ed. 13/2015	Angewandte Chemie International Edition	54	2015	Wiley-Blackwell	10.1002/anie.201590016
58d05105cf58f13f39efd424	236	Belayim Formation	11.608	15.97	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b889bfe13823bd29ba8838	73	Todilto Limestone	161.2	175.6	Edited by Carter, Lorna M. H. et al.	USGS research on mineral resources, 1994; Part A, Program and abstracts	Circular		1994	United States Geological Survey	
55b7869fe13823bd29ba8231	1369	Rustler mention	253.97	256.0278	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5502e189e1382326932d7bd2	305	Dolostones Chert			Melezhik, Victor A. et al.	Extreme 13Ccarb enrichment in ca. 2.0 Ga magnesite–stromatolite–dolomite–`red beds' association in a global context: a case for the world-wide signal enhanced by a local environment	Earth-Science Reviews	1-2	1999	Elsevier	10.1016/S0012-8252(99)00044-6
5c2fe60d1faed655488b6bad	251	Kumugeliemu Formation	23.03	65.5	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5c2bea2e1faed655488b221b	118	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
55b30ea3e138231cbdd6cfcd	2125	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
558d0009e13823109f3edbbc	1734	Claiborne Group	33.9	55.8	Anderson, R. Ernest et al.	Geologic and hydrologic summary of salt domes in Gulf Coast region of Texas, Louisiana, Mississippi, and Alabama	Open-File Report		1973	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	975	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5734b312cf58f14dbc2c579f	101	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
557cd3cfe138239225f869e5	1667	Clear Fork Group	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	1029	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
56834db7cf58f1479a0abca3	30	Asmari Formation	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1222	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	372	Cowden Anhydrite mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
558df7d7e13823109f3ee082	676	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5733f2e2cf58f12e47457e00	115	Brazer Dolomite	318.1	359.2	Joyce M. Budai et al.	Burial Dedolomite in the Mississippian Madison Limestone, Wyoming and Utah Thrust Belt	SEPM Journal of Sedimentary Research	Vol. 54	1984	Society for Sedimentary Geology	10.1306/212f83ff-2b24-11d7-8648000102c1865d
570fe41dcf58f114a862267f	64	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
54c060fbe1382389c54c3757	343	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5c34671e1faed655488bf01a	53	Basalt Pyrite Dolomite			Stoffers, P. and Ross, D.A.	Sedimentary History of the Red Sea	Initial Reports of the Deep Sea Drilling Project	23		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.23.123.1974
57126f9fcf58f142fd277238	94	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
55b7869fe13823bd29ba8231	112	Supai Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
574356b8cf58f1276e6f6439	13	Zhuanqiao Formation	99.6	145.5	XIONG, Xin et al.	Genesis and Prospecting of the Uranium and Thorium Mineralization Indicated from Deep Drilling ZK01, Luzong Basin	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12381_31
55b7869fe13823bd29ba8231	1884	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328be138239d8685567e	465	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
574f9a2fcf58f13bebe8af72	551	Prairie Evaporite Formation	385.3	397.5	McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
55b7869fe13823bd29ba8231	1423	Stone Corral Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1fcefcf58f15c72c90a17	511	Khorat Group	65.5	251	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
55b7869fe13823bd29ba8231	378	Wichita Group	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e272cf58f1479a0ab716	390	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b6d6a7e13823bd29ba7dcc	7722	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b2bc12e138231cbdd6ce12	2668	Khorat mention	33.9	237	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b67b0be1382373b63b7842	1632	Green River mention	34.853	58.4		List of referees, list of contents, subject index and author index vol. 51, 1987	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90142-6
56831341cf58f1479a0ab983	134	Gypsum mention			SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55ad3126e13823763a8303a0	124	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56c1d9bbcf58f15c72c9075f	131	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1d607cf58f15c72c9071a	222	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
558fe155e13823109f3eec57	272	Castile Formation	253.8	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	388	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
57de579ecf58f11956b3e520	146	Goethite Quartz Dolomite			Hunter, Hazel M.A. et al.	Examining Ni-laterite leach mineralogy & chemistry – a holistic multi-scale approach	Minerals Engineering		2013	Elsevier	10.1016/j.mineng.2013.05.002
55b31649e138231cbdd6cff7	1602	Anhydrite Dolomite				Geological Survey research 1967, Chapter C	Professional Paper		1967	United States Geological Survey	10.3133/pp575C

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2a9cacf58f1a8110b8a1e	77	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
579f1578cf58f1168e64ad7f	288	Tamarisk mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	418	Preuss Formation	163.59	163.97	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1152	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55a82328e13823757cc7049a	1006	Big Snowy Group	326.15	335	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
57f555decf58f17e0fbf38b4	573	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
54df4a35e138238a47f96f37	183	Cherty mention			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
54fc8912e138239936c6dc7a	161	Castile Formation	253.8	260.4	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
55b7869fe13823bd29ba8231	1546	Logan Gulch mention	366.8	370.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ea81cf58f15c72c908aa	332	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b8b7f4e13823bd29ba8982	976	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55b7869fe13823bd29ba8231	2076	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c6917cf58f171f87e5f3e	57	USCS Group			Aldaood, Abdulrahman et al.	Effect of water during freeze–thaw cycles on the performance and durability of lime-treated gypseous soil	Cold Regions Science and Technology		2016	Elsevier	10.1016/j.coldregions.2015.12.008
5590c038e13823109f3ef1c7	77	Tamarisk Member	251.9	273.01	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
54e64c66e138237cc91504d3	31	Castile Formation	253.8	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
58c8ed8ccf58f1a71217fb6b	78	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
559c3f39e138230816dad2ff	193	Tamarisk mention	251.9	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55b7869fe13823bd29ba8231	1884	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54e97acfe138237cc915120b	29	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
557cd3cfe138239225f869e5	3246	Blaine mention	268.51	275.2575	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
579aa26fcf58f10fc4765e10	130	Prairie Formation	359.2	416	Grasby, Stephen E. and Chen, Zhouheng	Subglacial recharge into the Western Canada Sedimentary Basin—Impact of Pleistocene glaciation on basin hydrodynamics	Geol Soc America Bull	117	2005	Geological Society of America	10.1130/b25571.1
54be7fc1e13823299564b0b3	192	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
5c19917d1faed655488915e2	236	Evaporite mention			Hsu, K.J. et al.	History of the Mediterranean Salinity Crisis	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.155.1978
54b4325ce138239d8684d4cc	178	Gypsum mention			Londeix, Laurent et al.	Messinian palaeoenvironments and hydrology in Sicily (Italy): The dinoflagellate cyst record	Geobios	40	2007	Elsevier	10.1016/j.geobios.2006.12.001
5ce2f9b20b45c76caf8ae21e	321	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5736d8aecf58f1a5bde13e12	79	Magnesite Quartz Dolomite			Jordan, P. G. et al.	Gypsum-anhydrite differentiation by SEM using the back-scattered electron-signal	Journal of Sedimentary Research	61	1991	Society for Sedimentary Geology	10.1306/d426777b-2b26-11d7-8648000102c1865d
5b526230cf58f1a50a464a8d	172	SYS Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
55b7869fe13823bd29ba8231	1392	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd3cfe138239225f869e5	321	Werner Formation	161.5	168.2	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5592a4a8e138236ee22180c0	83	Calcite Dolomite			Boyle, R.W. and Jonasson, I.R.	The geochemistry of antimony and its use as an indicator element in geochemical prospecting	Journal of Geochemical Exploration	20	1984	Elsevier	10.1016/0375-6742(84)90071-2
5a850dffcf58f13f065e41c5	61	Sedom Fm	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
5590c038e13823109f3ef1c7	61	Delaware Mountain Group	260.4	270.6	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
54be1b30e138233c8bc4f9d7	200	Nisku Formation	359.2	416	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54df4a35e138238a47f96f37	560	Burano Formation	237	251	Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
558c4ae2e13823109f3ed7ce	2767	Belden mention	307.5	323.2	U.S. Geological Survey	Geological Survey research 1968, Chapter C	Professional Paper		1968	United States Geological Survey	10.3133/pp600C
55b7869fe13823bd29ba8231	66	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	1313	Castile mention	259	259.51	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4324fe138239d8684b069	195	Heidberg Member			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
55b6d4bfe13823bd29ba7dc0	601	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
570fe41dcf58f114a862267f	2	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
5732032ecf58f19cbcbc550f	33	Vaca Triste Sandstone	251.9	273.01	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	258	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
598c914bcf58f17206d6eb4d	46	Asmari Formation	5.332	23.03	Pourkaseb, Houshang et al.	The occurrence and origin of celestite in the Abolfares region, Iran: Implications for Sr-mineralization in Zagros fold belt (ZFB)	Journal of African Earth Sciences	134	2017	Elsevier	10.1016/j.jafrearsci.2017.06.010
55b7869fe13823bd29ba8231	414	Goose Egg mention	247.2	282	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
570fe41dcf58f114a862267f	52	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7869fe13823bd29ba8231	69	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	564	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55917250e13823109f3ef5b1	1639	Khorat Group	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
57131acecf58f17d8d881dcb	82	Belayim Formation	11.608	15.97	Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
54b4328de138239d86855ceb	249	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55917250e13823109f3ef5b1	1622	Loei mention			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
54b4328de138239d86855c34	532	Cßayirhan mention			Orb, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54b4327ce138239d86852d2c	202	Ariri Formation	109.53	115.1	Jackson, Martin P.A et al.	Role of subaerial volcanic rocks and mantle plumes in creation of South Atlantic margins: implications for salt tectonics and source rocks	Marine and Petroleum Geology	17	2000	Elsevier	10.1016/S0264-8172(00)00006-4
558df7d7e13823109f3ee082	1144	Evaporite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	53	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557cd3cfe138239225f869e5	2627	Wellington Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	928	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1d9bbcf58f15c72c9075f	12	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1ea81cf58f15c72c908aa	294	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
559f1ba4e138234d98ad9f73	41	Rustler mention	253.97	256.0278	Herczeg, Andrew L. et al.	Uranium and radium mobility in groundwaters and brines within the delaware basin, Southeastern New Mexico, U.S.A.	Chemical Geology: Isotope Geoscience section	72	1988	Elsevier	10.1016/0168-9622(88)90066-8
57beed05cf58f1419cfbd6b3	135	Honggou Formation			Zhang, Jin et al.	Tectonics of the Xining Basin in NW China and its implications for the evolution of the NE Qinghai-Tibetan Plateau	Basin Research	28	2016	Wiley	10.1111/bre.12104
558d0009e13823109f3edbbc	1776	Vicksburg Group	27.82	33.9	Anderson, R. Ernest et al.	Geologic and hydrologic summary of salt domes in Gulf Coast region of Texas, Louisiana, Mississippi, and Alabama	Open-File Report		1973	United States Geological Survey	
55ad3126e13823763a8303a0	133	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5d150bd20b45c76caf904e78	66	Otto Fjord Formation	299	359.2	Harrington, Elise M. et al.	A Polarimetric SAR and Multispectral Remote Sensing Approach for Mapping Salt Diapirs: Axel Heiberg Island, NU, Canada	Canadian Journal of Remote Sensing	45	2019	Informa UK Limited	10.1080/07038992.2019.1610656
55b7869fe13823bd29ba8231	2003	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57de579ecf58f11956b3e520	146	Goethite Quartz Dolomite			Hunter, Hazel M.A. et al.	Examining Ni-laterite leach mineralogy & chemistry – a holistic multi-scale approach	Minerals Engineering		2013	Elsevier	10.1016/j.mineng.2013.05.002
56c1d607cf58f15c72c9071a	150	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
598c914bcf58f17206d6eb4d	123	Asmari mention	5.332	23.03	Pourkaseb, Houshang et al.	The occurrence and origin of celestite in the Abolfares region, Iran: Implications for Sr-mineralization in Zagros fold belt (ZFB)	Journal of African Earth Sciences	134	2017	Elsevier	10.1016/j.jafrearsci.2017.06.010
54e7c15ae138237cc9150ae2	67	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5a2d21eecf58f1a9c73d757e	273	Shuaiba Formation			Vandeginste, Veerle et al.	Diagenesis in salt dome roof strata: Barite - calcite assemblage in Jebel Madar, Oman	Marine and Petroleum Geology	86	2017	Elsevier	10.1016/j.marpetgeo.2017.06.008
55b7869fe13823bd29ba8231	611	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43271e138239d86850ff4	212	Bilara Group	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
55b6d4bfe13823bd29ba7dc0	1188	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5ce2f9b20b45c76caf8ae21e	498	Ballycultra Formation	346.7	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b43288e138239d86854e95	112	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
55baa3b5e1382373b63b89e7	431	Plio-Pleistocene Sedom Fm			Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1ea81cf58f15c72c908aa	217	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
558d0009e13823109f3edbbc	1681	Wilcox Group	55.8	65.5	Anderson, R. Ernest et al.	Geologic and hydrologic summary of salt domes in Gulf Coast region of Texas, Louisiana, Mississippi, and Alabama	Open-File Report		1973	United States Geological Survey	
54b4324fe138239d8684b069	120	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
54e97acfe138237cc915120b	113	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55a8145ce13823757cc70446	892	Low SP Sandstone			Bain, G. L. and Brown, C. E.	Evaluation of the Durham Triassic basin of North Carolina and techniques used to characterize its waste-storage potential	Open-File Report		1981	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	154	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
56c1ea81cf58f15c72c908aa	336	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57321bc8cf58f1a0ac39199e	103	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
56faac60cf58f15186bf46cd	264	Calcite mention			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
55b6d4bfe13823bd29ba7dc0	554	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b6d4bfe13823bd29ba7dc0	1371	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1918	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a69d57e13823757cc6fac4	276	Anhydrite Dolomite			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
55b7869fe13823bd29ba8231	623	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43288e138239d86854e95	104	Fats mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	40	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1d9bbcf58f15c72c9075f	182	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b8b7f4e13823bd29ba8982	971	Castile mention	259	259.51	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55541d92e138239301770a0e	226	Burns mention	23.03	33.9	West, Michael D. et al.	The geology of Australian Mars analogue sites	Planetary and Space Science	58	2010	Elsevier	10.1016/j.pss.2009.06.012
5508f1fbe138238460c4f526	89	Glen Rose Formation	65.5	145.5	Dworkin, S.I. and Land, L.S.	The origin of aqueous sulfate in Frio pore fluids and its implication for the origin of oil field brines	Applied Geochemistry	11	1996	Elsevier	10.1016/0883-2927(96)00006-6
578fb2c8cf58f1bdcd2df236	195	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55a0946ee1382381ff364540	128	Rustler Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
57f66ba7cf58f11e2b44f8c5	43	Sahara Formation	419.2	443.8	Kovalevych, Volodymyr M. et al.	Composition of brines in halite-hosted fluid inclusions in the Upper Ordovician, Canning Basin, Western Australia: new data on seawater chemistry	Terra Nova	18	2006	Wiley	10.1111/j.1365-3121.2006.00668.x
55b7869fe13823bd29ba8231	1027	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572ecdb4cf58f1177819e19e	358	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	80	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2591	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e272cf58f1479a0ab716	179	Salado Formation	251	260.4	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56c1ea81cf58f15c72c908aa	125	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
558eb5d6e13823109f3ee517	351	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b7869fe13823bd29ba8231	1546	Logan Gulch mention	366.8	370.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2463	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43271e138239d86850ff4	178	Bilara mention	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1470	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e49f08e138237cc914fdcc	76	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
55b30ea3e138231cbdd6cfcd	1103	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
557bfbc7e138239225f86664	402	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
58bf2d90cf58f1867eb10946	240	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5503421ae1382326932d7e6d	959	Castile Fm	253.8	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56c1ca03cf58f15c72c90620	144	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b30ea3e138231cbdd6cfcd	1392	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
558eb5d6e13823109f3ee517	265	Salado mention	256.03	262.2168	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
557f199ce13823bc80ba25a0	847	Cowden Anhydrite Member	251.9	273.01	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
572cf1fccf58f13accaa0e61	271	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c2fd7d01faed655488b6a28	48	Bulunkuole Group	488.3	542	Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
55a82328e13823757cc7049a	1108	Opeche Formation	273.01	283.5	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55b7869fe13823bd29ba8231	572	Ruff Formation	419.2	427.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	281	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55a0946ee1382381ff364540	99	Castile mention	259	259.51	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fda65e13823109f3eec30	1050	Belden Formation	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b78281e13823bd29ba8218	885	Artesia mention	259.51	273.01	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
558df7d7e13823109f3ee082	1509	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	2701	Day Creek Dolomite	261.19	264.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4327ce138239d86852f8a	10	Rotliegend Sandstone	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
557cd3cfe138239225f869e5	310	Morehouse Formation	261.19	343.5	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5509217ee138238460c4f689	177	Castile Formation	253.8	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b6d4bfe13823bd29ba7dc0	475	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558d0009e13823109f3edbbc	1671	Claiborne mention	37.71	50.5333	Anderson, R. Ernest et al.	Geologic and hydrologic summary of salt domes in Gulf Coast region of Texas, Louisiana, Mississippi, and Alabama	Open-File Report		1973	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1192	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57516912cf58f129ff61ef40	46	Watering Brook Formation			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
55af1c5ce13823763a830fe9	554	Tansill Formation	260.4	270.6	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54b4324fe138239d8684b069	120	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
56aaa9f0cf58f19442532ee1	147	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
55b6d4bfe13823bd29ba7dc0	182	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55baa3b5e1382373b63b89e7	431	Plio-Pleistocene Sedom Fm			Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55ad3126e13823763a8303a0	98	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
550b6ce8e1382369a6f9311e	186	Cadjebut Formation	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
575019eacf58f1696f3ea50a	278	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
54e49f08e138237cc914fdcc	102	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
559c3f39e138230816dad2ff	155	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5503421ae1382326932d7e6d	323	Sijes Formation	1.806	65.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b7869fe13823bd29ba8231	973	Werner Formation	161.5	168.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57ebec8acf58f19da2c7bc12	272	Jiushidaoban Formation	260.4	270.6	LIU, YingChao et al.	Formation of the Dongmozhazhua Pb-Zn Deposit in the Thrust-Fold Setting of the Tibetan Plateau, China: Evidence from Fluid Inclusion and Stable Isotope Data	Resource Geology	61	2011	Wiley	10.1111/j.1751-3928.2011.00174.x
54b4327de138239d868530d9	39	Maha Sarakham Formation	65.5	145.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
550915e7e138238460c4f632	396	Salina mention	419.68	429.4	Wilson, T.P. and Long, D.T.	Geochemistry and isotope chemistry of CaNaCl brines in Silurian strata, Michigan Basin, U.S.A.	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90079-V
55b7869fe13823bd29ba8231	2190	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	123	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b6d4bfe13823bd29ba7dc0	182	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b8b7f4e13823bd29ba8982	976	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	179	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
590769c6cf58f191e58edf9d	40	Blaine Formation	251	299	Smith, Arthur E. et al.	Oklahoma: Mineral Locality Index	Rocks & Minerals	72	1997	Taylor and Francis	10.1080/00357529709605050
55a7c745e13823757cc70251	133	Rustler mention	253.97	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5a21053ecf58f18a3170d1ed	122	Anhydrite Dolomite			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
56c1ea81cf58f15c72c908aa	394	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5598a6fee1382390cc640ebc	79	Krompachy Group			Radvanec, Martin et al.	Siderite mineralization of the Gemericum superunit (Western Carpathians, Slovakia): review and a revised genetic model	Ore Geology Reviews	24	2004	Elsevier	10.1016/j.oregeorev.2003.07.004
550915e7e138238460c4f632	290	Salina mention	419.68	429.4	Wilson, T.P. and Long, D.T.	Geochemistry and isotope chemistry of CaNaCl brines in Silurian strata, Michigan Basin, U.S.A.	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90079-V
584aa178cf58f19c3c0fb294	109	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328de138239d86855ceb	210	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
56c1d8a6cf58f15c72c9073f	130	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54bf7e39e13823023e43de1a	145	Bellerophon mention	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
55b690a7e138238e2d05483f	3494	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55973e40e1382390cc6406e7	43	Otto Fiord Formation	299	359.2	Grasby, Stephen E. et al.	Biogeochemical sulphur cycle in an extreme environment—lifebeneath a high arctic glacier, Nunavut, Canada	Journal of Geochemical Exploration		2003	Elsevier	10.1016/S0375-6742(03)00026-8
55ae0df7e13823763a830928	503	Artesia Group	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5833ce7ecf58f1110fa956dd	191	Stratigraphic Depth Calcite Dolomite			Schütt, Brigitta	Holocene paleohydrology of playa lakes in northern and central Spain: a reconstruction based on the mineral composition of lacustrine sediments	Quaternary International		2000	Elsevier	10.1016/S1040-6182(00)00062-8
57484ab3cf58f13effae7ac5	261	Mabou Group	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
574c1c0bcf58f1957a2a36f7	224	Clover Hill Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
55b73032e13823bd29ba8000	379	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5c4005801faed655488cf82c	864	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
575019eacf58f1696f3ea50a	105	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55b7869fe13823bd29ba8231	580	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58bfe48bcf58f113393dbc03	7	Calcite mention			Gil-Márquez, J.M. et al.	Hydrological and geochemical processes constraining groundwater salinity in wetland areas related to evaporitic (karst) systems. A case study from Southern Spain	Journal of Hydrology		2017	Elsevier	10.1016/j.jhydrol.2016.11.062
574f1369cf58f10afd57189e	102	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
56c1a95dcf58f15c72c903aa	395	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558df7d7e13823109f3ee082	1008	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	569	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58b7df47cf58f18af629a04c	108	Armancies Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
55b6d4bfe13823bd29ba7dc0	475	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4327be138239d86852bce	334	Rotliegend Group	251	299	Verweij, J.M and Simmelink, H.J	Geodynamic and hydrodynamic evolution of the Broad Fourteens Basin (The Netherlands) in relation to its petroleum systems	Marine and Petroleum Geology	19	2002	Elsevier	10.1016/S0264-8172(02)00021-1
54c04e8fe1382389c54c36c6	42	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
558fda65e13823109f3eec30	1602	Goose Egg Formation	199.6	251	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55765b42e138234790a011e4	303	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b7869fe13823bd29ba8231	277	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57484ab3cf58f13effae7ac5	80	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
55765d21e138234790a011ee	144	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
57c19a92cf58f16ab04df2ec	63	Lucas Formation	385.3	397.5	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
55185d29e1382394b500db56	40	Oligo-Miocene Zaragoza Gypsum Formation			Galve, J.P. et al.	Sinkholes in the salt-bearing evaporite karst of the Ebro River valley upstream of Zaragoza city (NE Spain) Geomorphological mapping and analysis as a basis for risk management	Geomorphology	108	2009	Elsevier	10.1016/j.geomorph.2008.12.018
55b7869fe13823bd29ba8231	2190	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43282e138239d86853f32	73	Rotliegend mention	251	299	Gluyas, Jon and Leonard, Andy	Diagenesis of the Rotliegend sandstone: the answer ain't blowin' in the wind	Marine and Petroleum Geology	12	1995	Elsevier	10.1016/0264-8172(95)91504-I
5733f2e2cf58f12e47457e00	115	Brazer Dolomite	318.1	359.2	Joyce M. Budai et al.	Burial Dedolomite in the Mississippian Madison Limestone, Wyoming and Utah Thrust Belt	SEPM Journal of Sedimentary Research	Vol. 54	1984	Society for Sedimentary Geology	10.1306/212f83ff-2b24-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	2069	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	37	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b64a4de1382314227d0039	25	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
54be7fc1e13823299564b0b3	232	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
578b8ab6cf58f1645f54f0c6	49	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1ea81cf58f15c72c908aa	194	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55ae4f4be13823763a830ada	293	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55b39c73e138231cbdd6d2c1	936	Hermosa mention	298.9	312	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
559d4d6ee138230816dad784	60	Castile Formation	253.8	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
55a0946ee1382381ff364540	257	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5906cf0dcf58f15ad9553b8a	53	Lockport Group	416	443.7	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c38a36cf58f17493f84562	18	Stuttgart Formation	199.6	228	Fischer, Sebastian et al.	Kinetic modeling of laboratory CO 2 -exposure experiments performed on whole rock reservoir samples	Greenhouse Gases: Science and Technology	4	2014	Wiley-Blackwell	10.1002/ghg.1415
55b7869fe13823bd29ba8231	604	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1884	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	986	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	408	Minnelusa Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	188	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550912cce138238460c4f61b	60	Lucas Formation	385.3	397.5	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
55b6d4bfe13823bd29ba7dc0	908	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5731ac74cf58f18e0ffaff50	391	Prairie Evaporite Formation	385.3	397.5	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
56c1d8a6cf58f15c72c9073f	388	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
559d6e67e138230816dad803	993	Nugget Sandstone	145.5	199.6	Roehler, Henry W. et al.	Summary report of the geology, mineral resources, engineering geology, and environmental geochemistry of the Sweetwater-Kemmerer area, Wyoming: Part A, Geology and mineral resources	Open-File Report		1977	United States Geological Survey	
55ad3126e13823763a8303a0	294	Castile mention	259	259.51	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54e7c15ae138237cc9150ae2	346	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5b6d3f1ecf58f193bb367046	6	Magnesian Limestone	251	299	Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
577b5e79cf58f13907e5e76d	28	Prairie Formation	359.2	416	De MILLE, G. et al.	Collapse Structures Related to Evaporites of the Prairie Formation, Saskatchewan	Geol Soc America Bull	75	1964	Geological Society of America	10.1130/0016-7606(1964)75[307:csrteo]2.0.co;2
572cf900cf58f13d86a1bdc8	266	Maha Sarakham mention	33.9	100.5	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
54be7fc1e13823299564b0b3	184	Castile mention	259	259.51	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b7869fe13823bd29ba8231	2487	Medicine Lodge Gypsum Member	273.01	282	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ae138239d8685557f	261	Ford Formation	66	100.5	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
572ecdb4cf58f1177819e19e	269	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
56c1ca03cf58f15c72c90620	105	Quillagua mention	5.332	11.608	Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54ddbfdae138238a47f968be	71	Mavqi'im Formation			Vengosh,, A. and Rosenthal, E.	Saline groundwater in Israel: its bearing on the water crisis in the country	Journal of Hydrology	156	1994	Elsevier	10.1016/0022-1694(94)90087-6
54b4328de138239d86855c34	501	Gypsiferous Claystone Member			Orț, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
557f199ce13823bc80ba25a0	789	Castile Formation	253.8	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54bf7e39e13823023e43de1a	226	Reichenhall Formation	199.6	251	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b4328ce138239d86855aad	96	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5b6eb3c5cf58f13c68e2d5dc	53	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
54b43270e138239d86850df6	79	Schisto-Calcaire Subgroup			Préat, Alain et al.	A peritidal evaporite environment in the Neoproterozoic of South Gabon (Schisto-Calcaire Subgroup, Nyanga Basin)	Precambrian Research	177	2010	Elsevier	10.1016/j.precamres.2009.12.003
54beddace13823023e43d931	209	Furnace Creek Formation	1.806	5.332	Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
55a7c745e13823757cc70251	114	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	2383	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54be90c7e13823299564b137	479	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a7c745e13823757cc70251	40	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
58d05f04cf58f143d83df298	745	Zechstein mention	251.9	273.01	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
557f199ce13823bc80ba25a0	1978	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55af1c5ce13823763a830fe9	745	Mlnnelusa mention			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b690a7e138238e2d05483f	3413	Siltstone Dolomite	121.4	122.4925	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
54e0a4c9e138238a47f974e4	861	Prairie Evaporite Formation	385.3	397.5	Nachshon, Uri et al.	Sulfate salt dynamics in the glaciated plains of North America	Journal of Hydrology		2013	Elsevier	10.1016/j.jhydrol.2013.07.001
578b8ab6cf58f1645f54f0c6	61	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b73032e13823bd29ba8000	386	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	9637	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	321	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54de0d40e138238a47f96a11	30	Jialingjiang mention	245	251	Zhou, Xun and Li, Cijun	Hydrogeochemistry of deep formation brines in the central Sichuan Basin, China	Journal of Hydrology	138	1992	Elsevier	10.1016/0022-1694(92)90152-L
55b7869fe13823bd29ba8231	1550	Logan Creek Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
558ff726e13823109f3eecd8	742	Description mention			Madsen, Beth M.	Core logs of three test holes in Cenozoic lake deposits near Hector, California	Bulletin		1970	United States Geological Survey	10.3133/b1296
5a0493edcf58f1b96402aae7	144	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55765b42e138234790a011e4	71	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
56c1d9bbcf58f15c72c9075f	121	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54b4328ae138239d8685557f	261	Ford Formation	66	100.5	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
5579c265e138231c7c52c464	168	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54b4328de138239d86855dfa	183	Salwa Member			Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55b7869fe13823bd29ba8231	1447	Goose Egg Formation	199.6	251	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5683349ccf58f1479a0abb4e	96	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5509217ee138238460c4f689	179	Castile Formation	253.8	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55b83d31e13823bd29ba865c	4835	Red mention	324.46	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
558fe155e13823109f3eec57	257	Lamar Limestone	259.51	262.21	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557b1abde138239225f86255	150	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54b4328de138239d86855c34	377	Belayim Formation	11.608	15.97	Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55b6d4bfe13823bd29ba7dc0	190	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
557f199ce13823bc80ba25a0	1794	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
57c19e14cf58f16bf61df64c	171	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
56c1d9bbcf58f15c72c9075f	195	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
578fb2c8cf58f1bdcd2df236	412	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
558ecdcbe13823109f3ee5af	297	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54fae770e138239936c6d10b	203	Castile Formation	253.8	260.4	Raab, M. and Spiro, B.	Sulfur isotopic variations during seawater evaporation with fractional crystallization	Chemical Geology: Isotope Geoscience section	86	1991	Elsevier	10.1016/0168-9622(91)90014-N
5c4005801faed655488cf82c	1080	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
58bb7f59cf58f1878850d92a	260	Anhydrite mention			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
5c4005801faed655488cf82c	642	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
56c1ca03cf58f15c72c90620	144	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
557f199ce13823bc80ba25a0	1794	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5712f1aacf58f16fb4cc921a	80	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5b6d936dcf58f1a92c2d33b5	129	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
5c2bea2e1faed655488b221b	6	Nugget Formation	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
558ec3e3e13823109f3ee570	105	Rustler Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
54c04e8fe1382389c54c36c6	42	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
54b43270e138239d86850db4	283	Schisto-Calcaire Subgroup			Frimmel, Hartwig E.	On the reliability of stable carbon isotopes for Neoproterozoic chemostratigraphic correlation	Precambrian Research	182	2010	Elsevier	10.1016/j.precamres.2010.01.003
578b8ab6cf58f1645f54f0c6	99	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
572cf900cf58f13d86a1bdc8	198	Rustler mention	253.97	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
56c1d9bbcf58f15c72c9075f	52	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577db7abcf58f14497044d46	120	Underlying Formation			BORCHERT, HERMANN	Principles of Oceanic Salt Deposition and Metamorphism	Geol Soc America Bull	80	1969	Geological Society of America	10.1130/0016-7606(1969)80[821:poosda]2.0.co;2
56834db7cf58f1479a0abca3	260	Gachsaran mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
54e2f6d3e138237cc914f6d6	24	Accessories Dolomite			Popp, T. and Kern, H.	Thermal dehydration reactions characterised by combined measurements of electrical conductivity and elastic wave velocities	Earth and Planetary Science Letters	1-2	1993	Elsevier	10.1016/0012-821X(93)90022-2
57320459cf58f19ced0f7bc5	77	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b39c73e138231cbdd6d2c1	968	Paradox Formation	299	318.1	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
575019eacf58f1696f3ea50a	167	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
5732d749cf58f1be482cdc3e	539	Prairie Evaporite Formation	385.3	397.5	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	2468	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	286	Tamarisk mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	2594	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
557cd3cfe138239225f869e5	4050	Cedar Mesa Member	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56c1c976cf58f15c72c9061b	246	Groden Formation	251	299	SPOTL, CHRISTOPH and BURNS, STEPHEN J.	Magnesite diagenesis in redbeds: a case study from the Permian of the Northern Calcareous Alps (Tyrol, Austria)	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb02010.x
55b7869fe13823bd29ba8231	2173	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	832	Capitan Limestone	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5a21053ecf58f18a3170d1ed	241	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
58bf2d90cf58f1867eb10946	231	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
58d03bf3cf58f138516d1200	419	Maha Sarakham mention	33.9	100.5	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
54d855ffe138238471e80284	427	Castile Formation	253.8	260.4	Schijf, Johan	Alkali elements (Na, K, Rb) and alkaline earth elements (Mg, Ca, Sr, Ba) in the anoxic brine of Orca Basin, northern Gulf of Mexico	Chemical Geology	243	2007	Elsevier	10.1016/j.chemgeo.2007.06.011
5c31d1fe1faed655488ba1bd	139	Mantur Formation			Simonov, O.N. et al.	The source of sulfur in sulfide deposits in the Siberian Platform traps (from isotope data)	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.07.015
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1d9bbcf58f15c72c9075f	122	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
57bedb9ccf58f13bf01999e9	2	Paradox Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55a43da1e13823757cc6f19a	261	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1119	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
578fb2c8cf58f1bdcd2df236	81	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
558df7d7e13823109f3ee082	2363	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
57a43018cf58f11204e17fe0	25	Lake Inflow Gypsum Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
558fda65e13823109f3eec30	1126	Paradox Member	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
5590aba6e13823109f3ef147	29	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
557f199ce13823bc80ba25a0	1763	Rustler Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b7869fe13823bd29ba8231	1198	Stone Corral Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae9887e13823763a830cad	107	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
572ee8a5cf58f11bb5bc1a43	295	Yates Formation	251	299	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
54b43281e138239d86853bfd	154	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b6d4bfe13823bd29ba7dc0	60	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
572cf1fccf58f13accaa0e61	244	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b43281e138239d86853bfd	160	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
5597c097e1382390cc6409b0	143	Minerals Dolomite			Bauerek, Arkadiusz et al.	Chemical composition of surface runoff from flotation wastes of Zn–Pb ore formation of the Mississippi Valley-type, Olkusz, Southern Poland	Journal of Geochemical Exploration		2013	Elsevier	10.1016/j.gexplo.2013.05.002
54b4328de138239d86855ceb	74	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
550995fee138238460c4f997	33	Castile Formation	253.8	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035
557cd3cfe138239225f869e5	1312	Castile mention	259	259.51	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d4bfe13823bd29ba7dc0	451	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
558df7d7e13823109f3ee082	370	Castile Formation	253.8	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56830b14cf58f1479a0ab918	69	Gessoso Solfifera mention	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
56833ddfcf58f1479a0abbcc	129	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
56833ddfcf58f1479a0abbcc	329	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
58d05105cf58f13f39efd424	428	Pillara Formation			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
570fe41dcf58f114a862267f	2	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5ce2f9b20b45c76caf8ae21e	148	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b64a4de1382314227d0039	4	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b6d4bfe13823bd29ba7dc0	1245	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4327fe138239d868537c7	306	Mo mention			Hezarkhani, Ardeshir	Hydrothermal evolution of the Sar-Cheshmeh porphyry Cu–Mo deposit, Iran: Evidence from fluid inclusions	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.11.003
55b7869fe13823bd29ba8231	2766	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a39ee95cf58f1314cf12808	220	Lisan Formation	0.0114	0.126	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
55a7c745e13823757cc70251	103	Rustler mention	253.97	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
558df7d7e13823109f3ee082	345	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b43281e138239d86853bfd	3	Khok Kruat Formation	65.5	251	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b7869fe13823bd29ba8231	1443	Goose Egg Formation	199.6	251	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a21053ecf58f18a3170d1ed	231	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
54e97acfe138237cc915120b	29	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b7869fe13823bd29ba8231	2055	Pequop mention	276.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57a43018cf58f11204e17fe0	868	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b4328de138239d86855ceb	245	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
57c19a92cf58f16ab04df2ec	65	Lucas Formation	385.3	397.5	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
584aa178cf58f19c3c0fb294	156	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b7869fe13823bd29ba8231	1927	Phoenix Basin-Luke Salt Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	7056	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5733004ccf58f1066ffdaeaa	207	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
58bb7f59cf58f1878850d92a	266	Red River Formation	443.7	488.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
55b7869fe13823bd29ba8231	46	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5590aba6e13823109f3ef147	149	Description Shale			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
59080b6ccf58f111237d82af	71	Glen Rose mention	100.5	113	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.99264 63
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55c04787cf58f16e99a3746f	231	Green River Formation	33.9	55.8	Tuttle, Michele L. and Goldhaber, Martin B.	Sedimentary sulfur geochemistry of the Paleogene Green River Formation, western USA: Implications for interpreting depositional and diagenetic processes in saline alkaline lakes	Geochimica et Cosmochimica Acta	57	1993	Elsevier	10.1016/0016-7037(93)90291-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	600	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1100	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b77fd5e1382373b63b7cce	223	Buckner Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
54b4328de138239d86855c34	774	Belayim Formation	11.608	15.97	Orb , Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54b43271e138239d86850ff4	78	Bilara Group	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
5c2fe60d1faed655488b6bad	213	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b7869fe13823bd29ba8231	1947	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a82328e13823757cc7049a	952	Mission Canyon mention	332.35	353.35	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
5733004ccf58f1066ffdaeaa	2	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
584aa178cf58f19c3c0fb294	156	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
58d05f04cf58f143d83df298	375	Carrols Corner Formation			Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
54e49f08e138237cc914fdcc	102	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54b4327fe138239d86853736	459	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
55b83d31e13823bd29ba865c	8362	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	1602	Paradox mention	306	319.714	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	51	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1103	McKnight Formation	103	104.25	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324de138239d8684aa17	94	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55c0d379cf58f16e99a378b9	77	Hutchinson Salt Member	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
557cd3cfe138239225f869e5	2595	Minnekahta Limestone	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
565df1c6cf58f148c57eb7bf	177	Mullite Hematite Magnetite Dolomite			Shreya, Neha et al.	Multi-technique study of fly ash from the Bokaro and Jharia coalfields (Jharkhand state, India): A contribution to its use as a geoliner	International Journal of Coal Geology	152	2015	Elsevier	10.1016/j.coal.2015.10.006
55b7869fe13823bd29ba8231	669	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1900	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05f04cf58f143d83df298	356	Gays River mention	323.2	358.9	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5579c265e138231c7c52c464	147	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
57a43018cf58f11204e17fe0	873	Hualapai Limestone	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
557cd3cfe138239225f869e5	3166	Opeche mention	273.01	283.5	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5579c265e138231c7c52c464	332	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	2071	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c2e2adcf58f105aaed24f4	133	Gachsaran Formation	5.332	23.03	Mirnejad, H. et al.	Major, minor element chemistry and oxygen and hydrogen isotopic compositions of Marun oil-field brines, SW Iran: Source history and economic potential	Geological Journal	46	2011	Wiley	10.1002/gj.1226
55b7869fe13823bd29ba8231	880	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1078	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
558eb5d6e13823109f3ee517	334	Tamarisk mention	251.9	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
59081969cf58f116699a134d	149	Sanders Group	318.1	359.2	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
55b6d4bfe13823bd29ba7dc0	5	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	1043	Prairie Evaporite Formation	385.3	397.5	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54e865c7e138237cc9150d7f	410	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b7869fe13823bd29ba8231	1507	Big Snowy Group	326.15	335	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a0946ee1382381ff364540	22	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
570fe41dcf58f114a862267f	173	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
5683349ccf58f1479a0abb4e	94	Zechstein Formation	251	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b30ea3e138231cbdd6cfcd	1956	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55ad3126e13823763a8303a0	94	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
557b1abde138239225f86255	156	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b4324de138239d8684aa17	54	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55a82328e13823757cc7049a	965	Charles Formation	318.1	359.2	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
56c1a95dcf58f15c72c903aa	488	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56834db7cf58f1479a0abca3	185	Gachsaran mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d6a7e13823bd29ba7dcc	8353	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	40	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57c1a06bcf58f16cbd621551	281	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
557cd3cfe138239225f869e5	2508	Stone Corral Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
58d06d34cf58f148974a929b	230	Fe mention			Pirajno, F and van Kranendonk, MJ	Review of hydrothermal processes and systems on Earth and implications for Martian analogues	Australian Journal of Earth Sciences	52	2005	Taylor and Francis	10.1080/08120090500134571
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
56c1d8a6cf58f15c72c9073f	388	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5b6d936dcf58f1a92c2d33b5	23	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
55ae0df7e13823763a830928	2981	San Andres mention	150.6	154.8	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54e865c7e138237cc9150d7f	116	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b5b47ce1382314227cfdae	25	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55b83b40e1382373b63b7fe6	390	Mohilla Formation	199.6	251	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
5712f1aacf58f16fb4cc921a	74	Perkasie Member	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
54e733ace138237cc9150889	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b690a7e138238e2d05483f	3423	Spearfish Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5579c265e138231c7c52c464	168	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b6d4bfe13823bd29ba7dc0	451	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5d3f58060b45c76cafa2004f	116	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
57e65deecf58f186b6da86bd	198	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5579c265e138231c7c52c464	29	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
5a2cf7f0cf58f19a331caf3c	429	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
56b99311cf58f14c238d4bdc	57	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
55b7869fe13823bd29ba8231	2231	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	264	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
56c1d8a6cf58f15c72c9073f	2	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5ce2f9b20b45c76caf8ae21e	487	Middleton Dale Anhydrite Formation	346.7	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324fe138239d8684b069	99	Hannover Formation			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
557b1abde138239225f86255	605	PARADOX FORMATION mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	220	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55ae0df7e13823763a830928	2689	Queen Formation	260.4	270.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	460	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b690a7e138238e2d05483f	3355	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b7869fe13823bd29ba8231	2333	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	380	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55af1c5ce13823763a830fe9	147	Castile mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55973e40e1382390cc6406e7	47	Otto Fiord mention	307.5	320.4	Grasby, Stephen E. et al.	Biogeochemical sulphur cycle in an extreme environment—lifebeneath a high arctic glacier, Nunavut, Canada	Journal of Geochemical Exploration		2003	Elsevier	10.1016/S0375-6742(03)00026-8
55ae4f4be13823763a830ada	260	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5c4005801faed655488cf82c	616	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
54b4324fe138239d8684b069	248	Niendorf Member			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
557bfbc7e138239225f86664	611	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
58bf2d90cf58f1867eb10946	231	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
584aa178cf58f19c3c0fb294	74	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54b4328ae138239d868553d8	394	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55b30ea3e138231cbdd6cfcd	2125	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5508f1fbe138238460c4f526	111	Texas Frio Formation			Dworkin, S.I. and Land, L.S.	The origin of aqueous sulfate in Frio pore fluids and its implication for the origin of oil field brines	Applied Geochemistry	11	1996	Elsevier	10.1016/0883-2927(96)00006-6
56c1d5f9cf58f15c72c90717	353	Prairie Evaporite Formation	385.3	397.5	SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
58d03bf3cf58f138516d1200	1422	Rotliegend Sandstone	251	299	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
57a43018cf58f11204e17fe0	151	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54b43276e138239d86851ec2	326	Habshan mention	99.6	145.5	Vandeginste, Veerle et al.	Interplay between depositional facies, diagenesis and early fractures in the Early Cretaceous Habshan Formation, Jebel Madar, Oman	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.11.006
55baa3b5e1382373b63b89e7	96	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1d9bbcf58f15c72c9075f	160	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
565e68f4cf58f148c57ebb1e	118	Saskatchewan mention	3.2683	4.6448	Ryerson, F.J. et al.	Natural CO2 accumulations in the western Williston Basin: A mineralogical analog for CO2 injection at the Weyburn site	International Journal of Greenhouse Gas Control	16	2013	Elsevier	10.1016/j.ijggc.2012.12.015
598c914bcf58f17206d6eb4d	130	Asmari Formation	5.332	23.03	Pourkaseb, Houshang et al.	The occurrence and origin of celestite in the Abolfares region, Iran: Implications for Sr-mineralization in Zagros fold belt (ZFB)	Journal of African Earth Sciences	134	2017	Elsevier	10.1016/j.jafrearsci.2017.06.010
572ecdb4cf58f1177819e19e	3	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
56c1d9bbcf58f15c72c9075f	249	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b43247e138239d86849b52	204	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5787e5f1cf58f1ba1190c99a	135	Lucas Formation	385.3	397.5	RICKARD, LAWRENCE V.	Correlation of the subsurface Lower and Middle Devonian of the Lake Erie region	Geol Soc America Bull	95	1984	GSA	10.1130/0016-7606(1984)95<814:cotsla>2.0.co;2
57321bc8cf58f1a0ac39199e	32	Portland Sandstone	175.6	199.6	D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
557cd3cfe138239225f869e5	343	Morehouse Formation	261.19	343.5	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
57c8787ccf58f14528333514	334	Windjana mention			Treiman, Allan H. et al.	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin X-ray diffraction of the Windjana sample (Kimberley area, Gale Crater)	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004932
55b6d4bfe13823bd29ba7dc0	1166	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5683349ccf58f1479a0abb4e	33	Fars Formation			Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b3dfb4e138231cbdd6d442	1733	Ervay mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
575019eacf58f1696f3ea50a	8	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
56c1d8a6cf58f15c72c9073f	366	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
558eb5d6e13823109f3ee517	316	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b7869fe13823bd29ba8231	706	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	182	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b6d4bfe13823bd29ba7dc0	446	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5a3dff46cf58f12be0bde56e	45	Oligocene-Miocene Zaragoza Formation			Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
57321bc8cf58f1a0ac39199e	107	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
54be1b30e138233c8bc4f9d7	71	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54b4328de138239d86855c5f	314	Green River Formation	33.9	55.8	Wells, Neil A. et al.	Quantitative evaluation of color measurements II. Analysis of Munsell color values from the Colton and Green River Formations (Eocene, central Utah)	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(01)00205-6
56c1d8a6cf58f15c72c9073f	50	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b7869fe13823bd29ba8231	317	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550ab8aae138238460c4fe5e	47	Windsor Group	318.1	359.2	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	668	EXPLANATION Salt Shale			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	111	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
54be7fc1e13823299564b0b3	192	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
54e97acfe138237cc915120b	121	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b7869fe13823bd29ba8231	2082	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	49	Lucas Formation	385.3	397.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5897de3fcf58f1081e8c64e1	358	Moenkopi Formation	199.6	251	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
565e68f4cf58f148c57ebb1e	46	Duperow Formation	359.2	416	Ryerson, F.J. et al.	Natural CO2 accumulations in the western Williston Basin: A mineralogical analog for CO2 injection at the Weyburn site	International Journal of Greenhouse Gas Control	16	2013	Elsevier	10.1016/j.ijggc.2012.12.015
56c1d9bbcf58f15c72c9075f	278	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5c31f51e1faed655488ba517	737	Belayım Formation			Diniz-Akarca, Cansu	Soft-sediment deformation structures related to tectonomagmatic activity: A case study from the borate-bearing lacustrine deposits of early Miocene Bigadiç Basin, NW Turkey	Sedimentary Geology	373	2018	Elsevier	10.1016/j.sedgeo.2018.05.012
54bf26f8e13823023e43db6f	599	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b7869fe13823bd29ba8231	639	Salina mention	419.68	429.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c48dc6cf58f1a8110b94db	209	Paradox mention	306	319.714	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
54df4a35e138238a47f96f37	249	Burano Anhydrite Formation			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
57ec17eccf58f1ac335ac1b3	399	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
5906dd0fcf58f15fea53aef7	323	Bluff mention	393.3	419.2	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
58d03bf3cf58f138516d1200	397	Smackover Formation	145.5	161.2	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55a82328e13823757cc7049a	1117	Minnekahta Limestone	251	260.4	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55b7869fe13823bd29ba8231	1749	Todilto mention	158.18	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ad3126e13823763a8303a0	217	Rustler Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5a2d0619cf58f19f7117d37a	53	CdB mention			Perri, Edoardo et al.	Microbial-mediated pre-salt carbonate deposition during the Messinian salinity crisis (Calcare di Base fm., Southern Italy)	Marine and Petroleum Geology	88	2017	Elsevier	10.1016/j.marpetgeo.2017.08.028
584aa178cf58f19c3c0fb294	182	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54b4328ae138239d868553d8	7	Rusas Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
54be7fc1e13823299564b0b3	184	Castile mention	259	259.51	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b7869fe13823bd29ba8231	580	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7c745e13823757cc70251	127	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5a2b750ccf58f1081042119c	61	Nam Noy Formation			Zhang, Dawen et al.	Magnetostratigraphic study of the potash-bearing strata from drilling core ZK2893 in the Sakhon Nakhon Basin, eastern Khorat Plateau	Palaeogeography, Palaeoclimatology, Palaeoecology	489	2018	Elsevier	10.1016/j.palaeo.2017.08.030
557cd3cfe138239225f869e5	824	Briggs Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	891	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5731ac74cf58f18e0ffaff50	391	Prairie Evaporite Formation	385.3	397.5	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
558df7d7e13823109f3ee082	1978	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	37	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b43271e138239d86850ff4	135	Bilara Group	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	310	Cowden Anhydrite mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54e9f64ee138237cc9151412	517	Portland Formation	175.6	199.6	West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
56c1ea81cf58f15c72c908aa	332	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5907c52bcf58f1b45c88c952	43	Warsaw Formation	339	341	Smith, Arthur E.	Minerals from the Sulfide Zone at Boling Salt Dome, New Gulf Wharton County, Texas	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603018
55c48dc6cf58f1a8110b94db	209	Paradox mention	306	319.714	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b7869fe13823bd29ba8231	1081	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5508f1fbe138238460c4f526	92	Frio mention	22.383	33.9	Dworkin, S.I. and Land, L.S.	The origin of aqueous sulfate in Frio pore fluids and its implication for the origin of oil field brines	Applied Geochemistry	11	1996	Elsevier	10.1016/0883-2927(96)00006-6
54bf7e39e13823023e43de1a	226	Reichenhall Formation	199.6	251	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
570fe41dcf58f114a862267f	29	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7869fe13823bd29ba8231	398	Minnelusa Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558eb5d6e13823109f3ee517	407	Rustler mention	253.97	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
59080b6ccf58f111237d82af	71	Glen Rose mention	100.5	113	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463
58d03bf3cf58f138516d1200	419	Maha Sarakham mention	33.9	100.5	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54f96e27e138239936c6c797	68	Cardona Formation			Miralles, L et al.	3-D rock salt fabrics in a shear zone (Súria Anticline, South-Pyrenees)	Journal of Structural Geology	23	2001	Elsevier	10.1016/S0191-8141(00)00138-3
5a2f778acf58f10a775a37f3	72	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
54c04652e1382389c54c3686	127	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
54b4324fe138239d8684b069	235	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
57d03153cf58f151be16553d	124	Chalk Magnesite Dolomite			Nieć, Marek et al.	Main challenges of mineral resources policy of Poland	Resources Policy		2014	Elsevier	10.1016/j.resourpol.2014.10.010
558df7d7e13823109f3ee082	605	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1966	Muddy Creek Formation	5.332	23.03	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54fb3438e138239936c6d321	332	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b7869fe13823bd29ba8231	1437	Minnelusa mention	282	320.05	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b7869fe13823bd29ba8231	2869	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5907a1e5cf58f1a696dd7cce	69	Billingham Anhydrite Formation	251.9	273.01	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
54b43245e138239d86849681	427	Santos mention	66	92.875	Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
55b30ea3e138231cbdd6cfcd	1051	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56834db7cf58f1479a0abca3	20	Asmari Formation	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
557cd3cfe138239225f869e5	4050	Cedar Mesa Member	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4324fe138239d8684b069	134	Dethlingen Formation			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
57484ab3cf58f13effae7ac5	109	Mabou Group	315	326.4	Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
54fb3438e138239936c6d321	269	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55c319eacf58f1a8110b8db1	34	Sedom Fm	5.332	23.03	Klein-BenDavid, Ofra et al.	The evolution of marine evaporitic brines in inland basins: The Jordan-Dead Sea Rift valley	Geochimica et Cosmochimica Acta	68	2004	Elsevier	10.1016/j.gca.2003.08.002
54e97acfe138237cc915120b	34	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b83d31e13823bd29ba865c	3259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b7869fe13823bd29ba8231	953	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	2282	Chase Group	270.6	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b83b40e1382373b63b7fe6	4	Geoscience Group			Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
574f1369cf58f10afd57189e	102	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
557bfbc7e138239225f86664	270	Halite Anhydrite Calcite Dolomite			Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1229	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328de138239d86855ceb	282	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
57ec17eccf58f1ac335ac1b3	220	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
557f199ce13823bc80ba25a0	2010	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54b4324de138239d8684aa17	167	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56834db7cf58f1479a0abca3	83	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
55b7869fe13823bd29ba8231	1423	Stone Corral Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5906dd0fcf58f15fea53aef7	446	Jackson mention	10.08	11.04	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
57c1a06bcf58f16cbd621551	299	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e865c7e138237cc9150d7f	363	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55ae0df7e13823763a830928	1461	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
557f199ce13823bc80ba25a0	804	Castile Formation	253.8	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579aae1bcf58f112b1fd775d	86	Salado Formation	251	260.4	Satterfield, Cindy L. et al.	New evidence for 250 Ma age of halotolerant bacterium from a Permian salt crystal	Geol	33	2005	Geological Society of America	10.1130/g21106.1
55ae0df7e13823763a830928	441	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	506	Grzybowo Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos[illegible] et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
58f74bd6cf58f19a1d3e9f21	193	Temperature Mineral Calcite Dolomite			Cantucci, B. et al.	Reconstruction of rocks petrophysical properties as input data for reservoir modeling	Geochemistry, Geophysics, Geosystems	17	2016	Wiley-Blackwell	10.1002/2016GC006548
55f28e79cf58f16256a217ad	115	Codo Formation	99.6	145.5	Abdioğlu, Emel et al.	Stratigraphy, mineralogy and depositional environment of the evaporite unit in the Aşkale (Erzurum) sub-basin, Eastern Anatolia (Turkey)	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.07.013
54b4328ae138239d86855597	22	Pak Reichenhall Fm			Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
56e353e7cf58f16de8a2e1bf	385	Minas Viejas Formation			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
54bf40b8e13823023e43dc3a	59	Green River Formation	33.9	55.8	Desborough, George A. et al.	Concentration and mineralogical residence of elements in rich oil shales of the Green River Formation, Piceance Creek basin, Colorado, and the Uinta Basin, Utah — A preliminary report	Chemical Geology		1976	Elsevier	10.1016/0009-2541(76)90018-8
58bc3655cf58f1147fed76f7	453	Red mention	324.46	324.8857	Azaraien, Hassan et al.	Metallogenesis of the sediment-hosted stratiform Cu deposits of the Ravar Copper Belt (RCB), Central Iran	Ore Geology Reviews	81	2017	Elsevier	10.1016/j.oregeorev.2016.09.035
55b6d6a7e13823bd29ba7dcc	7726	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
559c3f39e138230816dad2ff	128	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
578b8ab6cf58f1645f54f0c6	241	Salado mention	256.03	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b7869fe13823bd29ba8231	1370	Rustler mention	253.97	256.0278	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1244	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	411	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55c01a9ecf58f16e99a37305	34	Tamarisk Member	251.9	273.01	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
57477695cf58f10372c36173	181	Rossport Formation			Haynes, Frederick M.	Fluid-inclusion evidence of basinal brines in Archean basement, Thunder Bay Pb–Zn–Ba district, Ontario, Canada	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-177
54bedb19e13823023e43d91d	39	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□r and K□a isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
577c41d6cf58f188cebdd1fb	216	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
570fe41dcf58f114a862267f	230	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a7c745e13823757cc70251	66	Tamarisk mention	251.9	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
57bee020cf58f13d88794bee	305	Horton Group	318.1	359.2	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
55b8b7f4e13823bd29ba8982	971	Castile mention	259	259.51	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
54b7e5cfe138230a74d15b25	634	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
558e3447e13823109f3ee1ef	178	Castile Formation	253.8	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
557f199ce13823bc80ba25a0	418	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
578b8ab6cf58f1645f54f0c6	70	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
580e3bc6cf58f172dd1b8676	852	Minnelusa Formation	251	299	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
58bf2d90cf58f1867eb10946	244	Goyder Formation	485.4	501	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5579c265e138231c7c52c464	50	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5d3f58060b45c76cafa2004f	111	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
56c1a95dcf58f15c72c903aa	35	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5907c52bcf58f1b45c88c952	43	Warsaw Formation	339	341	Smith, Arthur E.	Minerals from the Sulfide Zone at Boling Salt Dome, New Gulf Wharton County, Texas	Rocks & Minerals	73	1998	Taylor and Francis	10.1080/00357529809603018
5592282ee138236ee2217eb0	348	Pugo Formation			Cooke, David R. and Bloom, Mark S.	Epithermal and subjacent porphyry mineralization, Acupan, Baguio District, Philippines: a fluid-inclusion and paragenetic study	Journal of Geochemical Exploration	35	1990	Elsevier	10.1016/0375-6742(90)90042-9
558df7d7e13823109f3ee082	3329	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
557cd3cfe138239225f869e5	1234	Castile Formation	253.8	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5579c265e138231c7c52c464	143	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	1582	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
59064984cf58f128d2f42909	126	Epidote Black Obsidian Chert			Troitsky, Alexander	International Mineral Processing Congress to Be Held in the USSR	Rocks & Minerals	43	1968	Taylor and Francis	10.1080/00357529.1968.11764843
57474ebdcf58f1b6f0394e11	66	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
54e8ae2de138237cc9150ec9	1404	Durham mention			Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
54be1b30e138233c8bc4f9d7	110	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b7869fe13823bd29ba8231	1422	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a69d57e13823757cc6fac4	100	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
5c2bea2e1faed655488b221b	118	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
54b4327ce138239d86852f8a	379	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
54c15752e1382389c54c3b8f	242	Bunter Sandstone	245	251	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
54e7c15ae138237cc9150ae2	70	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
5732d61ecf58f1be188d2a21	99	Steinsfjord Formation			Snorre Olaussen (2)	Formation of Celestite in the Wenlock, Oslo Region Norway-Evidence for Evaporitic Depositional Environments	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7c02-2b24-11d7-8648000102c1865d
558df7d7e13823109f3ee082	2283	Paradox mention	306	319.714	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1ea81cf58f15c72c908aa	265	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5579c265e138231c7c52c464	28	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	1034	Smackover mention	150.6	158.8535	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	2026	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1ca03cf58f15c72c90620	161	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
557cd3cfe138239225f869e5	1796	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b43245e138239d8684952a	173	Antalo Limestone			Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
572cf900cf58f13d86a1bdc8	58	Rustler mention	253.97	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
577bca4acf58f1538dda98fd	272	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54e49f08e138237cc914fdcc	74	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
579b56dacf58f13d24f0d7ef	49	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54b43281e138239d86853bfd	60	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
5c31d1fe1faed655488ba1bd	139	Mantur Formation			Simonov, O.N. et al.	The source of sulfur in sulfide deposits in the Siberian Platform traps (from isotope data)	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.07.015
5c2c0d801faed655488b25e1	42	Gachsaran mention	5.332	23.03	Rabiei, Minou et al.	A methodology for wellbore stability analysis of drilling into presalt formations: A case study from southern Iran	Journal of Petroleum Science and Engineering	167	2018	Elsevier	10.1016/j.petrol.2017.11.023
5682e272cf58f1479a0ab716	1043	Prairie Evaporite Formation	385.3	397.5	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55c35bc5cf58f1a8110b8fcc	95	Sedom Formation	5.332	23.03	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
55baa3b5e1382373b63b89e7	144	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54e64c66e138237cc91504d3	30	Salado Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr/86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
58bb7f59cf58f1878850d92a	113	Red River mention	446.15	450.75	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
56e353e7cf58f16de8a2e1bf	387	Minas Viejas mention			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
57321bc8cf58f1a0ac39199e	46	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
557cd3cfe138239225f869e5	2711	Strain Shale	201.4	251.902	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b54e9de1382314227cfc23	1243	Sahna Group				List of referees, list of contents, subject index and author index volume 54, 1990	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90315-C
55b7c404e13823bd29ba8379	317	Green River Formation	33.9	55.8	Edited by Tuttle, M. L.	Geochemical, biogeochemical, and sedimentological studies of the Green River Formation, Wyoming, Utah, and Colorado	Bulletin		1991	United States Geological Survey	
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
56c1d9bbcf58f15c72c9075f	44	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55baa3b5e1382373b63b89e7	91	Judea Group	65.5	99.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b30ea3e138231cbdd6cfcd	1420	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54eba4f0e138237cc9151b1e	311	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55b30ea3e138231cbdd6cfcd	1590	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
57321bc8cf58f1a0ac39199e	46	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	1228	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328ae138239d868553d8	221	Gebel El Rusas Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
54b4324de138239d8684aa17	167	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b690a7e138238e2d05483f	3508	Minnelusa mention	282	320.05	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
570fe41dcf58f114a862267f	52	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
54fc8912e138239936c6dc7a	1	Palaeozoic Carribuddy Group			Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
5712f1aacf58f16fb4cc921a	12	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1183	Clear Fork mention	273.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1602	Paradox mention	306	319.714	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	2957	Tubb mention			edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
557cd3cfe138239225f869e5	1244	Rustler Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55ae4f4be13823763a830ada	281	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
58d05f04cf58f143d83df298	359	Gays River Formation	323.2	358.9	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7869fe13823bd29ba8231	258	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
56833ddfcf58f1479a0abbcc	271	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b7869fe13823bd29ba8231	2209	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ca03cf58f15c72c90620	295	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
550901a3e138238460c4f59b	90	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ce138239d86855aad	107	Basal Anhydrite Member			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b97a75e1382369e57e4cef	114	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
55a43da1e13823757cc6f19a	292	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
5579c265e138231c7c52c464	1	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b30ea3e138231cbdd6cfcd	1086	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
579f1578cf58f1168e64ad7f	277	Fortyniner Member	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
56c1d9bbcf58f15c72c9075f	122	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b83d31e13823bd29ba865c	6155	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
557cd3cfe138239225f869e5	992	Pease River Group	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56c1ea81cf58f15c72c908aa	3	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	1563	Minturn Formation	299	318.1	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57608442cf58f10987ac4477	1289	Kiirunavaara mention			Martinsson, Olof et al.	Metallogeny of the Northern Norrbotten Ore Province, northern Fennoscandian Shield with emphasis on IOCG and apatite-iron ore deposits	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2016.02.011
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
5579c265e138231c7c52c464	168	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	1344	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558df7d7e13823109f3ee082	1920	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
54b4328fe138239d868561aa	155	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
557b1abde138239225f86255	1161	Siltstone Anhydrite Dolostone			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
5c19917c1faed65548891586	141	II Dolomite			The Shipboard Scientific Party	Site 374: Messina Abyssal Plain	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.105.1978
580b91b8cf58f14ba918ac36	41	Woodford Shale	359.2	385.3	Engle, Mark A. et al.	Geochemistry of formation waters from the Wolfcamp and “Cline” shales: Insights into brine origin, reservoir connectivity, and fluid flow in the Permian Basin, USA	Chemical Geology		2016	Elsevier	10.1016/j.chemgeo.2016.01.025
5c31d1fe1faed655488ba1bd	139	Mantur Formation			Simonov, O.N. et al.	The source of sulfur in sulfide deposits in the Siberian Platform traps (from isotope data)	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.07.015
5683349ccf58f1479a0abb4e	96	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
54e4d444e138237cc914feb2	116	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55ad3126e13823763a8303a0	91	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b7869fe13823bd29ba8231	2197	San Andres Limestone	269.64	279.0034	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54fae770e138239936c6d10b	203	Castile Formation	253.8	260.4	Raab, M. and Spiro, B.	Sulfur isotopic variations during seawater evaporation with fractional crystallization	Chemical Geology: Isotope Geoscience section	86	1991	Elsevier	10.1016/0168-9622(91)90014-N
55b7869fe13823bd29ba8231	732	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d5f9cf58f15c72c90717	353	Prairie Evaporite Formation	385.3	397.5	SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd3cfe138239225f869e5	2498	Wellington Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	503	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56a038b2cf58f1079fd4ba21	76	Buckner-Haynesville Formation			LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
55b7869fe13823bd29ba8231	1880	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c0d379cf58f16e99a378b9	345	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5c4005801faed655488cf82c	622	Shoemaker mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
55ad3126e13823763a8303a0	186	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b3e6a3e138231cbdd6d46d	3994	Horse Spring Formation	5.332	23.03	Edited by Vine, James David	Lithium resources and requirements by the year 2000	Professional Paper		1976	United States Geological Survey	10.3133/pp1005
54b4328ae138239d8685544	106	Greenfield Dolomite	422.05	429.8	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
5502c2cae1382326932d7ae8	156	Salina Formation	416	443.7	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
57e65deecf58f186b6da86bd	198	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5a2b750ccf58f1081042119c	61	Nam Noy Formation			Zhang, Dawen et al.	Magnetostratigraphic study of the potash-bearing strata from drilling core ZK2893 in the Sakhon Nakhon Basin, eastern Khorat Plateau	Palaeogeography, Palaeoclimatology, Palaeoecology	489	2018	Elsevier	10.1016/j.palaeo.2017.08.030
55b7869fe13823bd29ba8231	2142	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5897de3fcf58f1081e8c64e1	203	Murray mention	0.0117	0.774	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54be90c7e13823299564b137	479	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
56c1ea81cf58f15c72c908aa	164	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
572ee8a5cf58f11bb5bc1a43	276	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
58bb9b83cf58f193073e15ef	321	Analcime Anhydrite Dawsonite Dolomite			Teboul, Pierre-Alexandre et al.	Volcanic rock alterations of the Kwanza Basin, offshore Angola - Insights from an integrated petrological, geochemical and numerical approach	Marine and Petroleum Geology		2017	Elsevier	10.1016/j.marpetgeo.2016.12.020
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	2433	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56834db7cf58f1479a0abca3	291	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
5579c265e138231c7c52c464	2	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54eba4f0e138237cc9151b1e	318	Magnesium Limestone			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
56c1a95dcf58f15c72c903aa	389	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5731ac74cf58f18e0ffaff50	71	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
54b4328ce138239d86855b7a	99	Castile Fm	253.8	260.4	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
578fb2c8cf58f1bdcd2df236	42	Seven Rivers mention	261.76	264.5725	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b7869fe13823bd29ba8231	1006	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7c745e13823757cc70251	128	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5590c428e13823109f3ef1e1	276	Fletcher Anhydrite Member	259	259.51	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1980	Open-File Report		1982	United States Geological Survey	
570fe41dcf58f114a862267f	64	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7869fe13823bd29ba8231	2203	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae4f4be13823763a830ada	880	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
56c1ea81cf58f15c72c908aa	121	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55a43da1e13823757cc6f19a	283	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
54b4328ee138239d86856168	131	Tripoli Formation	5.332	7.246	Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
55b6d4bfe13823bd29ba7dc0	60	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54e865c7e138237cc9150d7f	116	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5756ab9ecf58f19941112e26	211	Sands Formation			Farid, Intissar et al.	Geochemical and isotopic study of surface and groundwaters in Ain Bou Mourra basin, central Tunisia	Quaternary International		2013	Elsevier	10.1016/j.quaint.2013.04.021
557cd3cfe138239225f869e5	3305	Saude Formation	145	251.902	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
58bb7f59cf58f1878850d92a	248	Red River Formation	443.7	488.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
5503421ae1382326932d7e6d	2194	Punta Gorda Anhydrite Bed	114.58	115.94	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55b7869fe13823bd29ba8231	990	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54eba4f0e138237cc9151b1e	38	Anhydrite Upgang Fm			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5730cdcccf58f16acaf6b5aa	250	Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
55765c3ce138234790a011e9	58	Salt IV mention			Hofmann, P. et al.	Organic matter of the Mulhouse Basin, France: a synthesis	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90003-T
557d2286e1382390b43c7e33	1131	Sandy Limestone			Meyerhoff, Arthur A	Energy resources of Soviet arctic and subarctic regions	Cold Regions Science and Technology		1983	Elsevier	10.1016/0165-232X(83)90063-0
5c3458ec1faed655488bed8f	780	Winnipegosis Formation	385.3	397.5	Stoffers, P. and Kuhn, R.	Red Sea Evaporites: A Petrographic and Geochemical Study	Initial Reports of the Deep Sea Drilling Project	23		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.23.122.1974
55b7869fe13823bd29ba8231	674	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	366	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5590d1bfe13823109f3ef23b	734	Magenta Dolomite	251.9	273.01	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
54b4328de138239d86855c34	91	Cßayirhan mention			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b7869fe13823bd29ba8231	623	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5579c265e138231c7c52c464	168	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d9bbcf58f15c72c9075f	284	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5d3f58060b45c76cafa2004f	207	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b30ea3e138231cbdd6cfcd	1956	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5712f1aacf58f16fb4cc921a	287	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
558fda65e13823109f3eec30	945	Humbug Formation	318.1	326.4	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b7869fe13823bd29ba8231	2062	Pequop mention	276.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56e2c03acf58f11c57ad6fd2	122	Calcite Dolomite			McDowell, Meryl L. and Hamilton, Victoria E.	Seeking phyllosilicates in thermal infrared data: A laboratory and Martian data case study	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2008JE003317
577bca4acf58f1538dda98fd	24	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
56834db7cf58f1479a0abca3	2	Asmari Formation	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
55b7869fe13823bd29ba8231	576	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05f04cf58f143d83df298	215	Zechstein mention	251.9	273.01	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
572ecdb4cf58f1177819e19e	3	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	276	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	112	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5590aa05e13823109f3ef13c	162	Halite Anhydrite Calcite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
550c651ce1382369a6f9352b	400	Magnesian Limestone	251	299	BELL, F.G.	Chapter 12 Construction Materials	Engineering Geology and Geotechnics		1980	Elsevier	10.1016/B978-0-408-00355-1.50015-1
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55b7869fe13823bd29ba8231	2229	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1972	Muddy Creek Formation	5.332	23.03	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c15752e1382389c54c3b8f	239	Magnesian Limestone	251	299	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
558fe155e13823109f3eec57	841	Culebra Dolomite	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b78281e13823bd29ba8218	903	Seven Rivers mention	261.76	264.5725	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	8061	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	83	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5579c265e138231c7c52c464	45	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54e9f64ee138237cc9151412	517	Portland Formation	175.6	199.6	West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
5579c265e138231c7c52c464	243	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
572cf900cf58f13d86a1bdc8	224	Rustler mention	253.97	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56a1e0c6cf58f19442528787	304	Anhydrite mention			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954
55b7869fe13823bd29ba8231	2220	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57126f9fcf58f142fd277238	31	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
56c1ea81cf58f15c72c908aa	215	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
57c8787ccf58f14528333514	162	Windjana Sandstone			Treiman, Allan H. et al.	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin X-ray diffraction of the Windjana sample (Kimberley area, Gale Crater)	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004932
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5503421ae1382326932d7e6d	135	Evaporite mention			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55c2a9cacf58f1a8110b8a1e	110	Maha Sarakham mention	33.9	100.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55ae9887e13823763a830cad	124	Castile Formation	253.8	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
55b7869fe13823bd29ba8231	1602	Paradox mention	306	319.714	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55a0946ee1382381ff364540	278	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.03	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54e7c15ae138237cc9150ae2	51	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b7869fe13823bd29ba8231	1183	Clear Fork mention	273.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	321	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c176c1cf58f1a8110b808a	1882	Navajo Sandstone	145.5	199.6		Goldschmidt Abstracts 2008- B	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.005
55b7869fe13823bd29ba8231	1197	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	262	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
578aea2bcf58f13920dc7baa	174	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
56c1d9bbcf58f15c72c9075f	272	Khok Kruat Formation	65.5	251	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558df7d7e13823109f3ee082	1318	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	2026	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55c48dc6cf58f1a8110b94db	164	Mabou Group	315	326.4	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
557cd3cfe138239225f869e5	1234	Castile Formation	253.8	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d4bfe13823bd29ba7dc0	1187	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558e3447e13823109f3ee1ef	131	Salado Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
5503421ae1382326932d7e6d	135	Evaporite mention			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55826ca1e1382390b43c936b	106	Coal Member	251	260.4	Ward, Colin R.	Minerals in bituminous coals of the Sydney basin (Australia) and the Illinois basin (U.S.A.)	International Journal of Coal Geology	13	1989	Elsevier	10.1016/0166-5162(89)90104-3
55c0d379cf58f16e99a378b9	41	Castile Formation	253.8	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
575c59dacf58f16e37942a6a	84	Rotliegend mention	251	299	Regenspurg, Simona et al.	Fluid-rock interactions in a geothermal Rotliegend/Permo-Carboniferous reservoir (North German Basin)	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2016.03.010

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b900cbe13823bd29ba8b6a	247	Big Snowy Group	326.15	335	Perry, William J., Jr. et al.	Petroleum potential of wilderness lands in Montana; petroleum potential of wilderness lands in the Western United States	Circular		1983	United States Geological Survey	
550901a3e138238460c4f59b	100	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
54fb3438e138239936c6d321	38	Main Dolomite	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b6d6a7e13823bd29ba7dcc	8141	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5748f823cf58f170c57fbbd7	102	Codroy Group	318.1	359.2	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
570fe41dcf58f114a862267f	2	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
579f1578cf58f1168e64ad7f	388	Magenta mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	179	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
54b4327ce138239d86852f8a	356	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
55af1c5ce13823763a830fe9	852	Salado mention	256.03	262.2168	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55a751cee13823757cc6ff3c	577	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
56ac2bfdcf58f19442534c89	51	Zaragoza Formation	23.03	33.9	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456
55c44c3ecf58f1a8110b93c8	120	Tochilinite Breunnerite Dolomite			Court, Richard W. and Sephton, Mark A.	New estimates of the production of volatile gases from ablating carbonaceous micrometeoroids at Earth and Mars during an E-belt-type Late Heavy Bombardment	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.09.010
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
578fb2c8cf58f1bdcd2df236	81	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b2cdb4e138231cbdd6ce74	326	UNITS Sandstone			Brown, C. Erwin	Determination of rock properties by borehole-geophysical and physical-testing techniques and ground-water quality and movement in the Durham Triassic basin, North Carolina	Professional Paper		1988	United States Geological Survey	10.3133/pp1432
55ae4f4be13823763a830ada	293	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b4324fe138239d8684b069	253	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
557cd3cfe138239225f869e5	852	Yeso Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1cb24cf58f15c72c90642	581	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324fe138239d8684b069	120	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
55af1c5ce13823763a830fe9	462	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55c2a9cacf58f1a8110b8a1e	86	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55b83d31e13823bd29ba865c	698	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d6a7e13823bd29ba7dcc	7493	Figure mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	1079	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2541	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5907fd66cf58f10b6afca82b	42	Curtis Formation	145.5	199.6	Dayvault, Richard D.	Colorful Agate and Jasper of Southeastern Utah	Rocks & Minerals	89	2014	Taylor and Francis	10.1080/00357529.2014.90466
55b7869fe13823bd29ba8231	2203	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54d3e320e138238471e7efcd	392	Serra Geral Formation	121.4	137.4	Bonotto, Daniel Marcos	Hydro(radio)chemical relationships in the giant Guarani aquifer, Brazil	Journal of Hydrology	323	2006	Elsevier	10.1016/j.jhydrol.2005.09.007
558fda65e13823109f3eec30	1766	Paradox mention	306	319.714	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
56833ddfcf58f1479a0abbcc	329	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b8b7f4e13823bd29ba8982	976	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
575019eacf58f1696f3ea50a	14	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55c0d379cf58f16e99a378b9	283	Wellington mention	279	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
59081969cf58f116699a134d	182	Curtis Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.53	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	1760	Capitan Limestone	251	299	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
58b86c42cf58f1055db5c6fa	312	Burano Formation	237	251	Marion, G.M. et al.	Modeling calcium sulfate chemistries with applications to Mars	Icarus		2016	Elsevier	10.1016/j.icarus.2016.05.016
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
54e8ae2de138237cc9150ec9	525	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
54b4328ae138239d8685557f	288	Raisby Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1d9bbcf58f15c72c9075f	61	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55af1c5ce13823763a830fe9	418	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b7869fe13823bd29ba8231	605	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	885	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5579c265e138231c7c52c464	339	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
598b8640cf58f11358c1f60c	192	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
557cd3cfe138239225f869e5	1309	UNITED STATES mention			McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
578b8ab6cf58f1645f54f0c6	68	Salado mention	256.03	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54b43259e138239d8684cd98	414	Red Bed	100.5	145	Milesi, J.P. et al.	An overview of the geology and major ore deposits of Central Africa: Explanatory note for the 1:4,000,000 map “Geology and major ore deposits of Central Africa”	Journal of African Earth Sciences	44	2006	Elsevier	10.1016/j.jafrearsci.2005.10.016
55b7869fe13823bd29ba8231	1468	Gypsum Spring Formation	168.65	174.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
577db7abcf58f14497044d46	314	Red Salt Shale			BORCHERT, HERMANN	Principles of Oceanic Salt Deposition and Metamorphism	Geol Soc America Bull	80	1969	Geological Society of America	10.1130/0016-7606(1969)80[821:poosda]2.0.co;2
558df7d7e13823109f3ee082	1321	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55a82328e13823757cc7049a	1013	Kibbey Limestone	315	346.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
579f1578cf58f1168e64ad7f	414	Dockum Group	199.6	251	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
578fb2c8cf58f1bdcd2df236	47	Seven Rivers Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
56c1d9bbcf58f15c72c9075f	111	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4324fe138239d8684b069	243	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
5734b312cf58f14dbc2c579f	482	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
54fb3438e138239936c6d321	184	Salado Formation	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5509217ee138238460c4f689	359	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
57968abbcf58f180d838d23c	63	Abu Dhabi Formation	-6E-05	0.01143	Wood, Warren W. et al.	Source of solutes to the coastal sabkha of Abu Dhabi	Geological Society of America Bulletin	114	2002	GSA	10.1130/0016-7606(2002)114<0259:sosttc>2.0.co;2
55b7869fe13823bd29ba8231	2485	Blaine Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
59080b6ccf58f111237d82af	17	Glen Rose Formation	65.5	145.5	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463
5a3dff46cf58f12be0bde56e	47	Zaragoza Formation	23.03	33.9	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
578cff68cf58f101e2dda387	8	Gypsum mention			Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
57a43018cf58f11204e17fe0	279	LAKE MEAD REGION Limestone			Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
557b1abde138239225f86255	150	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
584aa62ccf58f19d6a5f583e	25	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
56833ddfcf58f1479a0abbcc	274	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.9	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
574c1c0bcf58f1957a2a36f7	42	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
58d06d34cf58f148974a929b	230	Fe Dolomite			Pirajno, F and van Kranendonk, MJ	Review of hydrothermal processes and systems on Earth and implications for Martian analogues	Australian Journal of Earth Sciences	52	2005	Taylor and Francis	10.1080/08120090500134571
57ec16f5cf58f1abd84ca0b7	289	Morrison Formation	145.5	161.2	Jennings, Debra S. et al.	Comparison of modern and ancient barite-bearing acid-sulphate soils using micromorphology, geochemistry and field relationships	Sedimentology	62	2015	Wiley	10.1111/sed.12177
57c19e2ccf58f16bf61df668	332	Burano Anhydrites Formation			Gabellone, T. et al.	Fluid channeling along thrust zones: the Lagonegro case history, southern Apennines, Italy	Geofluids	13	2013	Wiley	10.1111/gfl.12020
56c1d9bbcf58f15c72c9075f	262	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
557f199ce13823bc80ba25a0	243	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
58c8ed8ccf58f1a71217fb6b	103	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
58c183abcf58f1a32df49350	313	Burano Formation	237	251	Kuroda, Junichiro et al.	Characterization of sulfate mineral deposits in central Thailand	Island Arc	26	2017	Wiley-Blackwell	10.1111/iar.12175
57f555decf58f17e0fbf38b4	568	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
574fae1acf58f142f8fdc4f8	90	Patience Lake Member			Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
557f199ce13823bc80ba25a0	951	Rustler Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
56c1a95dcf58f15c72c903aa	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56c1d607cf58f15c72c9071a	553	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
54d8fa70e138238471e80530	79	Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
5c3e6d6c1faed655488cd35a	214	Mercia Mudstone Group	199.6	251	Raine	Acid-saline-lake Systems of the Triassic Mercia Mudstone Group, County Antrim, Northern Ireland	Journal of Sedimentary Research	88	2018	Society for Sedimentary Geology	10.2110/jsr.2018.14
54b4327ce138239d86852f8a	350	Rotliegend Sandstone	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
58bf2d90cf58f1867eb10946	231	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
54b4328ce138239d86855aad	588	Basal Anhydrite mention			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b6d4bfe13823bd29ba7dc0	74	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b43247e138239d86849b52	331	El Molino Fm	61.6	70.1938	Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1a95dcf58f15c72c903aa	33	Sumner Group	275.26	282	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
558df7d7e13823109f3ee082	269	Anhydrite Limestone			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1ea81cf58f15c72c908aa	385	Blomidon Formation	203.6	216.5	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54fae770e138239936c6d10b	203	Castile Formation	253.8	260.4	Raab, M. and Spiro, B.	Sulfur isotopic variations during seawater evaporation with fractional crystallization	Chemical Geology: Isotope Geoscience section	86	1991	Elsevier	10.1016/0168-9622(91)90014-N
55c0d379cf58f16e99a378b9	63	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54bffee9e1382389c54c3458	349	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
54b4328ce138239d86855b7a	247	Smackover mention	150.6	158.8535	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5579c265e138231c7c52c464	176	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	2362	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05f04cf58f143d83df298	129	Khuff Formation	199.6	251	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
575019eacf58f1696f3ea50a	98	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55a43da1e13823757cc6f19a	292	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
5c2c0d801faed655488b25e1	391	Gachsaran mention	5.332	23.03	Rabiei, Minou et al.	A methodology for wellbore stability analysis of drilling into presalt formations: A case study from southern Iran	Journal of Petroleum Science and Engineering	167	2018	Elsevier	10.1016/j.petrol.2017.11.023
57ec17eccf58f1ac335ac1b3	399	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b75831e13823bd29ba8108	2310	Mauri Formation	5.332	23.03	Edited by Scott, Richard W., Jr. et al.	Advances related to United States and international mineral resources; developing frameworks and exploration technologies	Bulletin		1993	United States Geological Survey	
55b7869fe13823bd29ba8231	2643	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05f04cf58f143d83df298	131	Khuff Formation	199.6	251	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
58ccf037cf58f19bc60b2fe0	72	Ferroan Dolomite			Manini, Elena and Luna, Gian Marco	Influence of the mineralogical composition on microbial activities in marine sediments: an experimental approach	Chemistry and Ecology	19	2003	Taylor and Francis	10.1080/0275754031000159589 9
54be1b30e138233c8bc4f9d7	204	Satanka Evaporite Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b2c402e138231cbdd6ce3e	203	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55ae0df7e13823763a830928	2901	Santa Rosa Sandstone	199.6	228	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
572ecdb4cf58f1177819e19e	358	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
56c1d9bbcf58f15c72c9075f	225	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55c0d379cf58f16e99a378b9	75	Wellington Formation	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
57bee020cf58f13d88794bee	261	Windsor mention	95.2	99.5	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
575019eacf58f1696f3ea50a	98	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55baa3b5e1382373b63b89e7	148	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
572cf1fccf58f13accaa0e61	200	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54e8ae2de138237cc9150ec9	525	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a048d65cf58f1b96402a09e	160	Coboconk mention	455.62	455.725	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
5906dd0fcf58f15fea53aef7	398	Salado Limestone	251	299	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b7869fe13823bd29ba8231	1464	Sundance Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c0a121e1382389c54c387a	351	Calcite mention			Renard, Stéphane et al.	Geochemical effects of an oxycombustion stream containing SO2 and O2 on carbonate rocks in the context of CO2 storage	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.05.032
55765d83e138234790a011f0	30	Salt IV mention			Keely, B.J. et al.	A molecular stratigraphic approach to palaeoenvironmental assessment and the recognition of changes in source inputs in marls of the Mulhouse Basin (Alsace, France)	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90007-X
54e9f64ee138237cc9151412	487	Great Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
54b4328ae138239d8685544	7	Greenfield Dolomite	422.05	429.8	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
54b4328ce138239d86855aad	289	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
575019eacf58f1696f3ea50a	105	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55b7869fe13823bd29ba8231	2203	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	105	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
550912cce138238460c4f61b	64	Berea Sandstone	353.35	362.225	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
558eb5d6e13823109f3ee517	259	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54d4bb37e138238471e7f379	425	Salado mention	256.03	262.2168	Beauheim, Richard L and Roberts, Randall M	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
558fe155e13823109f3eec57	290	Salado Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
559c3f39e138230816dad2ff	195	Magenta Dolomite	251.9	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55b7869fe13823bd29ba8231	2160	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e97acfe138237cc915120b	29	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b7869fe13823bd29ba8231	1508	Kibbey mention	326.15	337.125	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54bfef15e1382330560e0801	230	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5579c265e138231c7c52c464	143	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	880	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5590d1bfe13823109f3ef23b	235	Culebra Dolomite	251	299	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
5509217ee138238460c4f689	96	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southeastern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56c1ea81cf58f15c72c908aa	352	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b735f3e13823bd29ba8028	2846	UNITED STATES mention			Luttrell, Gwendolyn Werth et al.	Lexicon of new formal geologic names of the United States, 1976-1980	Bulletin		1986	United States Geological Survey	
584aa178cf58f19c3c0fb294	106	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a43da1e13823757cc6f19a	254	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
557b1abde138239225f86255	1133	Calcareous mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
557bfbc7e138239225f86664	311	Castile Formation	253.8	260.4	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	195	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
57f555decf58f17e0fbf38b4	810	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
5c2bea2e1faed655488b221b	199	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
57ec1479cf58f1ab19b2dd9d	1055	Winnipegois Formation			Schreiber, B. Charlotte and Tabakh, Mohamed El	Deposition and early alteration of evaporites	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00002.x
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55765d83e138234790a011f0	30	Salt IV mention			Keely, B.J. et al.	A molecular stratigraphic approach to palaeoenvironmental assessment and the recognition of changes in source inputs in marls of the Mulhouse Basin (Alsace, France)	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90007-X
55a69d57e13823757cc6fac4	104	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
55b7869fe13823bd29ba8231	1508	Kibbey mention	326.15	337.125	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c2e5c8cf58f1a8110b8c08	98	Hutchinson Salt Member	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54b4327de138239d868530d9	65	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
55b77fd5e1382373b63b7cce	146	Louann Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
557cd3cfe138239225f869e5	1650	Wichita Group	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5c31d1fe1faed655488ba1bd	139	Mantur Formation			Simonov, O.N. et al.	The source of sulfur in sulfide deposits in the Siberian Platform traps (from isotope data)	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.07.015
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5579c265e138231c7c52c464	177	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54be1b30e138233c8bc4f9d7	68	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55a43da1e13823757cc6f19a	48	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
572ecdb4cf58f1177819e19e	23	Buckner Formation	145.5	199.6	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557bfbc7e138239225f86664	200	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
58cded3ccf58f12a356abeab	230	Mineral mention	307	315.2	Delgado, Gabriel et al.	Carbonate and Phosphate Precipitation by Saline Soil Bacteria in a Monitored Culture Medium	Geomicrobiology Journal	30	2013	Taylor and Francis	10.1080/01490451.2012.665148
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5579c265e138231c7c52c464	143	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
558fe155e13823109f3eec57	276	Salacio Formation			Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55a82328e13823757cc7049a	1145	Spearfish Formation	251	299	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55a7bdc9e13823757cc7020e	2129	Colorado mention	90.825	95.55	Collins, Donley S. et al.	Bibliography for update and revision of U.S.G.S. Bulletin 1114, Minerals of Colorado -- a 100 year record, by Edwin B. Eckel, Part A - Paper copy --Bibliography data file disks	Open-File Report		1989	United States Geological Survey	10.3133/ofr89206A
55b30ea3e138231cbdd6cfcd	2002	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a2c08b0cf58f140fb1cf84a	171	Sokolov mention			Hawkins, T. et al.	The geology and genesis of the iron skarns of the Turgai belt, northwestern Kazakhstan	Ore Geology Reviews	85	2017	Elsevier	10.1016/j.oregeorev.2015.10.016
557cd3cfe138239225f869e5	3305	Saude Formation	145	251.902	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
559c3f39e138230816dad2ff	484	Tamarisk Member	251.9	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
59081969cf58f116699a134d	155	Curtis Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
54b4328de138239d86855ceb	74	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5c19917d1faed655488915d3	528	SUBAERIAL Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
5748c817cf58f16342b08158	151	Argo Formation	199.6	251	Kettanah, Yawooz A. and Greenough, John	Hydrocarbon fluid inclusions in the Argo salt, offshore Canadian Atlantic margin 1	Canadian Journal of Earth Sciences	50	2013	Canadian Science Publishing	10.1139/cjes-2012-0040
54e97acfe138237cc915120b	113	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55c36968cf58f1a8110b9014	55	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
572cf1fccf58f13accaa0e61	104	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5749d6cacf58f1b0d4fcbc51	117	Majiagou Formation	443.7	488.3	ZHANG, Jing et al.	Controlling effects of paleo-climate and paleo-ocean on formation of carbonate reservoirs	Petroleum Exploration and Development	41	2014	Elsevier	10.1016/S1876-3804(14)60016-1
5ab72cf0cf58f18332aac0f6	1	Selective Formation			Tritschler, Ulrich et al.	Controlling the Selective Formation of Calcium Sulfate Polymorphs at Room Temperature	Angewandte Chemie International Edition	54	2015	Wiley-Blackwell	10.1002/anie.201409651
54b43245e138239d8684952a	177	Arab Formation	150.8	155.7	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
57d03153cf58f151be16553d	81	Magnesite Limestone			Nieć, Marek et al.	Main challenges of mineral resources policy of Poland	Resources Policy		2014	Elsevier	10.1016/j.resourpol.2014.10.010
5c2fe60d1faed655488b6bad	217	Leikoupo Formation	228	245	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5d3f58060b45c76cafa2004f	193	Rotliegend Group	251	299	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
54df4a35e138238a47f96f37	43	Burano Anhydrite Formation			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b7869fe13823bd29ba8231	576	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c31d9181faed655488ba2e1	42	Retiro Fm	113	114.05	Basso, M. et al.	THREE-DIMENSIONAL SEISMIC GEOMORPHOLOGY OF PALEOKARST IN THE CRETACEOUS MACAÉ GROUP CARBONATES, CAMPOS BASIN, BRAZIL	Journal of Petroleum Geology	41	2018	Wiley	10.1111/jpg.12719
55b7869fe13823bd29ba8231	1436	Minnelusa Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5503421ae1382326932d7e6d	1103	San Andres Fm	251	299	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5579c265e138231c7c52c464	28	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	2229	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a43da1e13823757cc6f19a	138	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
559d6e67e138230816dad803	976	Phosphoria Formation	251	299	Roehler, Henry W. et al.	Summary report of the geology, mineral resources, engineering geology, and environmental geochemistry of the Sweetwater-Kemmerer area, Wyoming: Part A, Geology and mineral resources	Open-File Report		1977	United States Geological Survey	
55b7869fe13823bd29ba8231	1385	Minnelusa Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	3002	Edwards Group	99.6	145.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e8ae2de138237cc9150ec9	531	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1086	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a2cf7f0cf58f19a331caf3c	35	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
55b77fd5e1382373b63b7cce	146	Louann Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
5ce2f9b20b45c76caf8ae21e	448	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55c48dc6cf58f1a8110b94db	149	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
598b8640cf58f11358c1f60c	192	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54fb3438e138239936c6d321	40	Platy Dolomite			García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b4324fe138239d8684b069	120	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
56c1ea81cf58f15c72c908aa	327	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5503421ae1382326932d7e6d	1129	Arab Fm	145.5	199.6	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
58b6daf1cf58f11f2b0dde84	249	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
56c1a95dcf58f15c72c903aa	798	Prairie Evaporite Formation	385.3	397.5	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d4bfe13823bd29ba7dc0	1191	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
550995fee138238460c4f997	30	Salado Formation	251	260.4	Xiong, Yongliang and Lord, Anna Snider	Experimental investigations of the reaction path in the MgO–CO2–H2O system in solutions with various ionic strengths, and their applications to nuclear waste isolation	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.12.035

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	217	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55a43da1e13823757cc6f19a	141	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54fb3438e138239936c6d321	241	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b7869fe13823bd29ba8231	1508	Kibbey mention	326.15	337.125	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ad3126e13823763a8303a0	131	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
555274cce13823930177030c	200	Gravel Sand Basalt Conglomerate			Ori, Gian Gabriele et al.	Martian paleolacustrine environments and their geological constrains on drilling operations for exobiological research	Planetary and Space Science	48	2000	Elsevier	10.1016/S0032-0633(00)00076-3
54e7c7dae138237cc9150b09	625	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2014.10.028
57a43018cf58f11204e17fe0	810	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b6d4bfe13823bd29ba7dc0	1237	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
558ec3e3e13823109f3ee570	112	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
58ccf037cf58f19bc60b2fe0	72	Ferroan Dolomite			Manini, Elena and Luna, Gian Marco	Influence of the mineralogical composition on microbial activities in marine sediments: an experimental approach	Chemistry and Ecology	19	2003	Taylor and Francis	10.1080/0275754031000159589 9
55b78281e13823bd29ba8218	2070	Yeso mention	275.26	286.225	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55a751cee13823757cc6ff3c	1714	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54b4327ee138239d868532b9	322	Calcite Dolomite			Xing, Lina et al.	Groundwater hydrochemical characteristics and processes along flow paths in the North China Plain	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.03.017
55b7869fe13823bd29ba8231	1083	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54b4328ae138239d8685544	23	Salina Group	416	443.7	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
55c01a9ecf58f16e99a37305	501	Tamarisk mention	251.9	273.01	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
574356b8cf58f1276e6f6439	13	Zhuanqiao Formation	99.6	145.5	XIONG, Xin et al.	Genesis and Prospecting of the Uranium and Thorium Mineralization Indicated from Deep Drilling ZK01, Luzong Basin	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12381_31
5731ac74cf58f18e0ffaff50	70	Salado mention	256.03	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
56c1d9bbcf58f15c72c9075f	217	Maha Sarakham mention	33.9	100.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
57c19a92cf58f16ab04df2ec	65	Lucas Formation	385.3	397.5	HAERI-ARDAKANI, O. et al.	Fracture mineralization and fluid flow evolution: an example from Ordovician-Devonian carbonates, southwestern Ontario, Canada	Geofluids	13	2013	Wiley	10.1111/gfl.12003
55b7869fe13823bd29ba8231	590	Detroit River Group	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a2d21eecf58f1a9c73d757e	364	Nahr Umr Formation	99.6	112	Vandeginste, Veerle et al.	Diagenesis in salt dome roof strata: Barite - calcite assemblage in Jebel Madar, Oman	Marine and Petroleum Geology	86	2017	Elsevier	10.1016/j.marpetgeo.2017.06.008
54b7e5cfe138230a74d15b25	436	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5602a5f6cf58f1b3a35afdec	108	Otto Fiord Formation	299	359.2	Lorenz, Ralph D. et al.	Analog environments for a Europa lander mission	Advances in Space Research	48	2011	Elsevier	10.1016/j.asr.2010.05.006
572ea708cf58f10f9db0ebad	275	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55c48dc6cf58f1a8110b94db	98	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic Dolomite			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54e49f08e138237cc914fdcc	102	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
55b7869fe13823bd29ba8231	993	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	1971	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56830ae3cf58f1479a0ab915	286	Winnipegosis mention	386.45	393.3	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a2c08b0cf58f140fb1cf84a	167	Valerianovka Supergroup	318.1	359.2	Hawkins, T. et al.	The geology and genesis of the iron skarns of the Turgai belt, northwestern Kazakhstan	Ore Geology Reviews	85	2017	Elsevier	10.1016/j.oregeorev.2015.10.016
579fe160cf58f15528a4466f	363	Prairie Evaporite Formation	385.3	397.5	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54eba4f0e138237cc9151b1e	146	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5590d1bfe13823109f3ef23b	186	Castile mention	259	259.51	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
5900d92bcf58f169295f6afb	147	Guanzhuang Formation			Tan, H-B. et al.	Fractionation of hydrogen and oxygen isotopes of gypsum hydration water and assessment of its geochemical indications	Australian Journal of Earth Sciences	61	2014	Taylor and Francis	10.1080/08120099.2014.921242
55a43da1e13823757cc6f19a	297	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	158	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
570fe41dcf58f114a862267f	147	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7869fe13823bd29ba8231	2831	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	986	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328de138239d86855c7b	51	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
572cf1fccf58f13accaa0e61	285	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
572cf1fccf58f13accaa0e61	269	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5733004ccf58f1066ffdaeaa	3	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b7e629e13823bd29ba8437	137	Lamotte Sandstone	485.4	501	Edited by Thorman, Charles H.	Application of structural geology to mineral and energy resources of the Central and Western United States	Bulletin		1992	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1242	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b43281e138239d86853bfd	174	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b78281e13823bd29ba8218	3653	Queen Formation	260.4	270.6	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5590d1bfe13823109f3ef23b	1257	Culebra Dolomite	251	299	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56f2f98bcf58f1892b30205d	50	Kamiiso Group			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b7869fe13823bd29ba8231	1236	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	1978	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55c2a9cacf58f1a8110b8a1e	98	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
57126a16cf58f140fa5c33f2	241	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b7869fe13823bd29ba8231	877	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558e3447e13823109f3ee1ef	199	Rustler Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
567564dccf58f1b1878a921d	51	Area Formation			Moghadasi, J. et al.	Model study on the kinetics of oil field formation damage due to salt precipitation from injection	Journal of Petroleum Science and Engineering	43	2004	Elsevier	10.1016/j.petrol.2004.02.014
55b7869fe13823bd29ba8231	774	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550c651ce1382369a6f9352b	400	Magnesian Limestone	251	299	BELL, F.G.	Chapter 12 Construction Materials	Engineering Geology and Geotechnics		1980	Elsevier	10.1016/B978-0-408-00355-1.50015-1
574f1369cf58f10afd57189e	390	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
55b78281e13823bd29ba8218	4090	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
56830ae3cf58f1479a0ab915	48	Brightholme Member			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
54b4328ce138239d86855aad	320	Basal Anhydrite Member			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55c07511cf58f16e99a375dc	1282	Balder Formation	1.806	65.5		Annual index	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90280-V
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	81	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
559dcd1ae138230816dad9be	347	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
5732032ecf58f19cbcbc550f	83	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
558ff726e13823109f3eecd8	832	Description mention			Madsen, Beth M.	Core logs of three test holes in Cenozoic lake deposits near Hector, California	Bulletin		1970	United States Geological Survey	10.3133/b1296
558fe155e13823109f3eec57	309	Cowden Anhydrite Member	251.9	273.01	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
55af1c5ce13823763a830fe9	405	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55c01a9ecf58f16e99a37305	237	Culebra mention	251	299	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
55b6d4bfe13823bd29ba7dc0	475	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1031	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54d92539e138238471e805e2	117	Bunter Sandstone	245	251	Stadler, S. et al.	Isotopic and geochemical indicators for groundwater flow and multi-component mixing near disturbed salt anticlines	Chemical Geology		2012	Elsevier	10.1016/j.chemgeo.2011.12.006

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c31d1fe1faed655488ba1bd	126	White Gp	175.6	199.6	Simonov, O.N. et al.	The source of sulfur in sulfide deposits in the Siberian Platform traps (from isotope data)	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.07.015
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	1013	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5579c265e138231c7c52c464	57	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b3dfb4e138231cbdd6d442	1707	Forelle mention			U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
56c1d9bbcf58f15c72c9075f	197	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1d607cf58f15c72c9071a	150	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
57309914cf58f1615003f490	87	Paradox mention	306	319.714	Omer B. Raup and Beth M. Madsen	Danburite in Evaporites of the Paradox Basin, Utah	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f88d2-2b24-11d7-8648000102c1865d
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b7869fe13823bd29ba8231	569	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5ab9a5fbcf58f196f620b199	400	Black River Group	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
56833129cf58f1479a0abb1c	873	Rus Formation	33.9	55.8	Clarke, Michael W. Hughes	STRATIGRAPHY AND ROCK UNIT NOMENCLATURE IN THE OIL-PRODUCING AREA OF INTERIOR OMAN	Journal of Petroleum Geology	11	1988	Wiley-Blackwell	10.1111/j.1747-5457.1988.tb00800.x
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54eba4f0e138237cc9151b1e	315	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55b7869fe13823bd29ba8231	1218	Briggs Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a2c08b0cf58f140fb1cf84a	171	Sokolov mention			Hawkins, T. et al.	The geology and genesis of the iron skarns of the Turgai belt, northwestern Kazakhstan	Ore Geology Reviews	85	2017	Elsevier	10.1016/j.oregeorev.2015.10.016
558df7d7e13823109f3ee082	2046	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b83b40e1382373b63b7fe6	16	Mohilla Formation	199.6	251	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
559c3f39e138230816dad2ff	599	Rustler Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54e49f08e138237cc914fdcc	74	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
5733004ccf58f1066ffdaeaa	114	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54c04e8fe1382389c54c36c6	118	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55c36968cf58f1a8110b9014	84	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55b5b47ce1382314227cfdae	252	Salina mention	419.68	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5579c265e138231c7c52c464	339	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	1360	Salado Formation	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	1363	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5b6d936dcf58f1a92c2d33b5	23	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54fb51c0e138239936c6d400	265	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578b8ab6cf58f1645f54f0c6	43	Castile mention	259	259.51	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b30ea3e138231cbdd6cfcd	1590	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
58d05f04cf58f143d83df298	131	Khuff Formation	199.6	251	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
57126a16cf58f140fa5c33f2	56	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b7869fe13823bd29ba8231	1582	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	327	Morehouse Formation	261.19	343.5	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56c1d9bbcf58f15c72c9075f	182	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
58bf2d90cf58f1867eb10946	322	Shannon Formation	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
557b1abde138239225f86255	1176	Anhydrite Dolostone			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	80	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
57d0097ccf58f145d627bfaf	103	Tagon Formation			Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
54b4328de138239d86855ceb	258	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54b43245e138239d8684952a	214	Carmel Formation	161.2	175.6	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
54e733ace138237cc9150889	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
557cd410e138239225f869e6	1771	Talkeetna Formation	175.6	199.6	Nokleberg, Warren J. et al.	Significant metalliferous lode deposits and placer districts of Alaska	Bulletin		1987	United States Geological Survey	10.3133/b1786
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c2e5c8cf58f1a8110b8c08	142	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
58b6daf1cf58f11f2b0dde84	251	Maha Sarakham Fm	65.5	145.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
56a1e0c6cf58f19442528787	27	Anhydrite mention			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954
55b7869fe13823bd29ba8231	258	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58bb9b83cf58f193073e15ef	86	Cuvo mention			Teboul, Pierre-Alexandre et al.	Volcanic rock alterations of the Kwanza Basin, offshore Angola - Insights from an integrated petrological, geochemical and numerical approach	Marine and Petroleum Geology		2017	Elsevier	10.1016/j.marpetgeo.2016.12.020
58b95b1bcf58f166c35f1298	47	Zebbag mention			Dhahri, Ferid and Boukadi, Noureddine	Triassic salt sheets of Mezzouna, Central Tunisia: New comments on Late Cretaceous halokinesis and geodynamic evolution of the northern African margin	Journal of African Earth Sciences		2017	Elsevier	10.1016/j.jafrearsci.2017.01.016
5a2c08b0cf58f140fb1cf84a	797	Kachar mention			Hawkins, T. et al.	The geology and genesis of the iron skarns of the Turgai belt, northwestern Kazakhstan	Ore Geology Reviews	85	2017	Elsevier	10.1016/j.oregeorev.2015.10.016
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55af1c5ce13823763a830fe9	835	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
56c1a95dcf58f15c72c903aa	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54be1b30e138233c8bc4f9d7	204	Satanka Evaporite Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b73032e13823bd29ba8000	379	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55f49f72cf58f16256a225dc	68	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
584aa178cf58f19c3c0fb294	98	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54be7fc1e13823299564b0b3	211	Castile Formation	253.8	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b3641de138231cbdd6d189	1568	Morehouse Formation	261.19	343.5	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
55b64a4de1382314227d0039	20	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
558df7d7e13823109f3ee082	345	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4328ce138239d86855aad	267	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54fb2ecfe138239936c6d30a	49	Carribuddy Group	416	443.7	Halas, S. et al.	Oxygen isotopes in authigenic quartz from massive salt deposits	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2015.02.034
584aa178cf58f19c3c0fb294	408	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
559c3f39e138230816dad2ff	134	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5733004ccf58f1066ffdaeaa	70	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54b4328ae138239d868553d8	221	Gebel El Rusas Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
5c2fd7d01faed655488b6a28	155	Bulunkuole Group	488.3	542	Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
590762a7cf58f18fc090d7b2	311	Salem Limestone	337.5	339	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
573090ddcf58f160029e9d90	5	Salado Formation	251	260.4	Dennis W. Powers and Bruce W. Hassinge	Synsedimentary Dissolution Pits in Halite of the Permian Salado Formation, Southeastern, New Mexico	SEPM Journal of Sedimentary Research	Vol. 55	1985	Society for Sedimentary Geology	10.1306/212f87e7-2b24-11d7-8648000102c1865d
557b1abde138239225f86255	1156	Calcareous mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
55a43da1e13823757cc6f19a	240	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
5579c265e138231c7c52c464	1	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54ead910e138237cc91517bf	462	Morelos Formation	65.5	145.5		Author index Tectonophysics volumes 101–150	Tectonophysics	150	1988	Elsevier	10.1016/0040-1951(88)90308-3
54b43247e138239d86849b52	246	Chaunaca Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b7869fe13823bd29ba8231	277	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328be138239d8685567e	305	Rus mention	33.9	55.8	Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
55b7869fe13823bd29ba8231	1038	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	2541	Fountain Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	1549	Logan Gulch mention	366.8	370.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b78281e13823bd29ba8218	3889	Queen Formation	260.4	270.6	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55af1c5ce13823763a830fe9	835	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54e7342de138237cc915088c	3	Bahloul Formation	89.3	93.5		Index	Chemical Geology	155	1999	Elsevier	10.1016/S0009-2541(99)00016-9
55b7869fe13823bd29ba8231	880	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559d4d6ee138230816dad784	29	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579f1578cf58f1168e64ad7f	368	Tansill Formation	260.4	270.6	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54be1b30e138233c8bc4f9d7	200	Nisku Formation	359.2	416	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5a3dff46cf58f12be0bde56e	47	Zaragoza Formation	23.03	33.9	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
55b7869fe13823bd29ba8231	1918	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b73032e13823bd29ba8000	205	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55b7869fe13823bd29ba8231	2433	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7c745e13823757cc70251	127	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b7869fe13823bd29ba8231	2402	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5508f1fbe138238460c4f526	89	Glen Rose Formation	65.5	145.5	Dworkin, S.I. and Land, L.S.	The origin of aqueous sulfate in Frio pore fluids and its implication for the origin of oil field brines	Applied Geochemistry	11	1996	Elsevier	10.1016/0883-2927(96)00006-6
5a2c08b0cf58f140fb1cf84a	171	Sokolov mention			Hawkins, T. et al.	The geology and genesis of the iron skarns of the Turgai belt, northwestern Kazakhstan	Ore Geology Reviews	85	2017	Elsevier	10.1016/j.oregeorev.2015.10.016
55b7869fe13823bd29ba8231	603	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
58bb7f59cf58f1878850d92a	91	Red River Formation	443.7	488.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
56834db7cf58f1479a0abca3	259	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
55ae0df7e13823763a830928	2686	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	3011	Wichita mention	279.75	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf1fccf58f13accaa0e61	205	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b6d4bfe13823bd29ba7dc0	1090	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55a751cee13823757cc6ff3c	574	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
58bf0a5acf58f17947438723	76	Series Depth Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
56c60ad7cf58f17493f876b5	168	St. Louis Limestone	318.1	359.2	Stueber, Alan M. and Criss, Robert E.	ORIGIN AND TRANSPORT OF DISSOLVED CHEMICALS IN A KARST WATERSHED, SOUTHWESTERN ILLINOIS	Journal of the American Water Resources Association	41	2005	Wiley-Blackwell	10.1111/j.1752-1688.2005.tb03734.x
5c29b7d41faed655488ae938	220	Luocheng mention			Ji, Dongping et al.	Mississippian anthracites in Guangxi Province, southern China: Petrological, mineralogical, and rare earth element evidence for high-temperature solutions	International Journal of Coal Geology	197	2018	Elsevier	10.1016/j.coal.2018.08.006
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
570fe41dcf58f114a862267f	257	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c4005801faed655488cf82c	642	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
55b6d4bfe13823bd29ba7dc0	60	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1d9bbcf58f15c72c9075f	104	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54e7c15ae138237cc9150ae2	51	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
54b4328ce138239d86855aad	289	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
590762a7cf58f18fc090d7b2	311	Salem Limestone	337.5	339	Huizing, Terry E. and Russell, Richard E.	Indiana Minerals A • Locality • Index	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768455
54bf7e39e13823023e43de1a	226	Reichenhall Formation	199.6	251	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
56c1d9bbcf58f15c72c9075f	140	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5d3f58060b45c76cafa2004f	151	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b7869fe13823bd29ba8231	2433	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5590aa05e13823109f3ef13c	163	Halite Anhydrite Calcite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
54bedb19e13823023e43d91d	141	Esterhazy mention			Baadsgaard, H.	Rb□r and K□a isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55b7869fe13823bd29ba8231	2775	Phosphoria Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a2cf7f0cf58f19a331caf3c	435	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
57320459cf58f19ced0f7bc5	77	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b39c73e138231cbdd6d2c1	937	Paradox mention	306	319.714	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5b6d3f1ecf58f193bb367046	6	Magnesian Limestone	251	299	Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
55b7869fe13823bd29ba8231	1047	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a43da1e13823757cc6f19a	309	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	554	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5731ac74cf58f18e0ffaff50	76	Rustler Formation	251	260.4	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
5682e272cf58f1479a0ab716	74	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b690a7e138238e2d05483f	3492	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
54b4328ae138239d86855597	136	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
54e49f08e138237cc914fdcc	76	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
557cd3cfe138239225f869e5	1180	Castile Formation	253.8	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
558df7d7e13823109f3ee082	323	Salado mention	256.03	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b64a4de13823142270030	336	SaJado Formation			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
558ec3e3e13823109f3ee570	48	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
55ad3126e13823763a8303a0	163	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
579fe160cf58f15528a4466f	363	Prairie Evaporite Formation	385.3	397.5	Holt, R. M. and Powers, D. W.	Synsedimentary dissolution pipes and the isolation of ancient bacteria and cellulose	Geological Society of America Bulletin	123	2011	Geological Society of America	10.1130/b30197.1
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
5579c265e138231c7c52c464	177	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
598b8640cf58f11358c1f60c	192	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55b7869fe13823bd29ba8231	1413	Stone Corral Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57321bc8cf58f1a0ac39199e	122	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
54eba4f0e138237cc9151b1e	59	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55b7869fe13823bd29ba8231	2460	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578fb2c8cf58f1bdcd2df236	195	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b2f6c2e138231cbdd6cf45	1004	Rustler Formation	251	260.4	Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology, hydrology, and topography; Articles 1-59	Professional Paper		1962	United States Geological Survey	
5a048d65cf58f1b96402a09e	130	Sherman Fall Formation	458.4	470	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54db3232e138235b0d06b7b1	454	Tourmaline mention			Henry, D.J. and Dutrow, B.L.	Tourmaline at diagenetic to low-grade metamorphic conditions: Its petrologic applicability	Lithos		2012	Elsevier	10.1016/j.lithos.2012.08.013
54b43282e138239d86853ec7	64	Albert Formation	318.1	359.2	Chowdhury, Ali H. and Noble, James P.A.	Organic carbon and pyrite sulphur relationships as evidences of bottom water conditions of sedimentation, Albert Formation fine-grained lacustrine sediments, New Brunswick, Canada	Marine and Petroleum Geology	13	1996	Elsevier	10.1016/0264-8172(95)00035-6
55b7869fe13823bd29ba8231	2173	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c44114cf58f17493f8536e	104	Seven Rivers Formation	251	299	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
54c00c02e1382389c54c34be	149	Hüttenberg Formation			Frimmel, Hartwig E.	Trace element distribution in Neoproterozoic carbonates as palaeoenvironmental indicator	Chemical Geology	258	2009	Elsevier	10.1016/j.chemgeo.2008.10.033
5a2f778acf58f10a775a37f3	71	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
56c1d9bbcf58f15c72c9075f	107	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5a2cf7f0cf58f19a331caf3c	35	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
54b4328ae138239d86855586	209	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
5d3f58060b45c76cafa2004f	29	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
56f2f98bcf58f1892b30205d	50	Kamiiso Group			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
550ee523e1382369a6f93f9e	205	Oligocene-Miocene Zaragoza Formation			Gutiérrez, Francisco et al.	Leakage problems in dams built on evaporites. The case of La Loteta Dam (NE Spain), a reservoir in a large karstic depression generated by interstratal salt dissolution	Engineering Geology		2015	Elsevier	10.1016/j.enggeo.2014.12.009

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a0946ee1382381ff364540	99	Castile mention	259	259.51	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55b7869fe13823bd29ba8231	1796	Supai mention	275.26	313.75	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ce138239d86855aad	96	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5579c265e138231c7c52c464	57	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
570fe41dcf58f114a862267f	2	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
54b4328ce138239d86855b7a	247	Smackover mention	150.6	158.8535	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
5683006acf58f1479a0ab88f	675	Prairie Evaporite Formation	385.3	397.5	KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
557cd3cfe138239225f869e5	2711	Strain Shale	201.4	251.902	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d4bfe13823bd29ba7dc0	1060	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
570fe41dcf58f114a862267f	21	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
557cd3cfe138239225f869e5	3243	Minnekahta Limestone	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	2433	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	283	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7780	Roswell mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558eb5d6e13823109f3ee517	334	Tamarisk mention	251.9	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b4328ae138239d86855565	410	Basque mention			Renaut, Robin W. and Long, Peter R.	Sedimentology of the saline lakes of the Cariboo Plateau, Interior British Columbia, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90051-1
55b7869fe13823bd29ba8231	877	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578aea2bcf58f13920dc7baa	219	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
54be1b30e138233c8bc4f9d7	68	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
550b6ce8e1382369a6f9311e	299	Cadjebut Formation	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
57a3dceccf58f1b8b5b032b5	264	Castile Formation	253.8	260.4	Kiro, Yael et al.	Environmental implications of salt facies in the Dead Sea	Geological Society of America Bulletin	128	2015	Geological Society of America	10.1130/b31357.1
572ecdb4cf58f1177819e19e	358	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
557b436fe138239225f86325	6897	GEOCHEMISTRY Formation			Roedder, Edwin	Composition of fluid inclusions	Professional Paper		1972	United States Geological Survey	10.3133/pp440JJ
578fb2c8cf58f1bdcd2df236	33	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
56f2f98bcf58f1892b30205d	101	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
54b4328ce138239d86855aad	369	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57484ab3cf58f13effae7ac5	74	Upperton Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
54fb3438e138239936c6d321	161	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
559d4d6ee138230816dad784	111	Vaca Triste Sandstone	251.9	273.01	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	7779	Roswell mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	229	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
557c738ee138239225f8685b	931	Castile Formation	253.8	260.4	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
5d3f58060b45c76cafa2004f	172	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5906dd0fcf58f15fea53aef7	133	Santa Elena Limestone	65.5	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
57320459cf58f19ced0f7bc5	79	San Andres Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	1063	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b6d4bfe13823bd29ba7dc0	334	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
58d05105cf58f13f39efd424	235	Castile Formation	253.8	260.4	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55b30ea3e138231cbdd6cfcd	1013	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55917250e13823109f3ef5b1	1562	Krabi mention			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	307	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55f4877fcf58f16256a22522	244	Tripoli Fm	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5c2ad1181faed655488b08a2	89	Marl Dozahir mention	33.9	55.8	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	2203	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c0a121e1382389c54c387a	379	Calcite Dolomite			Renard, Stéphane et al.	Geochemical effects of an oxycombustion stream containing SO2 and O2 on carbonate rocks in the context of CO2 storage	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.05.032
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b6d4bfe13823bd29ba7dc0	1195	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5a2cf7f0cf58f19a331caf3c	469	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
558e4538e13823109f3ee24f	2953	Wilcox mention	33.9	56	Pettijohn, R. A.	Geochemistry of ground water in the Gulf Coast Aquifer systems, south-central United States	Water-Resources Investigations Report		1996	United States Geological Survey	10.3133/wri964107
55b7869fe13823bd29ba8231	687	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	987	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328ae138239d8685557f	261	Ford Formation	66	100.5	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
56833ddfcf58f1479a0abbcc	72	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
54b4327de138239d868530d9	62	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
55b7869fe13823bd29ba8231	587	Lucas Formation	385.3	397.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	804	Castile Formation	253.8	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic Dolomite			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
579f1578cf58f1168e64ad7f	388	Magenta mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55a0946ee1382381ff364540	118	Salado mention	256.03	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
557f199ce13823bc80ba25a0	474	IIIII Sandstone			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54b4328ae138239d8685557f	417	Raisby Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
57c9f7a1cf58f1bbcffcfdff	251	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
584aa178cf58f19c3c0fb294	137	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
58d05105cf58f13f39efd424	236	Belayim Formation	11.608	15.97	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
57ec17eccf58f1ac335ac1b3	11	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
557cd3cfe138239225f869e5	2546	Nippewalla Group	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
584aa62ccf58f19d6a5f583e	561	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55ae4f4be13823763a830ada	68	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54e64c66e138237cc91504d3	7	Salado mention	256.03	262.2168	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
5590d1bfe13823109f3ef23b	729	Culebra Dolomite	251	299	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
57602b35cf58f1b1e9b07e02	77	Retiro Formation	113	114.05	Alvarenga, R.S. et al.	Seismic characteristics and distribution of hydrothermal vent complexes in the Cretaceous offshore rift section of the Campos Basin, offshore Brazil	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.03.030
55b7869fe13823bd29ba8231	317	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
557b1abde138239225f86255	972	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.53	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	134	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b6d6a7e13823bd29ba7dcc	1945	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	1233	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557cd3cfe138239225f869e5	2551	Blaine mention	268.51	275.2575	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	2463	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54be90c7e13823299564b137	479	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
5579c265e138231c7c52c464	2	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
56c1e5e7cf58f15c72c90847	156	Green River mention	34.853	58.4	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55ad3126e13823763a8303a0	98	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56c1d9bbcf58f15c72c9075f	262	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b30ea3e138231cbdd6cfcd	277	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5ce2f9b20b45c76caf8ae21e	487	Middleton Dale Anhydrite Formation	346.7	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54fa8fa1e138239936c6ceab	41	Paradox Formation	299	318.1	Huff, G.F. and Wampler, J.M.	K□Ar geochemistry of carnallite from salt-cycle six of the Paradox Formation in Utah, U.S.A.	Chemical Geology: Isotope Geoscience section	80	1990	Elsevier	10.1016/0168-9622(90)90012-2
5683349ccf58f1479a0abb4e	33	Fars Formation			Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
565e67a5cf58f148c57ebb15	49	Watrous Formation	170.9	174.7	Hawkes, Christopher D. and Gardner, Craig	Pressure transient testing for assessment of wellbore integrity in the IEAGHG Weyburn–Midale CO2 Monitoring and Storage Project	International Journal of Greenhouse Gas Control	16	2013	Elsevier	10.1016/j.ijggc.2012.12.022
54e2f6d3e138237cc914f6d6	24	Accessories Dolomite			Popp, T. and Kern, H.	Thermal dehydration reactions characterised by combined measurements of electrical conductivity and elastic wave velocities	Earth and Planetary Science Letters	1-2	1993	Elsevier	10.1016/0012-821X(93)90022-2
558fe155e13823109f3eec57	350	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b690a7e138238e2d05483f	3459	Minnelusa mention	282	320.05	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
54e865c7e138237cc9150d7f	178	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55af1c5ce13823763a830fe9	881	Rustler mention	253.97	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
56aaa9f0cf58f19442532ee1	17	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
574c1c0bcf58f1957a2a36f7	42	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b7869fe13823bd29ba8231	557	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf1fccf58f13accaa0e61	44	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
5c3d9a5c1faed655488cc5a0	2	Francis Group	305.43	305.7125	da Costa Mello, Simone et al.	Response of tomato to polyhalite as a multi-nutrient fertilizer in southeast Brazil	Journal of Plant Nutrition	41	2018	Informa UK Limited	10.1080/01904167.2018.149717878
55b33375e138231cbdd6d08f	1107	Lisan Formation	0.0114	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
57c1a06bcf58f16cbd621551	299	Dead Sea mention	5.332	23.03	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54e49f08e138237cc914fdcc	93	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1186	Clear Fork mention	273.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b3055ce138231cbdd6cf97	3293	Ghanam Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
575019eacf58f1696f3ea50a	277	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
5579c265e138231c7c52c464	143	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55a7c745e13823757cc70251	17	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
557f199ce13823bc80ba25a0	804	Castile Formation	253.8	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54be1b30e138233c8bc4f9d7	200	Nisku Formation	359.2	416	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
56c1d9bbcf58f15c72c9075f	8	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5517568be1382394b500d6fd	207	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
55ae2542e13823763a8309bd	167	Maha Sarakam Formation	65.5	145.5	Hite, R. J.	Progress report on the potash deposits of the Khorat Plateau, Thailand	Open-File Report		1982	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1368	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328ce138239d86855aad	476	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b4328ce138239d86855aad	24	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b7869fe13823bd29ba8231	2190	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.03	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
584aa178cf58f19c3c0fb294	103	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55c2e5c8cf58f1a8110b8c08	180	Zechstein mention	251.9	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.53	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43281e138239d86853bfd	18	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55baa3b5e1382373b63b89e7	69	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54e4d444e138237cc914feb2	32	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
54eba4f0e138237cc9151b1e	316	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
56831341cf58f1479a0ab983	382	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55ae4f4be13823763a830ada	468	Heriaosa Formation			Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5c2bea2e1faed655488b221b	115	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
557f199ce13823bc80ba25a0	1439	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55ae0df7e13823763a830928	549	Tamarisk Member	251.9	273.01	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	2962	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c4005801faed655488cf82c	864	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c2fe60d1faed655488b6bad	217	Leikoupo Formation	228	245	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5897de3fcf58f1081e8c64e1	171	Moenkopi mention	203.18	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54eba4f0e138237cc9151b1e	77	Boulby Shale			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5906dd0fcf58f15fea53aef7	198	Goliad Sandstone	2.1519	5.333	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
5590aba6e13823109f3ef147	189	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
577bca4acf58f1538dda98fd	260	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b4327be138239d86852c99	118	Skagerrak Formation	145	251.902	Cartwright, Joe et al.	Salt dissolution and salt-related deformation of the Forth Approaches Basin, UK North Sea	Marine and Petroleum Geology	18	2001	Elsevier	10.1016/S0264-8172(01)00019-8
557cd3cfe138239225f869e5	1798	Hustler Formation			McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b33375e138231cbdd6d08f	1107	Lisan Formation	0.0114	0.126	Bender, Friedrich	Geology of the Arabian Peninsula, Jordan	Professional Paper		1975	United States Geological Survey	10.3133/pp560I
55c0d379cf58f16e99a378b9	242	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5c3539ed1faed655488c1191	875	Winnipegosis Formation	385.3	397.5	Ryan, W.B.F. et al.	Site 124	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.106.1973
54d25bffe138235369fe011c	93	Aragonite Bloedite Calcite Dolomite			Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
55b7869fe13823bd29ba8231	458	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1470	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58bb7f59cf58f1878850d92a	94	Red River Formation	443.7	488.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
557cd3cfe138239225f869e5	2701	Day Creek Dolomite	261.19	264.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5748f823cf58f170c57fbbd7	102	Codroy Group	318.1	359.2	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
578fb2c8cf58f1bdcd2df236	193	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
58b6daf1cf58f11f2b0dde84	825	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
55b6d4bfe13823bd29ba7dc0	451	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56830ae3cf58f1479a0ab915	61	Shell Lake Member			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
58d03bf3cf58f138516d1200	818	Sanders Group	318.1	359.2	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1effacf58f15c72c9090b	5	Carribuddy Group	416	443.7	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
58cded3ccf58f12a356abeab	230	Mineral mention	307	315.2	Delgado, Gabriel et al.	Carbonate and Phosphate Precipitation by Saline Soil Bacteria in a Monitored Culture Medium	Geomicrobiology Journal	30	2013	Taylor and Francis	10.1080/01490451.2012.665148
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
55b78281e13823bd29ba8218	4090	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54bf26f8e13823023e43db6f	599	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550901a3e138238460c4f59b	100	Zaragoza Fm	5.332	23.03	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
5b526230cf58f1a50a464a8d	172	SYS Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
5683006acf58f1479a0ab88f	58	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
55aefe83e13823763a830f14	620	Anhydrite Limestone			Amato, Roger V. and Bebout, J. W.	Geological and operational summary, COST No. GE-1 well, Southeast Georgia Embayment area, South Atlantic OCS	Open-File Report		1978	United States Geological Survey	10.3133/ofr78668
55b30ea3e138231cbdd6cfcd	2026	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b7869fe13823bd29ba8231	322	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5b6d3f1ecf58f193bb367046	52	Magneslan Limestone			Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
56c1effacf58f15c72c9090b	264	San Andres Formation	251	299	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
58d06d34cf58f148974a929b	81	Fe mention			Pirajno, F and van Kranendonk, MJ	Review of hydrothermal processes and systems on Earth and implications for Martian analogues	Australian Journal of Earth Sciences	52	2005	Taylor and Francis	10.1080/08120090500134571
55b7869fe13823bd29ba8231	3052	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43288e138239d86854e95	44	Dibddiba Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
5c27936e1faed655488aac90	45	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	A hydrohalite spring deposit in the Canadian high Arctic: A potential Mars analogue	Earth and Planetary Science Letters	504	2018	Elsevier	10.1016/j.epsl.2018.10.001
578fb2c8cf58f1bdcd2df236	412	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b7869fe13823bd29ba8231	1234	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c04e8fe1382389c54c36c6	118	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55b3055ce138231cbdd6cf97	3280	Ghanam Group			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
57126a16cf58f140fa5c33f2	184	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55c48dc6cf58f1a8110b94db	157	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57bee020cf58f13d88794bee	261	Windsor mention	95.2	99.5	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
558fe155e13823109f3eec57	830	Culebra mention	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b78281e13823bd29ba8218	799	Yeso mention	275.26	286.225	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5503421ae1382326932d7e6d	1129	Arab Fm	145.5	199.6	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b83d31e13823bd29ba865c	4835	Red mention	324.46	324.8857	Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d4bfe13823bd29ba7dc0	446	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55ad3126e13823763a8303a0	122	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54fae770e138239936c6d10b	203	Castile Formation	253.8	260.4	Raab, M. and Spiro, B.	Sulfur isotopic variations during seawater evaporation with fractional crystallization	Chemical Geology: Isotope Geoscience section	86	1991	Elsevier	10.1016/0168-9622(91)90014-N
54b4324fe138239d8684b069	120	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d6a7e13823bd29ba7dcc	8141	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b67f4fe1382373b63b7864	44	Magnesian Limestone	251	299	Bath, A.H et al.	18O16O and 2H1H changes during progressive hydration of a Zechstein anhydrite formation	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90122-0
558e100ae13823109f3ee10f	159	Todilto mention	158.18	162.45	Soulliere, Sandra J. et al.	Mineral resources of the Ojito and Cabezon Wilderness Study Areas, Sandoval County, New Mexico	Bulletin		1987	United States Geological Survey	10.3133/b1733B
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
55aec932e13823763a830dda	315	Haygood Limestone			Prensky, S. E.	Bibliography of well-log applications; annual update, October 1, 1992 to September 30, 1993	Open-File Report		1993	United States Geological Survey	
558fbd00e13823109f3eeb74	201	Blue River Group	323.2	335	Wangsness, David J. et al.	Hydrology of area 32, Eastern Region, Interior Coal Province, Indiana	Open-File Report		1981	United States Geological Survey	10.3133/ofr81498
55c2a9cacf58f1a8110b8a1e	206	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55c0d379cf58f16e99a378b9	41	Castile Formation	253.8	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b7869fe13823bd29ba8231	772	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	68	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4324fe138239d8684b069	260	Munster Member			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
55b6d4bfe13823bd29ba7dc0	271	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557cd3cfe138239225f869e5	1927	Wellington Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56830ae3cf58f1479a0ab915	256	Shell Lake mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
54b4328ce138239d86855aad	505	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54c04e8fe1382389c54c36c6	118	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
557b1abde138239225f86255	1043	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57131a0ccf58f17d23cdb93a	72	Yates Formation	251	299	Osleger, D. A.	Sequence architecture and sea-level dynamics of Upper Permian shelfal facies, Guadalupe Mountains, southern New Mexico	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.327
55ae4f4be13823763a830ada	281	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b30ea3e138231cbdd6cfcd	1392	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2378	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56c1d9bbcf58f15c72c9075f	46	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b6d4bfe13823bd29ba7dc0	177	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5682e272cf58f1479a0ab716	408	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4328fe138239d868561aa	307	Haymaseki mention			Tekin, Erdoğan et al.	Sedimentology and paleoenvironmental evolution of Messinian evaporites in the Iskenderun–Hatay basin complex, Southern Turkey	Sedimentary Geology	229	2010	Elsevier	10.1016/j.sedgeo.2010.06.014
55a43da1e13823757cc6f19a	249	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd3cfe138239225f869e5	2578	Lykins Formation	245.9	273.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
557f7360e13823bc80ba26f4	2051	Yeso Formation	251	299	Robson, Stanley G. and Banta, Edward R.	Ground Water Atlas of the United States: Segment 2, Arizona, Colorado, New Mexico, Utah	Hydrologic Atlas		1995	United States Geological Survey	
58d03bf3cf58f138516d1200	419	Maha Sarakham mention	33.9	100.5	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55ae4f4be13823763a830ada	279	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
55b83d31e13823bd29ba865c	2887	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56c1cb24cf58f15c72c90642	59	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
56c1d607cf58f15c72c9071a	335	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
56c1d9bbcf58f15c72c9075f	108	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	2508	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e9f64ee138237cc9151412	177	Great Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
57177ecdcf58f1637fb099ed	38	Wellington Formation	251	299	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
5a2f778acf58f10a775a37f3	72	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
5ce2f9b20b45c76caf8ae21e	191	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
557cd3cfe138239225f869e5	1742	Artesia Group	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d4bfe13823bd29ba7dc0	554	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
584aa178cf58f19c3c0fb294	64	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b7869fe13823bd29ba8231	2842	Smackover Limestone	154.8	165.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	453	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5733004ccf58f1066ffdaeaa	395	Prairie Evaporite Formation	385.3	397.5	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55c2a9cacf58f1a8110b8a1e	60	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	1275	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43287e138239d86854dad	264	Concretionary Limestone	251	260.4	Amiri-Garroussi, K. and Taylor, J.C.M.	Displaced carbonates in the Zechstein of the UK North Sea	Marine and Petroleum Geology	9	1992	Elsevier	10.1016/0264-8172(92)90090-2
584aa178cf58f19c3c0fb294	175	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
570fe41dcf58f114a862267f	2	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7620be13823bd29ba814c	3086	See mention			Evans, L. P.	Contributions to economic geology, 1913, Part I, Metals and nonmetals except fuels--Publications by Survey authors on metals and nonmetals except fuels	Bulletin		1915	United States Geological Survey	10.3133/b580P
57ec17eccf58f1ac335ac1b3	645	Burano Formation	237	251	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5590aa05e13823109f3ef13c	11	Paradox Member	299	318.1	Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
572ee8a5cf58f11bb5bc1a43	448	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55a7c745e13823757cc70251	146	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b2bc12e138231cbdd6ce12	2668	Khorat mention	33.9	237	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
56c1d9bbcf58f15c72c9075f	259	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
550912cce138238460c4f61b	64	Berea Sandstone	353.35	362.225	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
54df4a35e138238a47f96f37	197	Burano Anhydrite Formation			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
57ed24dbcf58f133c5c0060e	11	Arab Formation	150.8	155.7	Swart, Peter K. et al.	Evidence for high temperature and 18 O-enriched fluids in the Arab-D of the Ghawar Field, Saudi Arabia	Sedimentology	63	2016	Wiley	10.1111/sed.12286
54e7c15ae138237cc9150ae2	106	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
58b95b1bcf58f166c35f1298	46	Zebbag mention			Dhahri, Ferid and Boukadi, Noureddine	Triassic salt sheets of Mezzouna, Central Tunisia: New comments on Late Cretaceous halokinesis and geodynamic evolution of the northern African margin	Journal of African Earth Sciences		2017	Elsevier	10.1016/j.jafrearsci.2017.01.016
54b4328ae138239d8685557f	73	Hartlepool Anhydrite Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
5ce2f9b20b45c76caf8ae21e	148	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56c1fcefcf58f15c72c90a17	511	Khorat Group	65.5	251	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
58d05f41cf58f143d83df312	92	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
572ecdb4cf58f1177819e19e	35	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
558df7d7e13823109f3ee082	676	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55b30ea3e138231cbdd6cfcd	1145	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b43271e138239d86850ff4	96	Bilara mention	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
55b5b47ce1382314227cfdae	227	Salina mention	419.68	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55b7869fe13823bd29ba8231	612	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327de138239d868530d9	189	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55ae0df7e13823763a830928	1339	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
589ebd9dcf58f101e1d918ac	77	Reference Huntite Calcite Dolomite			Balci, Nurgül et al.	Reproducing Authigenic Carbonate Precipitation in the Hypersaline Lake Acıgöl (Turkey) with Microbial Cultures	Geomicrobiology Journal		2016	Taylor and Francis	10.1080/01490451.2015.1099763
558df7d7e13823109f3ee082	2000	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55ad3126e13823763a8303a0	186	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55ae4f4be13823763a830ada	281	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b4327de138239d868530d9	39	Maha Sarakham mention	33.9	100.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577c41d6cf58f188cebdd1fb	216	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5b6eb3c5cf58f13c68e2d5dc	53	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
58bf2d90cf58f1867eb10946	231	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
575c59dacf58f16e37942a6a	306	Rotliegend mention	251	299	Regenspurg, Simona et al.	Fluid-rock interactions in a geothermal Rotliegend/Permo-Carboniferous reservoir (North German Basin)	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2016.03.010
54e64c66e138237cc91504d3	27	Rustler Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
54b43248e138239d86849e26	48	Oficina Viz Fm.			Chong Diaz, Guillermo et al.	Evolution and geochemical signatures in a Neogene forearc evaporitic basin: the Salar Grande (Central Andes of Chile)	Palaeogeography, Palaeoclimatology, Palaeoecology	151	1999	Elsevier	10.1016/S0031-0182(99)00014-0
5579c265e138231c7c52c464	2	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b30ea3e138231cbdd6cfcd	1992	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55a751cee13823757cc6ff3c	1206	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55b6d4bfe13823bd29ba7dc0	1425	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55a82328e13823757cc7049a	1203	Picard Shale	161.5	201.4	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
557f199ce13823bc80ba25a0	439	Yesa Formation			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
56aaa9f0cf58f19442532ee1	147	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
56c1d9bbcf58f15c72c9075f	195	Sarakham mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	623	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	896	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
5599341be1382390cc641189	203	Puerto Palombrera Formation			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
56c1ea81cf58f15c72c908aa	301	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5c2c0d801faed655488b25e1	42	Gachsaran mention	5.332	23.03	Rabiei, Minou et al.	A methodology for wellbore stability analysis of drilling into presalt formations: A case study from southern Iran	Journal of Petroleum Science and Engineering	167	2018	Elsevier	10.1016/j.petrol.2017.11.023
55b7869fe13823bd29ba8231	1179	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	975	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
54c0c25fe1382389c54c390a	280	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55c0d379cf58f16e99a378b9	44	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b6d4bfe13823bd29ba7dc0	1234	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
559afea3e1382390cc641cc4	491	Burano Formation	237	251	Montomoli, Chiara et al.	Fluid source and pressure–temperature conditions of high-salinity fluids in syn-tectonic veins from the Northeastern Apuan Alps (Northern Apennines, Italy)	Physics and Chemistry of the Earth, Parts A/B/C	30	2005	Elsevier	10.1016/j.pce.2005.01.003
557cd3cfe138239225f869e5	3229	Opeche Shale	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d8a6cf58f15c72c9073f	50	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
563d5ed5cf58f18954974436	515	Chlorite Corundum Diopside Dolomite			Shaw, Brian R. and Simms, Richard	Stratigraphic analysis system: SAS	Computers & Geosciences	3	1977	Elsevier	10.1016/0098-3004(77)90017-6
56c1d8a6cf58f15c72c9073f	426	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
58b8ce49cf58f12dec1f62bf	74	Na Cl Celestine Dolomite			Jensen, Gavin K.S.	Weyburn oilfield core assessment investigating cores from pre and post CO2 injection: Determining the impact of CO2 on the reservoir	International Journal of Greenhouse Gas Control	54	2016	Elsevier	10.1016/j.ijggc.2016.09.003
5ce2f9b20b45c76caf8ae21e	148	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
557f199ce13823bc80ba25a0	887	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5712f1aacf58f16fb4cc921a	265	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b7869fe13823bd29ba8231	1086	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c0d379cf58f16e99a378b9	196	Salado mention	256.03	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56834db7cf58f1479a0abca3	259	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
55b7869fe13823bd29ba8231	1047	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7c745e13823757cc70251	50	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
579f5bc9cf58f12a53c41a24	245	Base mention			Manzi, V. et al.	The Messinian "Calcare di Base" (Sicily, Italy) revisited	Geological Society of America Bulletin	123	2010	Geological Society of America	10.1130/b30262.1
57a43018cf58f11204e17fe0	827	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
56c1d8a6cf58f15c72c9073f	130	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
575c59dacf58f16e37942a6a	306	Rotliegend mention	251	299	Regenspurg, Simona et al.	Fluid-rock interactions in a geothermal Rotliegend/Permo-Carboniferous reservoir (North German Basin)	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2016.03.010
55b6d4bfe13823bd29ba7dc0	1089	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1ca03cf58f15c72c90620	111	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
56c1ea81cf58f15c72c908aa	307	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5c2fd7d01faed655488b6a28	54	Bulunkuole Group	488.3	542	Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
55b83d31e13823bd29ba865c	580	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54b4328de138239d86855c34	529	Cßayirhan mention			Orb, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b7869fe13823bd29ba8231	1725	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ae138239d86855597	219	Alpine Haselgebirge Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d8a6cf58f15c72c9073f	130	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
558cbceae13823109f3eda41	125	Coconino Sandstone	251	299	Bliss, J.D.	Mineral resource assessment of selected nonmetallic and metallic resources of the Coconino National Forest, Arizona	Open-File Report		1997	United States Geological Survey	10.3133/ofr97486
57608442cf58f10987ac4477	1289	Kiirunavaara mention			Martinsson, Olof et al.	Metallogeny of the Northern Norrbotten Ore Province, northern Fennoscandian Shield with emphasis on IOCG and apatite-iron ore deposits	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2016.02.011
55b7869fe13823bd29ba8231	2416	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2385	Zechstein Formation	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b6d4bfe13823bd29ba7dc0	475	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328ae138239d86855597	136	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
565e68f4cf58f148c57ebb1e	11	Duperow Formation	359.2	416	Ryerson, F.J. et al.	Natural CO2 accumulations in the western Williston Basin: A mineralogical analog for CO2 injection at the Weyburn site	International Journal of Greenhouse Gas Control	16	2013	Elsevier	10.1016/j.ijggc.2012.12.015
565df234cf58f148c57eb7c2	125	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Characteristics of ferrospheres in fly ashes derived from bokaro and jharia (jharkand, India) coals	International Journal of Coal Geology		2015	Elsevier	10.1016/j.coal.2015.11.013
56c1d9bbcf58f15c72c9075f	262	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
58d05f41cf58f143d83df312	92	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
55b690a7e138238e2d05483f	3555	Minnelusa mention	282	320.05	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
572ecdb4cf58f1177819e19e	319	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
54b4328be138239d8685567e	374	Rus mention	33.9	55.8	Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
55b7869fe13823bd29ba8231	2875	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	80	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
557cd3cfe138239225f869e5	2280	Stone Corral Dolomite	273.01	275.2575	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5731caeecf58f192f36c5766	114	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
5579c265e138231c7c52c464	28	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5a39ee95cf58f1314cf12808	63	Sedom Formation	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
584aa178cf58f19c3c0fb294	98	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
56c1d8a6cf58f15c72c9073f	275	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
55baa3b5e1382373b63b89e7	94	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54fc8912e138239936c6dc7a	108	Salado mention	256.03	262.2168	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d9bbcf58f15c72c9075f	160	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5598f6b0e1382390cc64103f	176	Daye Formation	245	251	Xie, Guiqing et al.	Geochemical constraints on Cu–Fe and Fe skarn deposits in the Edong district, Middle–Lower Yangtze River metallogenic belt, China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.08.005
56c1a95dcf58f15c72c903aa	1	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5682e272cf58f1479a0ab716	130	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b7869fe13823bd29ba8231	165	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	189	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5682e272cf58f1479a0ab716	107	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
57320459cf58f19ced0f7bc5	534	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
559d4d6ee138230816dad784	88	Rustler Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
558ec3e3e13823109f3ee570	48	Salado mention	256.03	262.2168	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55917250e13823109f3ef5b1	1624	Loei mention			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
558df7d7e13823109f3ee082	243	Salina Formation	416	443.7	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
565df1c6cf58f148c57eb7bf	177	Mullite Hematite Magnetite Dolomite			Shreya, Neha et al.	Multi-technique study of fly ash from the Bokaro and Jharia coalfields (Jharkhand state, India): A contribution to its use as a geoliner	International Journal of Coal Geology	152	2015	Elsevier	10.1016/j.coal.2015.10.006
5682dd16cf58f1479a0ab6de	144	Gessoso-solfifera Formation			MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
56830b14cf58f1479a0ab918	374	Rosetta mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54fb3438e138239936c6d321	161	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
558df7d7e13823109f3ee082	2953	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	1725	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	41	Magenta Dolomite	251.9	273.01	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
56c1d9bbcf58f15c72c9075f	1	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b78281e13823bd29ba8218	4067	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b7869fe13823bd29ba8231	1546	Logan Gulch mention	366.8	370.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7c745e13823757cc70251	114	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2319	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	266	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4328de138239d86855ceb	90	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
59081969cf58f116699a134d	2	Curtis Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
55b7869fe13823bd29ba8231	2198	Prairie Formation	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558df7d7e13823109f3ee082	370	Castile Formation	253.8	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5713034ccf58f175a32a0111	79	Carnallite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b30ea3e138231cbdd6cfcd	2026	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5906dd0fcf58f15fea53aef7	438	Glen Rose Limestone	65.5	145.5	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55c36968cf58f1a8110b9014	58	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
5897de3fcf58f1081e8c64e1	107	Dillinger Member			Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55b7869fe13823bd29ba8231	363	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5733004ccf58f1066ffdaeaa	8	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5733004ccf58f1066ffdaeaa	395	Prairie Evaporite Formation	385.3	397.5	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5590aa05e13823109f3ef13c	164	Halite Anhydrite Calcite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
575019eacf58f1696f3ea50a	8	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
54b4328de138239d86855dfa	333	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
578aea2bcf58f13920dc7baa	15	Andres mention			DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5579c265e138231c7c52c464	57	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5683349ccf58f1479a0abb4e	95	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
57de579ecf58f11956b3e520	146	Goethite Quartz Dolomite			Hunter, Hazel M.A. et al.	Examining Ni-laterite leach mineralogy & chemistry – a holistic multi-scale approach	Minerals Engineering		2013	Elsevier	10.1016/j.mineng.2013.05.002
55b7869fe13823bd29ba8231	1345	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b851e1e13823bd29ba86d8	199	Cottonwood Canyon Member	318.1	359.2	Sandberg, Charles A. and Klapper, Gilbert	Stratigraphy, age, and paleotectonic significance of the Cottonwood Canyon Member of the Madison Limestone in Wyoming and Montana	Bulletin		1967	United States Geological Survey	10.3133/b1251B
598b7f39cf58f110dbcb4af6	91	Dronovsk Group	245	251	Belous, I. R. et al.	OCCURRENCES OF MERCURY IN NORTHWESTERN DONBASS SALT DOMES	International Geology Review	26	2010	Taylor and Francis	10.1080/00206818409466586
54b4324fe138239d8684b069	253	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
56faac60cf58f15186bf46cd	264	Calcite mention			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
572ecdb4cf58f1177819e19e	269	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
56c1d9bbcf58f15c72c9075f	273	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4328ae138239d8685557f	406	Raisby Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a0495c3cf58f1b96402acf5	45	Hecho Group	33.9	55.8	Blasco, Mónica et al.	Geochemistry, geothermometry and influence of the concentration of mobile elements in the chemical characteristics of carbonate-evaporitic thermal systems. The case of the Tiermas geothermal system (Spain)	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.07.013
57a43018cf58f11204e17fe0	356	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
558e672ce13823109f3ee322	334	Castile mention	259	259.51	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
56c1ca03cf58f15c72c90620	150	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5503421ae1382326932d7e6d	1129	Arab Fm	145.5	199.6	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55bfbd79cf58f16e99a3701c	575	Prairie Evaporite Formation	385.3	397.5	Roberts, Sheila M. and Spencer, Ronald J.	Paleotemperatures preserved in fluid inclusions in halite	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00253-V
55b30ea3e138231cbdd6cfcd	1590	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2455	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	367	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
584aa178cf58f19c3c0fb294	650	Winnipegosis Formation	385.3	397.5	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
575705decf58f1bb124e0773	80	Castile Formation	253.8	260.4	Silva, Matthew K. et al.	Resolution of the Long-Term Performance Issues at the Waste Isolation Pilot Plant	Risk Analysis	19	1999	Wiley-Blackwell	10.1111/j.1539-6924.1999.tb00458.x
55b6d4bfe13823bd29ba7dc0	1371	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
572ea708cf58f10f9db0ebad	40	San Andres Formation	251	299	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
58bf2d90cf58f1867eb10946	184	Tempe Formation	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54b4328ae138239d86855597	136	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
56c1a95dcf58f15c72c903aa	1	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b7869fe13823bd29ba8231	1260	Artesia Group	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559dcd1ae138230816dad9be	363	Paradox Member	299	318.1	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5749d59dcf58f1b0821791d1	132	Dead Sea Group	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
56c1d8a6cf58f15c72c9073f	154	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54b43288e138239d86854e95	145	Fars mention			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
557cd3cfe138239225f869e5	2586	Stone Corral Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
56c1ca03cf58f15c72c90620	244	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5c2ad1181faed655488b08a2	103	Red mention	324.46	324.8857	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b5b47ce1382314227cfdae	25	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5590d1bfe13823109f3ef23b	734	Magenta Dolomite	251.9	273.01	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
558fe155e13823109f3eec57	302	Cowden Anhydrite Member	251.9	273.01	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
54e865c7e138237cc9150d7f	347	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b7869fe13823bd29ba8231	257	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d06d34cf58f148974a929b	230	Fe Dolomite			Pirajno, F and van Kranendonk, MJ	Review of hydrothermal processes and systems on Earth and implications for Martian analogues	Australian Journal of Earth Sciences	52	2005	Taylor and Francis	10.1080/08120090500134571
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327ce138239d86852f8a	145	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
5936c38dcf58f12dc3451d1e	69	Salt Plain Formation	271.89	276.3813	Hanlon, Corinne et al.	Comparison of δ 81 Br and δ 37 Cl composition of volatiles, salt precipitates, and associated water in terrestrial evaporative saline lake systems	Isotopes in Environmental and Health Studies		2017	Taylor and Francis	10.1080/10256016.2017.1324856
54e865c7e138237cc9150d7f	119	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
54e865c7e138237cc9150d7f	410	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
557cd3cfe138239225f869e5	1748	San Andres Limestone	269.64	279.0034	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4328ae138239d8685544	7	Greenfield Dolomite	422.05	429.8	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
550adbb3e138238460c4fef1	99	Periclase Calcite Dolomite			Wieland, E. et al.	Influence of superplasticizers on the long-term properties of cement pastes and possible impact on radionuclide uptake in a cement-based repository for radioactive waste	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2014.04.002
56c1d9bbcf58f15c72c9075f	120	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4327ee138239d86853305	40	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
58d05f04cf58f143d83df298	129	Khuff Formation	199.6	251	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
56c1a95dcf58f15c72c903aa	89	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
565e68f4cf58f148c57ebb1e	1	Duperow Formation	359.2	416	Ryerson, F.J. et al.	Natural CO2 accumulations in the western Williston Basin: A mineralogical analog for CO2 injection at the Weyburn site	International Journal of Greenhouse Gas Control	16	2013	Elsevier	10.1016/j.ijggc.2012.12.015
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328ee138239d868561688	230	Calcite mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
54b4328ce138239d86855a1e	575	Falces mention			Ingles, M. et al.	Relationship of mineralogy to depositional environments in the non-marine Tertiary mudstones of the southwestern Ebro Basin (Spain)	Sedimentary Geology	116	1998	Elsevier	10.1016/S0037-0738(97)00112-7
55b7869fe13823bd29ba8231	317	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	287	Tamarisk mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
565e68f4cf58f148c57ebb1e	227	Duperow mention	375.7	380.45	Ryerson, F.J. et al.	Natural CO2 accumulations in the western Williston Basin: A mineralogical analog for CO2 injection at the Weyburn site	International Journal of Greenhouse Gas Control	16	2013	Elsevier	10.1016/j.ijggc.2012.12.015
54bf26f8e13823023e43db6f	310	Edwards mention	100.5	103.625	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b4328ee138239d86855f3a	789	Belayim Formation	11.608	15.97	Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
54b4328ae138239d86855525	188	Hagif mention			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55ae0df7e13823763a830928	558	Dewey Lake Formation	251.9	253.9652	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56830b14cf58f1479a0ab918	69	Gessoso Solfifera mention	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54ff667de13823a766aa7497	111	Dawsonite Diaspore Diopside Dolomite			Gherbi, Cherif et al.	An experimental study of lake water-sediment interaction rates	Comptes Rendus Geoscience	342	2010	Elsevier	10.1016/j.crte.2009.11.002
570fe41dcf58f114a862267f	43	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b735f3e13823bd29ba8028	2846	UNITED STATES mention			Luttrell, Gwendolyn Werth et al.	Lexicon of new formal geologic names of the United States, 1976-1980	Bulletin		1986	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
550ab8aae138238460c4fe5e	294	Sydney Mines Formation	306.5	311.7	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
55b8b7f4e13823bd29ba8982	976	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55b7869fe13823bd29ba8231	2377	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5749d59dcf58f1b0821791d1	250	Prairie Evaporite Formation	385.3	397.5	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
54c0c25fe1382389c54c390a	108	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
577b3daccf58f13110d8e98f	419	Ba mention			OMORI, KEIICHI and KERR, PAUL F.	Infrared Studies of Saline Sulfate Minerals	Geol Soc America Bull	74	1963	Geological Society of America	10.1130/0016-7606(1963)74[709:isossm]2.0.co;2
55b7869fe13823bd29ba8231	1602	Paradox mention	306	319.714	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57437547cf58f1350bacb6cd	18	Brine Formation			CUI, Xiangmei et al.	Simulated Dynamic Evaporation of Yiliping Salt Lake Brine	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12279_6
558eb5d6e13823109f3ee517	434	Rustler mention	253.97	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
59aefb59cf58f1acd5671b26	238	Bassanite mention			Gazulla, M. F. et al.	Chemical characterisation by WD-XRF and XRD of silicon carbide-based grinding tools	X-Ray Spectrometry	39	2010	Wiley-Blackwell	10.1002/xrs.1258
57126f9fcf58f142fd277238	43	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
54b43270e138239d86850db4	308	Schisto-Calcaire Subgroup			Frimmel, Hartwig E.	On the reliability of stable carbon isotopes for Neoproterozoic chemostratigraphic correlation	Precambrian Research	182	2010	Elsevier	10.1016/j.precamres.2010.01.003
5749d59dcf58f1b0821791d1	90	Dead Sea Group	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54be7fc1e13823299564b0b3	224	Salado Formation	251	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b7869fe13823bd29ba8231	321	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5ce2f9b20b45c76caf8ae21e	286	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54e7342de138237cc915088c	3	Bahloul Formation	89.3	93.5		Index	Chemical Geology	155	1999	Elsevier	10.1016/S0009-2541(99)00016-9
558eb5d6e13823109f3ee517	333	Tamarisk mention	251.9	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5579c265e138231c7c52c464	45	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
579f1578cf58f1168e64ad7f	384	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	2254	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558df7d7e13823109f3ee082	2069	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
572ea708cf58f10f9db0ebad	322	Salado Formation	251	260.4	Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57ec17eccf58f1ac335ac1b3	538	Maha Sarakham mention	33.9	100.5	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
56834db7cf58f1479a0abca3	259	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
5732032ecf58f19cbcbc550f	73	Rustler Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	1171	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575c4f4ecf58f16b97cc4df6	1	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
5a048d65cf58f1b96402a09e	1	Rock-Water Interaction Group			Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
54fb3438e138239936c6d321	186	Salado mention	256.03	262.2168	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b6d4bfe13823bd29ba7dc0	1242	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557cd3cfe138239225f869e5	2508	Stone Corral Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b30ea3e138231cbdd6cfcd	1191	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328de138239d86855c34	163	Cßayirhan mention			Orb, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
54eba4f0e138237cc9151b1e	80	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
59081969cf58f116699a134d	149	Sanders Group	318.1	359.2	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
55b7869fe13823bd29ba8231	2465	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5503421ae1382326932d7e6d	135	Evaporite mention			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
56c1a95dcf58f15c72c903aa	174	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55af1c5ce13823763a830fe9	887	Fletcher Anhydrite Member	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
570fe41dcf58f114a862267f	64	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b83d31e13823bd29ba865c	585	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
56b99311cf58f14c238d4bdc	57	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
56c60ad7cf58f17493f876b5	168	St. Louis Limestone	318.1	359.2	Stueber, Alan M. and Criss, Robert E.	ORIGIN AND TRANSPORT OF DISSOLVED CHEMICALS IN A KARST WATERSHED, SOUTHWESTERN ILLINOIS	Journal of the American Water Resources Association	41	2005	Wiley-Blackwell	10.1111/j.1752-1688.2005.tb03734.x
55b7869fe13823bd29ba8231	1464	Sundance Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b7869fe13823bd29ba8231	1136	Anhydrite Salt Lowlands Limestone			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55917250e13823109f3ef5b1	850	Maha Sarakam mention	65.5	145.5	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
58c8ed8ccf58f1a71217fb6b	89	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
55b6d6a7e13823bd29ba7dcc	8343	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
572ecdb4cf58f1177819e19e	31	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
56834db7cf58f1479a0abca3	261	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
5a21053ecf58f18a3170d1ed	136	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5732032ecf58f19cbcbc550f	67	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
56c1ea81cf58f15c72c908aa	186	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
56f2f98bcf58f1892b30205d	234	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55a751cee13823757cc6ff3c	1200	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
55a0946ee1382381ff364540	113	Salado mention	256.03	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55ad3126e13823763a8303a0	88	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54b4328de138239d86855ceb	215	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
572ecdb4cf58f1177819e19e	273	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
56c1ea81cf58f15c72c908aa	352	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5732032ecf58f19cbcbc550f	94	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55c2a9cacf58f1a8110b8a1e	206	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55b7869fe13823bd29ba8231	1450	Goose Egg mention	247.2	282	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5733b975cf58f124f1cfb8f8	289	Detroit River Group	359.2	416	J. A. Fagerstrom	Petrology and Regional Significance of a Devonian Carbonate/Evaporite Complex, Eastern Michigan Basin	SEPM Journal of Sedimentary Research	Vol. 53	1983	Society for Sedimentary Geology	10.1306/212f81ac-2b24-11d7-8648000102c1865d
54df4a35e138238a47f96f37	25	Burano Anhydrite Formation			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
5ce2f9b20b45c76caf8ae21e	455	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55ae0df7e13823763a830928	547	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
575019eacf58f1696f3ea50a	16	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55b30ea3e138231cbdd6cfcd	1590	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54d4bb37e138238471e7f379	362	Salado mention	256.03	262.2168	Beauheim, Richard L and Roberts, Randall M	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
55b8484be13823bd29ba869d	165	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
58bb864acf58f18a73ed4b28	81	Ariri Formation	109.53	115.1	Alves, Tiago M. et al.	An incomplete correlation between pre-salt topography, top reservoir erosion, and salt deformation in deep-water Santos Basin (SE Brazil)	Marine and Petroleum Geology		2017	Elsevier	10.1016/j.marpetgeo.2016.10.015
58b7df47cf58f18af629a04c	110	Besalu mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
56a1e0c6cf58f19442528787	428	Hypothetical Anhydrite Seal Formation			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954
58bb7f59cf58f1878850d92a	264	Red River mention	446.15	450.75	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
557cd3cfe138239225f869e5	2503	Ninnescah Shale	275.26	280.5016	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43247e138239d86849b52	226	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
5a850dffcf58f13f065e41c5	55	Sedom mention	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
559e58a2e138230816dadbe2	667	Kaibab Formation	270.6	299	Bliss, J.D.	Preliminary mineral resource assessment of selected industrial and collector minerals of the Prescott National Forest, Arizona	Open-File Report		1999	United States Geological Survey	10.3133/ofr99305
557f199ce13823bc80ba25a0	1794	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
58c8ed8ccf58f1a71217fb6b	89	Kirmir Formation	5.332	23.03	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
5683349ccf58f1479a0abb4e	103	Castile mention	259	259.51	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b6d4bfe13823bd29ba7dc0	963	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5509217ee138238460c4f689	235	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b78281e13823bd29ba8218	798	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
57131885cf58f17cb0fd1f40	10	Belayin Formation			Kovalevich, V. M. et al.	Brine inclusions in halite and the origin of the Middle Devonian Prairie Evaporites of Western Canada; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.228
54b43276e138239d86851ec2	341	Habshan Formation	99.6	145.5	Vandeginste, Veerle et al.	Interplay between depositional facies, diagenesis and early fractures in the Early Cretaceous Habshan Formation, Jebel Madar, Oman	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.11.006
54b4328de138239d86855cbb	693	Belayim Formation	11.608	15.97	Kasprzyk, Alicja	Sedimentological and diagenetic patterns of anhydrite deposits in the Badenian evaporite basin of the Carpathian Foredeep, southern Poland	Sedimentary Geology	158	2003	Elsevier	10.1016/S0037-0738(02)00265-8
55b7869fe13823bd29ba8231	2793	Supai Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e97acfe138237cc915120b	34	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5682fa41cf58f1479a0ab846	29	Facha Member	33.9	55.8	AMIRI-GARROUSSI, K.	Eocene spheroidal dolomite from the western Sirte Basin, Libya	Sedimentology	35	1988	Wiley-Blackwell	10.1111/j.1365-3091.1988.tb01237.x
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
56f2f98bcf58f1892b30205d	50	Kamiiso Group			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b7869fe13823bd29ba8231	1946	Luke Salt Member	5.332	23.03	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	433	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
578fb2c8cf58f1bdcd2df236	33	San Andres Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
57608442cf58f10987ac4477	1296	Kiirunavaara mention			Martinsson, Olof et al.	Metallogeny of the Northern Norrbotten Ore Province, northern Fennoscandian Shield with emphasis on IOCG and apatite-iron ore deposits	Ore Geology Reviews		2016	Elsevier	10.1016/j.oregeorev.2016.02.011
5b6d3f1ecf58f193bb367046	10	Magnesian Limestone	251	299	Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
5590aba6e13823109f3ef147	29	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2212	Cedar Keys Limestone	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54d899b7e138238471e803b7	124	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
590157c0cf58f190a83b8654	792	Anorthoclase Sandstone				Classified Advertisements	Rocks & Minerals	35	1960	Taylor and Francis	10.1080/00357529.1960.11766648
559877f7e1382390cc640dbc	311	Bellerophon Formation	251	299	Palinkaš, Ladislav A. et al.	Metallogeny of the Northwestern and Central Dinarides and Southern Tisia	Ore Geology Reviews	34	2008	Elsevier	10.1016/j.oregeorev.2008.05.006
54be1b30e138233c8bc4f9d7	200	Nisku Formation	359.2	416	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b7869fe13823bd29ba8231	785	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5683349ccf58f1479a0abb4e	133	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b7869fe13823bd29ba8231	447	Supai Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	76	Tamarisk Member	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
57320459cf58f19ced0f7bc5	86	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	733	Warsaw Limestone	339	341	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328de138239d86855ceb	54	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
584aa178cf58f19c3c0fb294	81	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
56c1ea81cf58f15c72c908aa	351	Nisku Formation	359.2	416	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54b43247e138239d86849b52	111	Aroifilla Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
557cd3cfe138239225f869e5	2540	Stone Corral mention	273.01	280.5016	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
579f1578cf58f1168e64ad7f	288	Tamarisk mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5683349ccf58f1479a0abb4e	91	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b7869fe13823bd29ba8231	1140	Quartermaster Formation	251.9	273.01	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
56833ddfcf58f1479a0abbcc	278	Main Dolomite	251	260.4	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b7869fe13823bd29ba8231	775	Fort Pierce Formation	119.3	148.15	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83b40e1382373b63b7fe6	30	Castile mention	259	259.51	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
56c1d9bbcf58f15c72c9075f	227	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55baa3b5e1382373b63b89e7	193	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54e49f08e138237cc914fdcc	93	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bf2d90cf58f1867eb10946	228	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55c2a9cacf58f1a8110b8a1e	91	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5b6f081fcf58f1539ffa6761	266	Germik Formation			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
54fb3438e138239936c6d321	489	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54b7e5cfe138230a74d15b25	634	Keuper mention	266.9	242	Sherlock, R.L.	A correlation of the British Permo-Triassic rocks Part II. England South of the Pennines and Wales	Proceedings of the Geologists' Association	39	1928	Elsevier	10.1016/S0016-7878(28)80032-0
55b70b93e1382373b63b7aed	690	Prairie Evaporhe Formation	385.3	397.5	Knauth, L.Paul and Beeunas, Mark A.	Isotope geochemistry of fluid inclusions in Permian halite with implications for the isotopic history of ocean water and the origin of saline formation waters	Geochimica et Cosmochimica Acta	50	1986	Elsevier	10.1016/0016-7037(86)90195-X
56c1d9bbcf58f15c72c9075f	197	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1ca03cf58f15c72c90620	129	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b77fd5e1382373b63b7cce	223	Buckner Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
58bb7f59cf58f1878850d92a	113	Red River mention	446.15	450.75	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
557cd3cfe138239225f869e5	863	Pease River Group	273.01	282	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
55c48dc6cf58f1a8110b94db	71	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
5502ed7de1382326932d7c2a	2233	Knox Group	488.3	501	Warren, John	Dolomite: occurrence, evolution and economically important associations	Earth-Science Reviews	1-3	2000	Elsevier	10.1016/S0012-8252(00)00022-2
55b7869fe13823bd29ba8231	1508	Kibbey mention	326.15	337.125	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ea81cf58f15c72c908aa	307	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55a7c745e13823757cc70251	114	Forty-niner Member			Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
5579c265e138231c7c52c464	168	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
57126f9fcf58f142fd277238	35	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5ce2f9b20b45c76caf8ae21e	865	Hathern Anhydrite mention	346.7	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
58bf2d90cf58f1867eb10946	313	Tempe Formation	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
572ecdb4cf58f1177819e19e	117	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	1884	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	2981	San Andres mention	150.6	154.8	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	601	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b43259e138239d8684cd98	414	Red Bed	100.5	145	Milesi, J.P. et al.	An overview of the geology and major ore deposits of Central Africa: Explanatory note for the 1:4,000,000 map “Geology and major ore deposits of Central Africa”	Journal of African Earth Sciences	44	2006	Elsevier	10.1016/j.jafrearsci.2005.10.016

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2190	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	275	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
56c1d8a6cf58f15c72c9073f	366	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
5b289527cf58f1347499025c	156	Aragonitec Calcitec Fluorite Dolomite			Cardoso, Antonio J. et al.	Batch Test Assessment of Waste-to-Energy Combustion Residues Impacts on Precipitate Formation in Landfill Leachate Collection Systems	Journal of the Air & Waste Management Association	58	2008	Informa UK Limited	10.3155/1047-3289.58.1.19
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
570fe41dcf58f114a862267f	2	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
5517568be1382394b500d6fd	114	Calcite Dolomite			Schütt, Brigitta	Reconstruction of palaeoenvironmental conditions by investigation of Holocene playa sediments in the Ebro Basin, Spain: preliminary results	Geomorphology	23	1998	Elsevier	10.1016/S0169-555X(98)00009-9
570fe41dcf58f114a862267f	219	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
58c8ed8ccf58f1a71217fb6b	173	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
559dcd1ae138230816dad9be	362	Paradox Member	299	318.1	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
54b4328ee138239d86855f3a	195	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
585b644ecf58f1a722daada6	92	Fort Union Formation	55.8	65.5	McMahon, P.B. et al.	Chemical Considerations for an Updated National Assessment of Brackish Groundwater Resources	Groundwater	54	2016	Wiley	10.1111/gwat.12367
57c1a06bcf58f16cbd621551	59	Ramon Group	199.6	251	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
59aefb59cf58f1acd5671b26	163	Bassanite Dolomite			Gazulla, M. F. et al.	Chemical characterisation by WD-XRF and XRD of silicon carbide-based grinding tools	X-Ray Spectrometry	39	2010	Wiley-Blackwell	10.1002/xrs.1258
55b7869fe13823bd29ba8231	3010	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
570fe41dcf58f114a862267f	255	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
5502ed7de1382326932d7c2a	1061	Zechstein mention	251.9	273.01	Warren, John	Dolomite: occurrence, evolution and economically important associations	Earth-Science Reviews	1-3	2000	Elsevier	10.1016/S0012-8252(00)00022-2
55b7869fe13823bd29ba8231	2594	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a0946ee1382381ff364540	104	Castile mention	259	259.51	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	111	San Andres Formation	251	299	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b6d4bfe13823bd29ba7dc0	1059	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4324fe138239d8684b069	252	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
57a43018cf58f11204e17fe0	471	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57c19f3dcf58f16c6a855ae6	84	Burano Fm	237	251	Gasparrini, M. et al.	Diagenesis versus hydrothermalism and fluid-rock interaction within the Tuscan Nappe of the Monte Amiata CO 2 -rich geothermal area (Italy)	Geofluids	13	2013	Wiley	10.1111/gfl.12025
579f1578cf58f1168e64ad7f	79	Cowden Anhydrite Member	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	1745	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1b6a3cf58f15c72c904b4	277	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
567c9105cf58f1b2eac1a357	157	Morelos Formation	65.5	145.5	Talavera Mendoza, Oscar et al.	Water-rock-tailings interactions and sources of sulfur and metals in the subtropical mining region of Taxco, Guerrero (southern Mexico): A multi-isotopic approach	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2015.12.002
5682e272cf58f1479a0ab716	416	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5731caeecf58f192f36c5766	61	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
56c1d9bbcf58f15c72c9075f	177	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54be7fc1e13823299564b0b3	192	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
54b4328ce138239d86855aad	96	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b30ea3e138231cbdd6cfcd	1650	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
572ecdb4cf58f1177819e19e	276	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
55af1c5ce13823763a830fe9	41	Magenta Dolomite	251.9	273.01	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54d4bb37e138238471e7f379	433	Salado mention	256.03	262.2168	Beauheim, Richard L and Roberts, Randall M	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54b97a75e1382369e57e4cef	2	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5503421ae1382326932d7e6d	125	Hith Formation	199.6	251	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54c04e8fe1382389c54c36c6	82	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
5989d928cf58f1325fd87abd	104	Clay Quartz Calcite Dolomite			Gueciouer, A. et al.	Valorization of KCl/PHPA system of water-based drilling fluid in presence of reactive clay: Application on Algerian field	Applied Clay Science	146	2017	Elsevier	10.1016/j.clay.2017.06.007
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55c48dc6cf58f1a8110b94db	43	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
58bf2d90cf58f1867eb10946	231	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
54b4328ce138239d86855b7a	327	Queen Formation	260.4	270.6	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
55b7869fe13823bd29ba8231	1966	Muddy Creek Formation	5.332	23.03	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	134	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
5ce2f9b20b45c76caf8ae21e	321	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55a43da1e13823757cc6f19a	300	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	734	Wapsipinicon Limestone	383.95	391.9	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	774	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c0c25fe1382389c54c390a	280	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55b7869fe13823bd29ba8231	712	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43250e138239d8684b46c	168	Maha Sarakham Formation	65.5	145.5	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55b7869fe13823bd29ba8231	1359	Salado mention	256.03	262.2168	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf1fccf58f13accaa0e61	395	Prairie Evaporite Formation	385.3	397.5	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55b6d4bfe13823bd29ba7dc0	447	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557b1abde138239225f86255	1245	Calcareous mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
59081969cf58f116699a134d	182	Curtis Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
55a43da1e13823757cc6f19a	269	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
579f1578cf58f1168e64ad7f	244	Vaca Triste Sandstone	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5502c2cae1382326932d7ae8	793	Prairie mention	383.95	389.1	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55b83b40e1382373b63b7fe6	27	Blaine Fm	251	299	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
584aa178cf58f19c3c0fb294	98	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
557cd3cfe138239225f869e5	2701	Day Creek Dolomite	261.19	264.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54be1b30e138233c8bc4f9d7	109	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5ab66103cf58f143ea8f4c06	200	Selective Formation				Graphical Abstract: Angew. Chem. Int. Ed. 13/2015	Angewandte Chemie International Edition	54	2015	Wiley-Blackwell	10.1002/anie.201590016
56b99311cf58f14c238d4bdc	57	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
57320459cf58f19ced0f7bc5	89	Seven Rivers mention	261.76	264.5725	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b30ea3e138231cbdd6cfcd	1992	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
554712dae138233dfd7d3d3a	256	Sandstone/shale Limestone			Peiffer, L. et al.	Tracing thermal aquifers of El Chichón volcano–hydrothermal system (México) with 87Sr/86Sr, Ca/Sr and REE	Journal of Volcanology and Geothermal Research	205	2011	Elsevier	10.1016/j.jvolgeores.2011.06.004
54b4328ae138239d8685544	223	Salina mention	419.68	429.4	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
5c4005801faed655488cf82c	616	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
5a39ee95cf58f1314cf12808	86	Sedom Formation	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
570fe41dcf58f114a862267f	52	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	3062	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1364	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5583191be1382390b43c96ad	471	Escucha Formation			Querol, X. et al.	Distribution of sulfur in coals of the Teruel mining district, Spain	International Journal of Coal Geology	18	1991	Elsevier	10.1016/0166-5162(91)90056-O
56c1d9bbcf58f15c72c9075f	224	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b7869fe13823bd29ba8231	277	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c060fbe1382389c54c3757	218	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55b6d4bfe13823bd29ba7dc0	1240	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4327fe138239d868537c7	306	Mo mention			Hezarkhani, Ardeshir	Hydrothermal evolution of the Sar-Cheshmeh porphyry Cu–Mo deposit, Iran: Evidence from fluid inclusions	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.11.003
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
58d27a97cf58f121bb4ff118	357	Debolt Formation	318.1	359.2	Baniak, Greg M. et al.	Sabkha and Burrow-Mediated Dolomitization in the Mississippian Debolt Formation, Northwestern Alberta, Canada	Ichnos	21	2014	Taylor and Francis	10.1080/10420940.2014.930036
54bffee9e1382389c54c3458	349	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
58d03bf3cf58f138516d1200	511	Rotliegende mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
58d05f04cf58f143d83df298	359	Gays River Formation	323.2	358.9	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
58bf2d90cf58f1867eb10946	132	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5753de61cf58f152826f3b93	31	Prairie Evaporite Formation	385.3	397.5	Gendzwill, D. J. and Stead, D.	Rock mass characterization around Saskatchewan potash mine openings using geophysical techniques: a review	Canadian Geotechnical Journal	29	1992	Canadian Science Publishing	10.1139/t92-073
577b5e79cf58f13907e5e76d	60	Prairie Formation	359.2	416	De MILLE, G. et al.	Collapse Structures Related to Evaporites of the Prairie Formation, Saskatchewan	Geol Soc America Bull	75	1964	Geological Society of America	10.1130/0016-7606(1964)75[307:csrteo]2.0.co;2
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5683349ccf58f1479a0abb4e	103	Castile mention	259	259.51	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
5c19917d1faed655488915d3	46	Gesesso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
54b4328de138239d86855dfa	333	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
558ff726e13823109f3eecd8	612	Description mention			Madsen, Beth M.	Core logs of three test holes in Cenozoic lake deposits near Hector, California	Bulletin		1970	United States Geological Survey	10.3133/b1296
5907be0fcf58f1b18607fd07	82	Sanders Group	318.1	359.2	Smith, Jeffrey R.	Geodes and Geodes after Fossils from Heltonville Lawrence County Indiana	Rocks & Minerals	82	2007	Taylor and Francis	10.3200/RMIN.82.3.200-209
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b6d4bfe13823bd29ba7dc0	963	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	669	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	379	Amarillo Fork Group			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2229	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b73032e13823bd29ba8000	323	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b7869fe13823bd29ba8231	2228	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	233	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
578b8ab6cf58f1645f54f0c6	59	Salado mention	256.03	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
557cd3cfe138239225f869e5	4050	Cedar Mesa Member	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55af1c5ce13823763a830fe9	150	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
56c1ea81cf58f15c72c908aa	352	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
56c1d607cf58f15c72c9071a	365	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55b7869fe13823bd29ba8231	1363	Castile mention	259	259.51	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
580e3bc6cf58f172dd1b8676	38	Salt Loeme Formation			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
559c3f39e138230816dad2ff	128	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55b73032e13823bd29ba8000	211	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
57ec17eccf58f1ac335ac1b3	448	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
55b30ea3e138231cbdd6cfcd	1210	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55ae0df7e13823763a830928	2236	Castile Formation	253.8	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
58b8ce49cf58f12dec1f62bf	41	Charles Formation	318.1	359.2	Jensen, Gavin K.S.	Weyburn oilfield core assessment investigating cores from pre and post CO2 injection: Determining the impact of CO2 on the reservoir	International Journal of Greenhouse Gas Control	54	2016	Elsevier	10.1016/j.ijggc.2016.09.003
558ff726e13823109f3eecd8	612	Description mention			Madsen, Beth M.	Core logs of three test holes in Cenozoic lake deposits near Hector, California	Bulletin		1970	United States Geological Survey	10.3133/b1296
58b6daf1cf58f11f2b0dde84	843	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
5a2c08b0cf58f140fb1cf84a	70	Valerianovka Supergroup	318.1	359.2	Hawkins, T. et al.	The geology and genesis of the iron skarns of the Turgai belt, northwestern Kazakhstan	Ore Geology Reviews	85	2017	Elsevier	10.1016/j.oregeorev.2015.10.016
5c2fc2a31faed655488b68d4	35	Tugutublak Fm	299	318.1	Chen, Huayong et al.	Genesis of the Paleozoic Aqishan-Yamansu arc-basin system and Fe (-Cu) mineralization in the Eastern Tianshan, NW China	Ore Geology Reviews	105	2019	Elsevier	10.1016/j.oregeorev.2018.12.012
54e9f64ee138237cc9151412	494	Dirt Bed			West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
5bf90c4dcf58f1a9c3124ad5	87	Calcite Dolomite			Giustetto, Roberto et al.	Deterioration of building materials and artworks in the 'Santa Maria della Stella' church, Saluzzo (Italy): Causes of decay and possible remedies	Studies in Conservation	62	2017	Informa UK Limited	10.1080/00393630.2016.1217694
55a43da1e13823757cc6f19a	283	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
575019eacf58f1696f3ea50a	16	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55b6d4bfe13823bd29ba7dc0	1237	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	2290	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5c3539e11faed655488c10ed	212	Prairie Evaporite mention	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	1392	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54be7fc1e13823299564b0b3	192	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
5749d59dcf58f1b0821791d1	96	Windsor Group	318.1	359.2	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
573133c3cf58f17ae858e28c	295	Supai Formation	251	299	M. A. McCaffrey et al.	The Evaporation Path of Seawater and the Coprecipitation of Br- and K+ with Halite	SEPM Journal of Sedimentary Research	Vol. 57	1987	Society for Sedimentary Geology	10.1306/212f8cab-2b24-11d7-8648000102c1865d
558e3447e13823109f3ee1ef	182	Salado Formation	251	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
55b7869fe13823bd29ba8231	1031	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b64a4de1382314227d0039	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
574fa5eccf58f14020b9e845	385	Chinchaga Formation	388.63	393.3	Morrow, D. W. et al.	A hypothesis concerning the origin of barite in Devonian carbonate rocks of northeastern British Columbia	Canadian Journal of Earth Sciences	15	1978	Canadian Science Publishing	10.1139/e78-147
54b4328ce138239d86855aad	96	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b3d511e138231cbdd6d40e	286	Tabular mention			Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1369	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55ad3126e13823763a8303a0	124	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
557b1abde138239225f86255	477	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
57484ab3cf58f13effae7ac5	80	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
54c04e8fe1382389c54c36c6	35	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
54b4324de138239d8684aa17	182	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b7869fe13823bd29ba8231	1171	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	1244	Rustler Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
557bfbc7e138239225f86664	312	Paradox mention	306	319.714	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	2001	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58ccdb01cf58f193ab4b19a8	56	Albert Formation	318.1	359.2	Pickerill, Ron K.	Carboniferous nonmarine invertebrate ichnocoenoses from southern New Brunswick, eastern Canada	Ichnos	2	1992	Taylor and Francis	10.1080/10420949209380072
559c3f39e138230816dad2ff	134	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54c04e8fe1382389c54c36c6	118	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54c0a121e1382389c54c387a	351	Calcite mention			Renard, Stéphane et al.	Geochemical effects of an oxycombustion stream containing SO2 and O2 on carbonate rocks in the context of CO2 storage	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.05.032
558df7d7e13823109f3ee082	235	Castile mention	259	259.51	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	1297	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1281	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575019eacf58f1696f3ea50a	16	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55a0946ee1382381ff364540	99	Castile mention	259	259.51	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
575019eacf58f1696f3ea50a	33	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
557b1abde138239225f86255	85	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
54c060fbe1382389c54c3757	218	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54be7fc1e13823299564b0b3	238	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
5732032ecf58f19cbcbc550f	66	Castile Formation	253.8	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
584aa178cf58f19c3c0fb294	98	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55a7c745e13823757cc70251	139	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	193	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557cd3cfe138239225f869e5	860	Arroyo Formation	276.01	278.6288	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1031	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ce138239d86855aad	237	Anhydrite Marker Bed			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
558eb5d6e13823109f3ee517	312	Rustler mention	253.97	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5b6d936dcf58f1a92c2d33b5	22	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54b4328ae138239d8685557f	71	Hartlepool Anhydrite Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
56c1cb24cf58f15c72c90642	342	Gypsum mention			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
5907be0fcf58f1b18607fd07	82	Sanders Group	318.1	359.2	Smith, Jeffrey R.	Geodes and Geodes after Fossils from Heltonville Lawrence County Indiana	Rocks & Minerals	82	2007	Taylor and Francis	10.3200/RMIN.82.3.200-209
5b6d936dcf58f1a92c2d33b5	118	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54eba4f0e138237cc9151b1e	74	Boulby Shale			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
557cd3cfe138239225f869e5	2531	Blaine Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	738	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1590	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1a95dcf58f15c72c903aa	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b7869fe13823bd29ba8231	2414	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5907cc1ccf58f1b703793d5d	169	Wilcox mention	33.9	56	Paris, Travis A.	Tennessee Mineral Locality Index	Rocks & Minerals	86	2011	Taylor and Francis	10.1080/00357529.2010.51713
5906dd0fcf58f15fea53aef7	446	Jackson mention	10.08	11.04	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
54be7fc1e13823299564b0b3	232	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b7869fe13823bd29ba8231	1402	Lykins Formation	245.9	273.01	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55ae4f4be13823763a830ada	431	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54c060fbe1382389c54c3757	158	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
578fb2c8cf58f1bdcd2df236	47	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5509217ee138238460c4f689	294	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c48dc6cf58f1a8110b94db	59	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55b7869fe13823bd29ba8231	1947	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ce138239d86855aad	495	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b889bfe13823bd29ba8838	73	Todilto Limestone	161.2	175.6	Edited by Carter, Lorna M. H. et al.	USGS research on mineral resources, 1994; Part A, Program and abstracts	Circular		1994	United States Geological Survey	
54c04e8fe1382389c54c36c6	93	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55b30ea3e138231cbdd6cfcd	1145	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1ca03cf58f15c72c90620	150	Soledad Formation			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
56de7f80cf58f18eca0d2b65	229	End-Member Librarya Group			Baldridge, Alice M.	Mars remote-sensing analog studies in the Badwater Basin, Death Valley, California	Journal of Geophysical Research	109	2004	Wiley-Blackwell	10.1029/2004JE002315
54e7c15ae138237cc9150ae2	190	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54eba4f0e138237cc9151b1e	53	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
557cd3cfe138239225f869e5	1662	Clear Fork Group	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55765d21e138234790a011ee	8	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
575c4f4ecf58f16b97cc4df6	137	Gypsum mention			Fenton, Lori K. et al.	Sedimentary differentiation of aeolian grains at the White Sands National Monument, New Mexico, USA	Aeolian Research		2016	Elsevier	10.1016/j.aeolia.2016.05.001
558fe155e13823109f3eec57	295	Castile Formation	253.8	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	453	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54d0272be13823b501cdbc75	49	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
54b43288e138239d86854e95	56	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
54b4328ee138239d86855f3a	195	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
550ab8aae138238460c4fe5e	160	Windsor mention	95.2	99.5	Martel, A.T et al.	Brines in the Carboniferous Sydney Coalfield, Atlantic Canada	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00023-8
5731ac74cf58f18e0ffaff50	70	Salado mention	256.03	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55090847e138238460c4f5cc	540	Magnesite Dolomite			Harrison, Wendy J. et al.	Geochemical interactions resulting from carbon dioxide disposal on the seafloor	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00018-F
55b83b40e1382373b63b7fe6	450	Supai Formation	251	299	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
5713034ccf58f175a32a0111	388	Prairie mention	383.95	389.1	Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
557cd3cfe138239225f869e5	6288	Castile mention	259	259.51	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56c1d607cf58f15c72c9071a	373	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
579f1578cf58f1168e64ad7f	294	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
5ce2f9b20b45c76caf8ae21e	567	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55b7869fe13823bd29ba8231	2497	Seven Rivers Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2465	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550912cce138238460c4f61b	59	Lucas Formation	385.3	397.5	Wilson, Timothy P. and Long, David T.	Geochemistry and isotope chemistry of Michigan Basin brines: Devonian formations	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90058-O
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54b43270e138239d86850df6	79	Schisto-Calcaire Subgroup			Préat, Alain et al.	A peritidal evaporite environment in the Neoproterozoic of South Gabon (Schisto-Calcaire Subgroup, Nyanga Basin)	Precambrian Research	177	2010	Elsevier	10.1016/j.precamres.2009.12.003
55b7869fe13823bd29ba8231	569	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a43da1e13823757cc6f19a	144	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
5579c265e138231c7c52c464	57	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b67f4fe1382373b63b7864	44	Magnesian Limestone	251	299	Bath, A.H et al.	18O16O and 2H1H changes during progressive hydration of a Zechstein anhydrite formation	Geochimica et Cosmochimica Acta	51	1987	Elsevier	10.1016/0016-7037(87)90122-0
5c3539e11faed655488c10ed	1407	Prairie Evaporite Formation	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b43245e138239d86849681	184	Lagoa Feia Formation	112	125	Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
559c3f39e138230816dad2ff	134	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
558df7d7e13823109f3ee082	1006	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5731caeecf58f192f36c5766	459	Winnipegosis Formation	385.3	397.5	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	2160	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ad3126e13823763a8303a0	213	Rustler mention	253.97	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5897de3fcf58f1081e8c64e1	183	Moenkopi mention	203.18	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
58bb7f59cf58f1878850d92a	308	Red River Formation	443.7	488.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579b56dacf58f13d24f0d7ef	80	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
584aa62ccf58f19d6a5f583e	561	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5c2bea2e1faed655488b221b	118	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
55b6d4bfe13823bd29ba7dc0	763	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
57321bc8cf58f1a0ac39199e	32	Portland Sandstone	175.6	199.6	D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
574fae1acf58f142f8fdc4f8	567	Prairie Evaporite Formation	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
55b7869fe13823bd29ba8231	3002	Edwards Group	99.6	145.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5733b975cf58f124f1cfb8f8	255	Formosa Reef Limestone			J. A. Fagerstrom	Petrology and Regional Significance of a Devonian Carbonate/Evaporite Complex, Eastern Michigan Basin	SEPM Journal of Sedimentary Research	Vol. 53	1983	Society for Sedimentary Geology	10.1306/212f81ac-2b24-11d7-8648000102c1865d
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55f2e991cf58f16256a21a0d	283	Yunlong Formation	55.8	65.5	Wang, Xiao-Hu et al.	Geological, fluid inclusion and isotopic studies of the Baiyangping Pb–Zn–Cu–Ag polymetallic deposit, Lanping basin, Yunnan province, China	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.08.009
5c2fd6ac1faed655488b69f1	3	Qi'eshan Group	299	359.2	Chen, Huayong et al.	Overprinting mineralization in the Paleozoic Yandong porphyry copper deposit, Eastern Tianshan, NW China—Evidence from geology, fluid inclusions and geochronology	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.04.013
557cd3cfe138239225f869e5	1744	Artesia Formation	259.51	273.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4328be138239d8685567e	363	Rus mention	33.9	55.8	Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
558e3094e13823109f3ee1d7	43	Hermosa Formation	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
5c2fd7d01faed655488b6a28	5	Post-Archean Australian Shale			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
56c1d9bbcf58f15c72c9075f	181	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
54e865c7e138237cc9150d7f	347	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
577c41d6cf58f188cebdd1fb	216	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55b7869fe13823bd29ba8231	2160	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7354fe13823757cc6fe82	850	A/R mention			Diment, William H. and Pratt, Howard R.	Thermal conductivity of some rock-forming minerals: a tabulation	Open-File Report		1988	United States Geological Survey	10.3133/ofr88690
5ab90b76cf58f15ad7d7cedf	501	Saint-Ouen Limestone			Lettéron, Alexandre et al.	Reconstruction of a saline, lacustrine carbonate system (Priabonian, St-Chaptes Basin, SE France): Depositional models, paleogeographic and paleoclimatic implications	Sedimentary Geology	367	2018	Elsevier	10.1016/j.sedgeo.2017.12.023
557cd3cfe138239225f869e5	2540	Stone Corral mention	273.01	280.5016	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	460	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56946510cf58f1377d598b28	161	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
5897de3fcf58f1081e8c64e1	22	Moenkopi mention	203.18	251.902	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55a751cee13823757cc6ff3c	581	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54c04e8fe1382389c54c36c6	69	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56834db7cf58f1479a0abca3	241	Asmari Formation	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
57a43018cf58f11204e17fe0	873	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54be1b30e138233c8bc4f9d7	85	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
551eecf7e138236e51a99d74	55	Zaragoza Fm	5.332	23.03	Pueyo Anchuela, Óscar et al.	Combination of electromagnetic, geophysical methods and sedimentological studies for the development of 3D models in alluvial sediments affected by karst (Ebro Basin, NE Spain)	Journal of Applied Geophysics		2014	Elsevier	10.1016/j.jappgeo.2014.01.002
54d8fa70e138238471e80530	79	Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
54bf26f8e13823023e43db6f	603	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55c2a9cacf58f1a8110b8a1e	47	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5579c265e138231c7c52c464	51	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5579c265e138231c7c52c464	147	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
54be1b30e138233c8bc4f9d7	200	Nisku Formation	359.2	416	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54b4327ee138239d86853305	78	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
55b7869fe13823bd29ba8231	1037	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578b8ab6cf58f1645f54f0c6	505	Prairie Evaporite Formation	385.3	397.5	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56f2f98bcf58f1892b30205d	57	Kamiiso Group			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b7869fe13823bd29ba8231	2485	Blaine Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54be7fc1e13823299564b0b3	184	Castile mention	259	259.51	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
56a1e0c6cf58f19442528787	27	Anhydrite mention			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954
54b4328de138239d86855ceb	160	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
574c1c0bcf58f1957a2a36f7	42	Cassidy Lake Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
55f49f72cf58f16256a225dc	133	Nong Bok Formation	65.5	99.6	Zhang, Hua et al.	Quantitative temperature records of mid Cretaceous hothouse: Evidence from halite fluid inclusions	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.07.022
57131885cf58f17cb0fd1f40	10	Belayin Formation			Kovalevich, V. M. et al.	Brine inclusions in halite and the origin of the Middle Devonian Prairie Evaporites of Western Canada; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.228
56c1d8a6cf58f15c72c9073f	130	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b7869fe13823bd29ba8231	2061	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a7c745e13823757cc70251	18	Rustler mention	253.97	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
598c914bcf58f17206d6eb4d	231	Turkey Bozbel Formation			Pourkaseb, Houshang et al.	The occurrence and origin of celestite in the Abolfares region, Iran: Implications for Sr-mineralization in Zagros fold belt (ZFB)	Journal of African Earth Sciences	134	2017	Elsevier	10.1016/j.jafrearsci.2017.06.010
579b56dacf58f13d24f0d7ef	62	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	417	Rustler mention	253.97	256.0278	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b7869fe13823bd29ba8231	2069	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55bfc14ecf58f16e99a3703b	311	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55b83b40e1382373b63b7fe6	390	Mohilla Formation	199.6	251	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
55ad3126e13823763a8303a0	293	Castile mention	259	259.51	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
54bf7e39e13823023e43de1a	224	Reichenhall Formation	199.6	251	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
558eb5d6e13823109f3ee517	332	Tamarisk mention	251.9	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b7869fe13823bd29ba8231	1289	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1880	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	1229	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57320459cf58f19ced0f7bc5	79	San Andres mention	150.6	154.8	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
54be1b30e138233c8bc4f9d7	120	Intersaliferous Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55ad3126e13823763a8303a0	80	Castile mention	259	259.51	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
59081969cf58f116699a134d	465	Curtis Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
54c04e8fe1382389c54c36c6	82	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55973e40e1382390cc6406e7	43	Otto Fiord Formation	299	359.2	Grasby, Stephen E. et al.	Biogeochemical sulphur cycle in an extreme environment—lifebeneath a high arctic glacier, Nunavut, Canada	Journal of Geochemical Exploration		2003	Elsevier	10.1016/S0375-6742(03)00026-8
55b7869fe13823bd29ba8231	425	Dawson Bay mention	381.78	386.8667	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57ec1ab3cf58f1acfab96941	182	Zaragoza Gypsum Formation	5.332	23.03	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
55b7869fe13823bd29ba8231	699	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	1339	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54b4324fe138239d8684b069	235	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
5a21527bcf58f1a7a6b3677b	407	SCIc Member			Préat, Alain et al.	Paleoenvironments, δ13C and δ18O signatures in the Neoproterozoic carbonates of the Comba Basin, Republic of Congo: Implications for regional correlations and Marinoan event	Journal of African Earth Sciences	137	2018	Elsevier	10.1016/j.jafrearsci.2017.09.002

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cd3cfe138239225f869e5	1662	Clear Fork Group	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
56c38a36cf58f17493f84562	84	Anhydrite mention			Fischer, Sebastian et al.	Kinetic modeling of laboratory CO 2 -exposure experiments performed on whole rock reservoir samples	Greenhouse Gases: Science and Technology	4	2014	Wiley-Blackwell	10.1002/ghg.1415
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d06d34cf58f148974a929b	230	Fe mention			Pirajno, F and van Kranendonk, MJ	Review of hydrothermal processes and systems on Earth and implications for Martian analogues	Australian Journal of Earth Sciences	52	2005	Taylor and Francis	10.1080/08120090500134571
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
54b4328ce138239d86855aad	369	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5579c265e138231c7c52c464	2	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	8111	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
572cf1fccf58f13accaa0e61	104	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54eba4f0e138237cc9151b1e	417	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
550901a3e138238460c4f59b	94	Cardona Fm			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
55b8b7f4e13823bd29ba8982	974	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
584aa178cf58f19c3c0fb294	89	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
56c1ea81cf58f15c72c908aa	66	Perkasie Member	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
55b73032e13823bd29ba8000	205	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
550915e7e138238460c4f632	290	Salina mention	419.68	429.4	Wilson, T.P. and Long, D.T.	Geochemistry and isotope chemistry of CaNaCl brines in Silurian strata, Michigan Basin, U.S.A.	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90079-V
56c1ca03cf58f15c72c90620	216	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55c35bc5cf58f1a8110b8fcc	656	Werra mention			Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
558ff726e13823109f3eecd8	910	Description mention			Madsen, Beth M.	Core logs of three test holes in Cenozoic lake deposits near Hector, California	Bulletin		1970	United States Geological Survey	10.3133/b1296
5a0495c3cf58f1b96402acf5	45	Hecho Group	33.9	55.8	Blasco, Mónica et al.	Geochemistry, geothermometry and influence of the concentration of mobile elements in the chemical characteristics of carbonate-evaporitic thermal systems. The case of the Tiermas geothermal system (Spain)	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.07.013
55b7869fe13823bd29ba8231	621	Dundee Limestone	386.45	391.9	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58565bd0cf58f11562436097	218	Bay Fiord Formation	459.98	478.47	Greenberger, Rebecca N. et al.	Hyperspectral mapping of alteration assemblages within a hydrothermal vug at the Haughton impact structure, Canada	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12716
5681ea4acf58f1ba274d4b51	40	Meenymore Formation	323.2	358.9	MASON, THOMAS R.	Formation and diagenesis of Visean trace fossils from Ireland	Lethaia	13	1980	Wiley-Blackwell	10.1111/j.1502-3931.1980.tb00636.x
57c19e2dcf58f16bf61df66a	49	Arab Formation	150.8	155.7	Nader, F. H. et al.	Quantification of diagenesis impact on the reservoir properties of the Jurassic Arab D and C members (Offshore, U.A.E.)	Geofluids	13	2013	Wiley	10.1111/gfl.12022

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559733d0e1382390cc6406ac	173	Chromite Diaspore Dolomite			Piché, Mathieu and Jébrak, Michel	Normative minerals and alteration indices developed for mineral exploration	Journal of Geochemical Exploration	82	2004	Elsevier	10.1016/j.gexplo.2003.10.001
55b83d31e13823bd29ba865c	6142	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b8b7f4e13823bd29ba8982	974	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
558bbed5e13823109f3ed4f8	56	Mancos Shale	65.5	145.5	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55933fbae138236ee2218347	10	Wieliczka Formation			Bukowski, K et al.	Inclusion brine chemistry of the Badenian salt from Wieliczka	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00118-7
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55ad3126e13823763a8303a0	23	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
559afea3e1382390cc641cc4	491	Burano Formation	237	251	Montomoli, Chiara et al.	Fluid source and pressure–temperature conditions of high-salinity fluids in syn-tectonic veins from the Northeastern Apuan Alps (Northern Apennines, Italy)	Physics and Chemistry of the Earth, Parts A/B/C	30	2005	Elsevier	10.1016/j.pce.2005.01.003
5682e272cf58f1479a0ab716	322	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
54b4327ee138239d86853305	41	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
55b6d4bfe13823bd29ba7dc0	867	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54be7fc1e13823299564b0b3	192	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
580e3bc6cf58f172dd1b8676	286	Bambata Formation	112	125	Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
54ef9042e138237cc9152b85	200	Ariri mention	109.53	115.1	Dooley, Tim P. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 2: Mechanical explanation from physical modeling	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.009
5602a5f6cf58f1b3a35afdec	108	Otto Fiord Formation	299	359.2	Lorenz, Ralph D. et al.	Analog environments for a Europa lander mission	Advances in Space Research	48	2011	Elsevier	10.1016/j.asr.2010.05.006
557b1abde138239225f86255	972	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
578aea2bcf58f13920dc7baa	170	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
578fb2c8cf58f1bdcd2df236	276	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
58b7df47cf58f18af629a04c	112	Vallfogona Formation			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
578fb2c8cf58f1bdcd2df236	148	Salado mention	256.03	262.2168	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
558eb5d6e13823109f3ee517	334	Tamarisk mention	251.9	273.01	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54b43271e138239d86850ff4	135	Bilara Group	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
584aa178cf58f19c3c0fb294	109	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55baa3b5e1382373b63b89e7	94	Halite Dolomite	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5906dd0fcf58f15fea53aef7	179	Salado mention	256.03	262.2168	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622
55b7869fe13823bd29ba8231	1344	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327ce138239d86852f70	577	Ezanga Formation			Karner, Garry D. et al.	Tectonic significance of syn-rift sediment packages across the Gabon-Cabinda continental margin	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00040-8

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324fe138239d8684b069	289	Munster Member			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
5731ac74cf58f18e0ffaff50	70	Salado mention	256.03	262.2168	Enrique Casas and Tim K. Lowenstein	Diagenesis of Saline Pan Halite: Comparison of Petrographic Features of Modern, Quaternary and Permian Halites	SEPM Journal of Sedimentary Research	Vol. 59	1989	Society for Sedimentary Geology	10.1306/212f905c-2b24-11d7-8648000102c1865d
58d03bf3cf58f138516d1200	419	Maha Sarakham mention	33.9	100.5	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	738	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324fe138239d8684b069	263	Khuff Formation	199.6	251	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b4328de138239d86855ceb	1	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
56c1d607cf58f15c72c9071a	222	Capitan mention	259.51	273.01	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
557f199ce13823bc80ba25a0	775	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
56c1d9bbcf58f15c72c9075f	80	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56830ae3cf58f1479a0ab915	266	Whitkow mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
58bb7f59cf58f1878850d92a	113	Red River mention	446.15	450.75	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
56c1ca03cf58f15c72c90620	80	Soledad mention			Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5683349ccf58f1479a0abb4e	95	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
557b1abde138239225f86255	85	Paradox Formation	299	318.1	Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
580d82a3cf58f132b679c9de	9	Barite mention			González-Sánchez, Francisco et al.	Geological setting and genesis of stratabound barite deposits at Múzquiz, Coahuila in northeastern Mexico	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.10.008
55a69d57e13823757cc6fac4	38	Gypsum Shale			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
57934985cf58f16f329e7c23	290	Halite Calcite Dolomite			Kauffman, Shelley J. et al.	Lithological and hydrological influences on ground-water composition in a heterogeneous carbonate-clay aquifer system	Geological Society of America Bulletin	110	1998	GSA	10.1130/0016-7606(1998)110<1163:lahiog>2.3.co;2
55b75831e13823bd29ba8108	2310	Mauri Formation	5.332	23.03	Edited by Scott, Richard W., Jr. et al.	Advances related to United States and international mineral resources; developing frameworks and exploration technologies	Bulletin		1993	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	1	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
583429eccf58f12bd2a49cbb	366	Otto Fiord Formation	299	359.2	Gleeson, Damhnait F. et al.	Characterization of a sulfur-rich Arctic spring site and field analog to Europa using hyperspectral data	Remote Sensing of Environment	114	2010	Elsevier	10.1016/j.rse.2010.01.011
58d03bf3cf58f138516d1200	393	Smackover Formation	145.5	161.2	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55b7869fe13823bd29ba8231	710	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e8ae2de138237cc9150ec9	525	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
557b1abde138239225f86255	1176	Anhydrite Dolostone			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1395	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
56e353e7cf58f16de8a2e1bf	387	Minas Viejas mention			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
58bf2d90cf58f1867eb10946	141	Todd River Dolostone	511	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
574fa5eccf58f14020b9e845	385	Chinchaga Formation	388.63	393.3	Morrow, D. W. et al.	A hypothesis concerning the origin of barite in Devonian carbonate rocks of northeastern British Columbia	Canadian Journal of Earth Sciences	15	1978	Canadian Science Publishing	10.1139/e78-147
56831c84cf58f1479a0aba03	29	Green River Formation	33.9	55.8		Book reviews	Sedimentology	30	1983	Wiley-Blackwell	10.1111/j.1365-3091.1983.tb00684.x
5a21053ecf58f18a3170d1ed	231	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5c2fe60d1faed655488b6bad	251	Kumugeliemu Formation	23.03	65.5	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b6d4bfe13823bd29ba7dc0	1232	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	2198	Prairie Formation	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	217	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
54c0a121e1382389c54c387a	351	Calcite mention			Renard, Stéphane et al.	Geochemical effects of an oxycombustion stream containing SO2 and O2 on carbonate rocks in the context of CO2 storage	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.05.032
5a21053ecf58f18a3170d1ed	228	Khorat Group	65.5	251	Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	875	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b7869fe13823bd29ba8231	3065	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2796	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572ecdb4cf58f1177819e19e	319	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
54b4328ae138239d868553d8	221	Gebel El Rusas Formation			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
56c1d8a6cf58f15c72c9073f	130	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
584aa62ccf58f19d6a5f583e	128	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
558bbd56e13823109f3ed4ef	285	Castile mention	259	259.51	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
56c1ca03cf58f15c72c90620	69	Quillagua mention	5.332	11.608	Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559c3f39e138230816dad2ff	130	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5a21527bcf58f1a7a6b3677b	749	Lockport Formation	423	433.4	Préat, Alain et al.	Paleoenvironments, δ13C and δ18O signatures in the Neoproterozoic carbonates of the Comba Basin, Republic of Congo: Implications for regional correlations and Marinoan event	Journal of African Earth Sciences	137	2018	Elsevier	10.1016/j.jafrearsci.2017.09.002
5907fd66cf58f10b6afca82b	456	Curtis Formation	145.5	199.6	Dayvault, Richard D.	Colorful Agate and Jasper of Southeastern Utah	Rocks & Minerals	89	2014	Taylor and Francis	10.1080/00357529.2014.90466
56c1d8a6cf58f15c72c9073f	80	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
57131acecf58f17d8d881dcb	207	Belayin Formation			Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
55ad3126e13823763a8303a0	133	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56c1d9bbcf58f15c72c9075f	268	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1ca03cf58f15c72c90620	179	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b7869fe13823bd29ba8231	1448	Sybille mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56a69cadcf58f1944252e14d	30	Augusta Victoria Formation			Campos, Eduardo A. et al.	Magmatic Fluid Inclusions from the Zaldivar Deposit, Northern Chile: The Role of Early Metal-bearing Fluids in a Porphyry Copper System	Resource Geology	56	2006	Wiley-Blackwell	10.1111/j.1751-3928.2006.tb00262.x
5b540f81cf58f11c464cbe77	51	Carribuddy Group	416	443.7	Halas, S. et al.	Oxygen isotopes in authigenic quartz from massive salt deposits	Chemical Geology	402	2015	Elsevier	10.1016/j.chemgeo.2015.02.034
54fb3438e138239936c6d321	33	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55a69d57e13823757cc6fac4	104	Anhydrite mention			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
57484ab3cf58f13effae7ac5	70	Cassidy Lake mention			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
55c01a9ecf58f16e99a37305	34	Tamarisk Member	251.9	273.01	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55a751cee13823757cc6ff3c	884	Tansill Formation	260.4	270.6	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54b4328ce138239d86855aad	96	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
57de579ecf58f11956b3e520	146	Goethite Quartz Dolomite			Hunter, Hazel M.A. et al.	Examining Ni-laterite leach mineralogy & chemistry – a holistic multi-scale approach	Minerals Engineering		2013	Elsevier	10.1016/j.mineng.2013.05.002
56831341cf58f1479a0ab983	382	Zaragoza Formation	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
55b7869fe13823bd29ba8231	53	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
56f2f98bcf58f1892b30205d	57	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
54d8fa70e138238471e80530	98	Main Evaporite Member			Kovalevych, Volodymyr et al.	Geochemistry of Early Triassic seawater as indicated by study of the Röt halite in the Netherlands, Germany, and Poland	Chemical Geology	182	2002	Elsevier	10.1016/S0009-2541(01)00343-6
55b6d4bfe13823bd29ba7dc0	451	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1918	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558ebfafe13823109f3ee557	798	Minnelusa Formation	251	299	U.S. Geological Survey	National energy resource issues; geologic perspective and the role of geologic information	Bulletin		1988	United States Geological Survey	10.3133/b1850
56c1d9bbcf58f15c72c9075f	265	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
557cdb22e138239225f86a07	3197	Feet mention			Dane, C.H.	Geology of the Salt Valley anticline and adjacent areas, Grand County, Utah	Bulletin		1935	United States Geological Survey	10.3133/b863
5ce2f9b20b45c76caf8ae21e	448	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b43281e138239d86853c09	433	Tai Formation			Tan, B.K.	Seventh Regional Conference on Geology, Mineral and Hydrocarbon Resources of Southeast Asia (GEOSEA VII), Bangkok, 5–8 November 1991	Journal of Southeast Asian Earth Sciences	7	1992	Elsevier	10.1016/0743-9547(92)90005-V
56c1c32bcf58f15c72c9059b	229	Bellerophon mention	251	299	BOSELLINI, ALFONSO and HARDIE, LAWRENCE A.	Depositional theme of a marginal marine evaporite	Sedimentology	20	1973	Wiley-Blackwell	10.1111/j.1365-3091.1973.tb01604.x
577db7abcf58f14497044d46	120	Underlying Formation			BORCHERT, HERMANN	Principles of Oceanic Salt Deposition and Metamorphism	Geol Soc America Bull	80	1969	Geological Society of America	10.1130/0016-7606(1969)80[821:poosda]2.0.co;2
54b4325ae138239d8684cec7	321	SE Elhiopia Dolomite			Tadesse, Solomon et al.	Geology and mineral potential of Ethiopia: a note on geology and mineral map of Ethiopia	Journal of African Earth Sciences	36	2003	Elsevier	10.1016/S0899-5362(03)00048-4
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
56c1d8a6cf58f15c72c9073f	50	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
56c1ea81cf58f15c72c908aa	265	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
57de579ecf58f11956b3e520	146	Goethite Quartz Dolomite			Hunter, Hazel M.A. et al.	Examining Ni-laterite leach mineralogy & chemistry – a holistic multi-scale approach	Minerals Engineering		2013	Elsevier	10.1016/j.mineng.2013.05.002
56c1d9bbcf58f15c72c9075f	131	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	365	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
570fe41dcf58f114a862267f	139	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55a751cee13823757cc6ff3c	1200	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
57ca1161cf58f10278760d05	249	Mineral Group	65.5	251	Rogers, A. Deanne and Hamilton, Victoria E.	Compositional provinces of Mars from statistical analyses of TES, GRS, OMEGA and CRISM data	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004690
56a1e0c6cf58f19442528787	71	Anhydrite Member			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954
55ae0df7e13823763a830928	3171	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
558bbd56e13823109f3ed4ef	162	OOOt Sandstone			Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
54bfef15e1382330560e0801	230	Winnipeg Formation	443.7	488.3	Leybourne, M.I. et al.	Geochemistry and stable isotopic composition of tufa waters and precipitates from the Interlake Region, Manitoba, Canada: Constraints on groundwater origin, calcitization, and tufa formation	Chemical Geology	260	2009	Elsevier	10.1016/j.chemgeo.2008.12.024
55b7869fe13823bd29ba8231	416	Gypsllll Spring Formation			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54bf26f8e13823023e43db6f	572	Hofra Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
56c1d9bbcf58f15c72c9075f	88	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b43287e138239d86854dad	65	LITHOLOGY Dolomite			Amiri-Garroussi, K. and Taylor, J.C.M.	Displaced carbonates in the Zechstein of the UK North Sea	Marine and Petroleum Geology	9	1992	Elsevier	10.1016/0264-8172(92)90090-2
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b30ea3e138231cbdd6cfcd	1152	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
584aa178cf58f19c3c0fb294	156	Calcite mention			Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b30ea3e138231cbdd6cfcd	1761	Organic mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1610	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	1223	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
575019eacf58f1696f3ea50a	8	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
5c2bea2e1faed655488b221b	199	Nugget Sandstone	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
5c4005801faed655488cf82c	636	Matijevic mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
570fe41dcf58f114a862267f	52	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
56c1cb24cf58f15c72c90642	401	Gypsum Formation			HARDIE, LAWRENCE A. and EUGSTER, HANS P.	THE DEPOSITIONAL ENVIRONMENT OF MARINE EVAPORITES: A CASE FOR SHALLOW, CLASTIC ACCUMULATION	Sedimentology	16	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb00228.x
55b7869fe13823bd29ba8231	425	Prairie mention	383.95	389.1	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	458	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	738	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1364	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55c0d379cf58f16e99a378b9	307	Wellington mention	279	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b2c402e138231cbdd6ce3e	201	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
5c3539e11faed655488c10ed	1407	Prairie Evaporite Formation	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
56c1d8a6cf58f15c72c9073f	318	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
579b56dacf58f13d24f0d7ef	99	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
56c1ea81cf58f15c72c908aa	352	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
578b8ab6cf58f1645f54f0c6	73	Salado mention	256.03	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b7869fe13823bd29ba8231	389	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	68	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5733b975cf58f124f1cfb8f8	255	Formosa Reef Limestone			J. A. Fagerstrom	Petrology and Regional Significance of a Devonian Carbonate/Evaporite Complex, Eastern Michigan Basin	SEPM Journal of Sedimentary Research	Vol. 53	1983	Society for Sedimentary Geology	10.1306/212f81ac-2b24-11d7-8648000102c1865d
55b6d6a7e13823bd29ba7dcc	8356	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5c27936e1faed655488aac90	45	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	A hydrohalite spring deposit in the Canadian high Arctic: A potential Mars analogue	Earth and Planetary Science Letters	504	2018	Elsevier	10.1016/j.epsl.2018.10.001
55b7869fe13823bd29ba8231	2485	Blaine Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
55b7869fe13823bd29ba8231	1234	San Andres mention	150.6	154.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b64a4de1382314227d0039	318	Salado Formation	251	260.4	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b388d6e138231cbdd6d25d	1114	Gamma Member			Geological Survey (U.S.)	Geological Survey research 1962; Short papers in geology and hydrology; Articles 60-119	Professional Paper		1962	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58c8ed8ccf58f1a71217fb6b	186	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
584aa178cf58f19c3c0fb294	103	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54c0a121e1382389c54c387a	330	Pyrite Dolomite			Renard, Stéphane et al.	Geochemical effects of an oxycombustion stream containing SO2 and O2 on carbonate rocks in the context of CO2 storage	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.05.032
56c1d9bbcf58f15c72c9075f	182	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b77fd5e1382373b63b7cce	54	Louann mention	145	174.7	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
559c3f39e138230816dad2ff	952	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
5a2f778acf58f10a775a37f3	72	Zaragoza Formation	23.03	33.9	Guerrero, J. and Gutiérrez, F.	Gypsum scarps and asymmetric fluvial valleys in evaporitic terrains. The role of river migration, landslides, karstification and lithology (Ebro River, NE Spain)	Geomorphology	297	2017	Elsevier	10.1016/j.geomorph.2017.09.018
55a7c745e13823757cc70251	49	Rustler mention	253.97	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
54e7c15ae138237cc9150ae2	74	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
58d05f41cf58f143d83df312	98	Ouldburra Formation	488.3	542	Kovalevych, V. M. et al.	Deposition and chemical composition of early Cambrian salt in the eastern Officer Basin, South Australia	Australian Journal of Earth Sciences	53	2006	Taylor and Francis	10.1080/08120090600686736
5579c265e138231c7c52c464	147	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	580	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5b199d0dcf58f13e9d9dc48e	331	Cobar mention	407.6	427.4	Seccombe, P. K. et al.	Sulfur isotope and fluid inclusion geochemistry of metamorphic Cu–Au vein deposits, central Cobar area, NSW, Australia	Australian Journal of Earth Sciences	64	2017	Informa UK Limited	10.1080/08120099.2017.1297330
54b4328ee138239d86856168	230	Calcite mention			Ziegenbalg, S.B. et al.	Formation of secondary carbonates and native sulphur in sulphate-rich Messinian strata, Sicily	Sedimentary Geology	227	2010	Elsevier	10.1016/j.sedgeo.2010.03.007
56c1ea81cf58f15c72c908aa	359	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5907fd66cf58f10b6afca82b	522	Curtis Formation	145.5	199.6	Dayvault, Richard D.	Colorful Agate and Jasper of Southeastern Utah	Rocks & Minerals	89	2014	Taylor and Francis	10.1080/00357529.2014.90466
54b4328ae138239d8685544	7	Greenfield Dolomite	422.05	429.8	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4
55b7869fe13823bd29ba8231	1290	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54d92539e138238471e805e2	95	Bunter Sandstone	245	251	Stadler, S. et al.	Isotopic and geochemical indicators for groundwater flow and multi-component mixing near disturbed salt anticlines	Chemical Geology		2012	Elsevier	10.1016/j.chemgeo.2011.12.006
55b7869fe13823bd29ba8231	175	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1506	Madison mention	332.35	358.9	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	64	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55765b42e138234790a011e4	71	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
55b7869fe13823bd29ba8231	2250	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	481	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	12	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	398	Minnelusa Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	259	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5b289527cf58f1347499025c	156	Aragonitec Calcitec Fluorite Dolomite			Cardoso, Antonio J. et al.	Batch Test Assessment of Waste-to-Energy Combustion Residues Impacts on Precipitate Formation in Landfill Leachate Collection Systems	Journal of the Air & Waste Management Association	58	2008	Informa UK Limited	10.3155/1047-3289.58.1.19
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55b7869fe13823bd29ba8231	2643	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43247e138239d86849b52	246	Chaunaca Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55c0f018cf58f16e99a3799f	7	Salado Formation	251	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
58bb9b83cf58f193073e15ef	321	Analcime Anhydrite Dawsonite Dolomite			Teboul, Pierre-Alexandre et al.	Volcanic rock alterations of the Kwanza Basin, offshore Angola - Insights from an integrated petrological, geochemical and numerical approach	Marine and Petroleum Geology		2017	Elsevier	10.1016/j.marpetgeo.2016.12.020
55b5b47ce1382314227cfdae	147	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54b43250e138239d8684b46c	168	Maha Sarakham Formation	65.5	145.5	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
55b7869fe13823bd29ba8231	336	Detroit River Group	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55bfc14ecf58f16e99a3703b	200	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5712f1aacf58f16fb4cc921a	299	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b7869fe13823bd29ba8231	2455	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578aea2bcf58f13920dc7baa	24	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
577bca4acf58f1538dda98fd	272	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
56c1a95dcf58f15c72c903aa	798	Prairie Evaporite Formation	385.3	397.5	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
584aa178cf58f19c3c0fb294	408	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b7869fe13823bd29ba8231	611	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b77fd5e1382373b63b7cce	56	Norphlet Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
55ad3126e13823763a8303a0	124	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
579b56dacf58f13d24f0d7ef	8	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328ce138239d86855aad	660	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57a43018cf58f11204e17fe0	356	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf900cf58f13d86a1bdc8	209	Rustler mention	253.97	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55a43da1e13823757cc6f19a	144	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	44	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	2688	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c4005801faed655488cf82c	616	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
5598ea48e1382390cc640ff5	216	Tulomozero Formation			Hu, Guyue et al.	In situ LA–MC–ICP–MS boron isotope and zircon U–Pb age determinations of Paleoproterozoic borate deposits in Liaoning Province, northeastern China	Ore Geology Reviews	65	2015	Elsevier	10.1016/j.oregeorev.2014.09.005
55b7869fe13823bd29ba8231	693	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1550	Logan Creek Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	15	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558fe155e13823109f3eec57	830	Culebra mention	251	299	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
56831341cf58f1479a0ab983	67	Zaragoza mention	23.03	33.9	SALVANY, JOSEP M. et al.	Glauberite?halite association of the Zaragoza Gypsum Formation (Lower Miocene, Ebro Basin, NE Spain)	Sedimentology	54	2007	Wiley-Blackwell	10.1111/j.1365-3091.2006.00844.x
558fe155e13823109f3eec57	359	Rustler mention	253.97	256.0278	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
55af1c5ce13823763a830fe9	527	Forty-niner Member			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55ad3126e13823763a8303a0	138	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
558ebfafe13823109f3ee557	798	Minnelusa Formation	251	299	U.S. Geological Survey	National energy resource issues; geologic perspective and the role of geologic information	Bulletin		1988	United States Geological Survey	10.3133/b1850
5906cf0dcf58f15ad9553b8a	148	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
55b7869fe13823bd29ba8231	1290	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5712f1aacf58f16fb4cc921a	221	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b7869fe13823bd29ba8231	1579	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54fb3438e138239936c6d321	269	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54be7fc1e13823299564b0b3	305	Carmel Formation	161.2	175.6	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b7869fe13823bd29ba8231	1982	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2fd6ac1faed655488b69f1	120	Qi'eshan Group	299	359.2	Chen, Huayong et al.	Overprinting mineralization in the Paleozoic Yandong porphyry copper deposit, Eastern Tianshan, NW China—Evidence from geology, fluid inclusions and geochronology	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.04.013
54b4328be138239d8685567e	224	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
5c2fd7d01faed655488b6a28	48	Bulunkuole Group	488.3	542	Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
55ae9887e13823763a830cad	91	Rustler Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54e9af58e138237cc91512f7	76	Deer Bay Formation	65.5	145.5	Shearman, D.J. and Smith, A.J.	Ikaite, the parent mineral of jarrowite-type pseudomorphs	Proceedings of the Geologists' Association	96	1985	Elsevier	10.1016/S0016-7878(85)80019-5
55b6d4bfe13823bd29ba7dc0	60	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a21053ecf58f18a3170d1ed	231	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
56c1d9bbcf58f15c72c9075f	51	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54e865c7e138237cc9150d7f	187	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
58bc7562cf58f12d483cfce3	351	Mangang Fm			Wu, Chihua et al.	Mid-Cretaceous desert system in the Simao Basin, southwestern China, and its implications for sea-level change during a greenhouse climate	Palaeogeography, Palaeoclimatology, Palaeoecology		2017	Elsevier	10.1016/j.palaeo.2016.12.048
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55a0946ee1382381ff364540	142	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	334	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54be1b30e138233c8bc4f9d7	71	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5682e272cf58f1479a0ab716	179	Salado Formation	251	260.4	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b6d4bfe13823bd29ba7dc0	1217	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
56830b14cf58f1479a0ab918	367	Rosetta mention			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
58d03bf3cf58f138516d1200	511	Rotliegende mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
5c3539e11faed655488c10ed	212	Prairie Evaporite mention	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973
5b6f081fcf58f1539ffa6761	325	Fars Formation			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
5a2cf7f0cf58f19a331caf3c	478	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
56f2f98bcf58f1892b30205d	57	Ebiyagawa Formation	-6E-05	23.03	MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b6d4bfe13823bd29ba7dc0	9	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5897de3fcf58f1081e8c64e1	570	Murray mention	0.0117	0.774	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
55c48dc6cf58f1a8110b94db	149	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
54b4328ae138239d8685557f	285	Raisby Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
57a43018cf58f11204e17fe0	835	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55b5b47ce1382314227cfdae	253	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
558e672ce13823109f3ee322	330	Castile Formation	253.8	260.4	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
557cd3cfe138239225f869e5	1255	Tansill Formation	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
579f1578cf58f1168e64ad7f	384	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b7869fe13823bd29ba8231	1140	Quartermaster Formation	251.9	273.01	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	474	IIIII Sandstone			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5682e272cf58f1479a0ab716	395	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
557f199ce13823bc80ba25a0	951	Rustler Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55a751cee13823757cc6ff3c	577	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
56c1d9bbcf58f15c72c9075f	216	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54be7fc1e13823299564b0b3	308	Salina Formation	416	443.7	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
5731caeecf58f192f36c5766	61	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55bfbd79cf58f16e99a3701c	575	Prairie Evaporite Formation	385.3	397.5	Roberts, Sheila M. and Spencer, Ronald J.	Paleotemperatures preserved in fluid inclusions in halite	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00253-V
55b6d4bfe13823bd29ba7dc0	475	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
56c1d8a6cf58f15c72c9073f	391	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b30ea3e138231cbdd6cfcd	1432	Organic mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	160	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
5b6f081fcf58f1539ffa6761	74	Yapılar mention			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
56c1d607cf58f15c72c9071a	251	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55c0d379cf58f16e99a378b9	200	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
5508f1fbe138238460c4f526	105	Frio mention	22.383	33.9	Dworkin, S.I. and Land, L.S.	The origin of aqueous sulfate in Frio pore fluids and its implication for the origin of oil field brines	Applied Geochemistry	11	1996	Elsevier	10.1016/0883-2927(96)00006-6
56f2f98bcf58f1892b30205d	47	Kamiiso Group			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
54b4328ce138239d86855b7a	347	Yeso Formation	251	299	Sarg, J.F	The sequence stratigraphy, sedimentology, and economic importance of evaporite–carbonate transitions: a review	Sedimentary Geology	140	2001	Elsevier	10.1016/S0037-0738(00)00170-6
55b64a4de1382314227d003 9	367	Marker Bed			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
5a2cf7f0cf58f19a331caf3c	469	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
55b7869fe13823bd29ba8231	2485	Blaine Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578fb2c8cf58f1bdcd2df236	412	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b7869fe13823bd29ba8231	987	Buckner Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54eba4f0e138237cc9151b1e	59	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
57c8787ccf58f14528333514	334	Windjana mention			Treiman, Allan H. et al.	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin X-ray diffraction of the Windjana sample (Kimberley area, Gale Crater)	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004932
54b4324fe138239d8684b069	243	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
55b7869fe13823bd29ba8231	1372	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5734b312cf58f14dbc2c579f	78	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
54e7c15ae138237cc9150ae2	38	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
58d05105cf58f13f39efd424	588	Belayim Formation	11.608	15.97	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54c04e8fe1382389c54c36c6	42	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
5509217ee138238460c4f689	177	Castile Formation	253.8	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5907a1e5cf58f1a696dd7cce	63	Billingham Anhydrite Formation	251.9	273.01	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
55b7869fe13823bd29ba8231	1762	Supai Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ce138239d86855aad	296	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b7869fe13823bd29ba8231	696	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	63	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5579c265e138231c7c52c464	210	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
570fe41dcf58f114a862267f	230	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55c0d379cf58f16e99a378b9	405	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55b5b47ce1382314227cfdae	147	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54b4327de138239d868530d9	62	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
557cd3cfe138239225f869e5	2552	Blaine mention	268.51	275.2575	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5683349ccf58f1479a0abb4e	106	Capitan Formation	260.4	270.6	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
559dcd1ae138230816dad9be	347	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
55b7869fe13823bd29ba8231	1281	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fe155e13823109f3eec57	53	Rustler Formation	251	260.4	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
559dcd1ae138230816dad9be	365	Paradox Member	299	318.1	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
54e7c15ae138237cc9150ae2	74	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b7869fe13823bd29ba8231	2190	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550915e7e138238460c4f632	396	Salina mention	419.68	429.4	Wilson, T.P. and Long, D.T.	Geochemistry and isotope chemistry of CaNaCl brines in Silurian strata, Michigan Basin, U.S.A.	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90079-V
54e7c15ae138237cc9150ae2	70	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b690a7e138238e2d05483f	3459	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
56c1ea81cf58f15c72c908aa	194	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b6d6a7e13823bd29ba7dcc	8103	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	161	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5ce2f9b20b45c76caf8ae21e	286	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b43245e138239d8684952a	156	Khorat Group	65.5	251	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
58b86c42cf58f1055db5c6fa	312	Burano Formation	237	251	Marion, G.M. et al.	Modeling calcium sulfate chemistries with applications to Mars	Icarus		2016	Elsevier	10.1016/j.icarus.2016.05.016
56830b14cf58f1479a0ab918	444	Qawasim Fm			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
54be7fc1e13823299564b0b3	211	Castile Formation	253.8	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
558e672ce13823109f3ee322	334	Castile mention	259	259.51	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1981	Water-Resources Investigations Report		1983	United States Geological Survey	
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b83b40e1382373b63b7fe6	4	Geoscience Group			Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
54e4d444e138237cc914feb2	16	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
55b7869fe13823bd29ba8231	669	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2fe60d1faed655488b6bad	217	Leikoupo Formation	228	245	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b6d4bfe13823bd29ba7dc0	1232	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5af05c0bcf58f12f5846a45d	126	Barnett Shale	318.1	359.2	Wickard	Paragenesis of Mineralized Fractures and Diagenesis of Prominent North American Shales	The Sedimentary Record	14	2016	Society for Sedimentary Geology	10.2110/sedred.2016.4.4
54b4328ce138239d86855aad	383	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
558fda65e13823109f3eec30	1098	Paradox Member	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
54be90c7e13823299564b137	45	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	441	Magenta Dolomite	251.9	273.01	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
59ceecc5cf58f14e831adf32	101	Quartz Albite Dolomite			Gharib, Nima et al.	Flow characteristics and wear prediction of Herschel-Bulkley non-Newtonian paste backfill in pipe elbows	The Canadian Journal of Chemical Engineering	95	2017	Wiley-Blackwell	10.1002/cjce.22749
54b4328ce138239d86855b5a	74	Tripoli Formation	5.332	7.246	Taberner, C. et al.	The use of environmental markers to distinguish marine vs. continental deposition and to quantify the significance of recycling in evaporite basins	Sedimentary Geology	137	2000	Elsevier	10.1016/S0037-0738(00)00105-6
55b7869fe13823bd29ba8231	433	Minnelusa mention	282	320.05	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c9f7a1cf58f1bbcffcfdff	251	Mercia Mudstone Group	199.6	251	Schwenzer, S. P. et al.	Fluids during diagenesis and sulfate vein formation in sediments at Gale crater, Mars	Meteoritics & Planetary Science		2016	Wiley	10.1111/maps.12668
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b6d6a7e13823bd29ba7dcc	8353	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328be138239d8685567e	374	Rus mention	33.9	55.8	Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
558eb5d6e13823109f3ee517	178	Bell Canyon Formation	260.4	270.6	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
557c738ee138239225f8685b	1010	Castile Formation	253.8	260.4	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
55b6d4bfe13823bd29ba7dc0	1120	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
583429eccf58f12bd2a49cbb	366	Otto Fiord Formation	299	359.2	Gleeson, Damhnait F. et al.	Characterization of a sulfur-rich Arctic spring site and field analog to Europa using hyperspectral data	Remote Sensing of Environment	114	2010	Elsevier	10.1016/j.rse.2010.01.011
55baa3b5e1382373b63b89e7	215	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b7869fe13823bd29ba8231	21	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
574fae1acf58f142f8fdc4f8	567	Prairie Evaporite Formation	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
55a7c745e13823757cc70251	17	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55ad3126e13823763a8303a0	83	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b7869fe13823bd29ba8231	1918	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e272cf58f1479a0ab716	574	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558d0009e13823109f3edbbc	1776	Vicksburg Group	27.82	33.9	Anderson, R. Ernest et al.	Geologic and hydrologic summary of salt domes in Gulf Coast region of Texas, Louisiana, Mississippi, and Alabama	Open-File Report		1973	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	119	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56c1ea81cf58f15c72c908aa	291	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
578b8ab6cf58f1645f54f0c6	283	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b7869fe13823bd29ba8231	1281	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b5b47ce1382314227cfdae	144	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5583191be1382390b43c96ad	474	Escucha Formation			Querol, X. et al.	Distribution of sulfur in coals of the Teruel mining district, Spain	International Journal of Coal Geology	18	1991	Elsevier	10.1016/0166-5162(91)90056-O
58ac40fdcf58f1946fb5ce65	127	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
55b7869fe13823bd29ba8231	2714	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e8ae2de138237cc9150ec9	1325	Durham mention			Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
5749d59dcf58f1b0821791d1	96	Windsor Group	318.1	359.2	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328ce138239d86855bed	57	Furnace Creek Formation	1.806	5.332	Tanner, Lawrence H	Borate formation in a perennial lacustrine setting: Miocene–Pliocene Furnace Creek Formation, Death Valley, California, USA	Sedimentary Geology	148	2002	Elsevier	10.1016/S0037-0738(01)00221-4
56c1ea81cf58f15c72c908aa	332	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
56c1d9bbcf58f15c72c9075f	132	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b735f3e13823bd29ba8028	6154	Ruff Formation	419.2	427.4	Luttrell, Gwendolyn Werth et al.	Lexicon of new formal geologic names of the United States, 1976-1980	Bulletin		1986	United States Geological Survey	
55b690a7e138238e2d05483f	400	Souris River Formation	359.2	416	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54e865c7e138237cc9150d7f	378	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55af1c5ce13823763a830fe9	838	Capitan Limestone	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572cf900cf58f13d86a1bdc8	189	Maha Sarakham Formation	65.5	145.5	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55b7869fe13823bd29ba8231	1884	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a82328e13823757cc7049a	1154	Saude mention	145	251.902	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
557f199ce13823bc80ba25a0	1794	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55baa3b5e1382373b63b89e7	91	Sh Sk Judea Group			Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
572cf900cf58f13d86a1bdc8	294	Rustler Formation	251	260.4	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
56830b14cf58f1479a0ab918	69	Gessoso Solfifera mention	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
57f555decf58f17e0fbf38b4	573	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
55baa3b5e1382373b63b89e7	373	Louann Fm	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
559d4d6ee138230816dad784	496	Castile Formation	253.8	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
56c38a36cf58f17493f84562	84	Anhydrite mention			Fischer, Sebastian et al.	Kinetic modeling of laboratory CO 2 -exposure experiments performed on whole rock reservoir samples	Greenhouse Gases: Science and Technology	4	2014	Wiley-Blackwell	10.1002/ghg.1415
54e7447fe138237cc91508e5	1097	Praire Evaporite Formation	385.3	397.5	Fanlo, Isabel and Ayora, Carlos	The evolution of the Lorraine evaporite basin: implications for the chemical and isotope composition of the Triassic ocean	Chemical Geology	146	1998	Elsevier	10.1016/S0009-2541(98)00007-2
550b2b52e1382369a6f92fe2	221	Anhydrite Aragonite Calcite Dolomite			Ma, Jinzhu et al.	Groundwater recharge and evolution in the Dunhuang Basin, northwestern China	Applied Geochemistry		2013	Elsevier	10.1016/j.apgeochem.2012.10.007
55b7869fe13823bd29ba8231	1489	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b5b47ce1382314227cfdae	167	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
558fda65e13823109f3eec30	1766	Paradox mention	306	319.714	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.53	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	217	Sarakham mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	2401	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	110	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
5d3f58060b45c76cafa2004f	328	Paradox Formation	299	318.1	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b7869fe13823bd29ba8231	622	Michigan Formation	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55baa3b5e1382373b63b89e7	159	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5d3f58060b45c76cafa2004f	330	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
54b43271e138239d86850ff4	96	Bilara mention	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
55ae2542e13823763a8309bd	63	Maha Sarakham Formation	65.5	145.5	Hite, R. J.	Progress report on the potash deposits of the Khorat Plateau, Thailand	Open-File Report		1982	United States Geological Survey	
54b4327be138239d86852c99	420	Zechstein mention	251.9	273.01	Cartwright, Joe et al.	Salt dissolution and salt-related deformation of the Forth Approaches Basin, UK North Sea	Marine and Petroleum Geology	18	2001	Elsevier	10.1016/S0264-8172(01)00019-8
551ddd48e138236e51a99900	17	Prairie Evaporite Formation	385.3	397.5	Hill, D.G.	Multiple log potash assay	Journal of Applied Geophysics	30	1993	Elsevier	10.1016/0926-9851(93)90037-Y
5c2fd7d01faed655488b6a28	155	Bulunkuole Group	488.3	542	Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
55b7869fe13823bd29ba8231	1042	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57516912cf58f129ff61ef40	201	Macumber mention	323.2	358.9	Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
55c0f018cf58f16e99a3799f	30	Salado Formation	251	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	1261	Cloud Chief Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ea81cf58f15c72c908aa	217	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5749d59dcf58f1b0821791d1	90	Dead Sea Group	5.332	23.03	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
54fc8912e138239936c6dc7a	107	Salado mention	256.03	262.2168	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54e8ae2de138237cc9150ec9	525	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
5682fa41cf58f1479a0ab846	29	Facha Member	33.9	55.8	AMIRI-GARROUSSI, K.	Eocene spheroidal dolomite from the western Sirte Basin, Libya	Sedimentology	35	1988	Wiley-Blackwell	10.1111/j.1365-3091.1988.tb01237.x
56aaa9f0cf58f19442532ee1	105	Thebes Formation			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
55b7869fe13823bd29ba8231	2831	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	579	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2160	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1e5e7cf58f15c72c90847	20	Brunswick Formation	0.0117	0.129	HOUTEN, FRANKLYN B.	CRYSTAL CASTS IN UPPER TRIASSIC LOCKATONG AND BRUNSWICK FORMATIONS	Sedimentology	4	1965	Wiley-Blackwell	10.1111/j.1365-3091.1965.tb01553.x
55b30ea3e138231cbdd6cfcd	2135	Flow Anhydrite Calcite Dolomite			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
575d04f6cf58f198893b8def	154	Ibura Member			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
55af1c5ce13823763a830fe9	411	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
590785cdcf58f19bf342565e	51	Mississippian-age Warsaw Formation			Smith, Arthur E. and Prior, Harold L.	Iowa Mineral Locality Index	Rocks & Minerals	77	2002	Taylor and Francis	10.1080/00357529.2002.9924893
54bf26f8e13823023e43db6f	317	Edwards mention	100.5	103.625	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
550dedb5e1382369a6f93ba1	94	Zaragoza Gypsum Formation	5.332	23.03	Guerrero, Jesús et al.	A sinkhole susceptibility zonation based on paleokarst analysis along a stretch of the Madrid–Barcelona high-speed railway built over gypsum- and salt-bearing evaporites (NE Spain)	Engineering Geology	102	2008	Elsevier	10.1016/j.enggeo.2008.07.010
578b8ab6cf58f1645f54f0c6	457	Castile Formation	253.8	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
557f199ce13823bc80ba25a0	237	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
572cf900cf58f13d86a1bdc8	111	Tamarisk mention	251.9	273.01	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b30ea3e138231cbdd6cfcd	1081	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
557f199ce13823bc80ba25a0	1879	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b6d4bfe13823bd29ba7dc0	1210	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558bbd56e13823109f3ed4ef	288	Castile mention	259	259.51	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
598c0bc9cf58f14465ea778f	53	Tropico Group	1.806	65.5	Abbey, William J. et al.	Deep UV Raman spectroscopy for planetary exploration: The search for in situ organics	Icarus	290	2017	Elsevier	10.1016/j.icarus.2017.01.039
55ad3126e13823763a8303a0	118	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5508f1fbe138238460c4f526	89	Glen Rose Formation	65.5	145.5	Dworkin, S.I. and Land, L.S.	The origin of aqueous sulfate in Frio pore fluids and its implication for the origin of oil field brines	Applied Geochemistry	11	1996	Elsevier	10.1016/0883-2927(96)00006-6
55b7869fe13823bd29ba8231	46	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
574f9a2fcf58f13bebe8af72	551	Prairie Evaporite Formation	385.3	397.5	McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
54b4328de138239d86855c34	163	Cßayirhan mention			Orb, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
55b6d6a7e13823bd29ba7dcc	8343	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
58b88f2dcf58f11400b8036b	24	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Vermicular kaolinite relics in fly ash derived from Bokaro and Jharia coals (Jharkhand, India)	International Journal of Coal Geology		2016	Elsevier	10.1016/j.coal.2016.06.011
57484ab3cf58f13effae7ac5	130	Cassidy Lake Formation			Wilson, Paul et al.	Structural geology of the Penobsquis salt structure: late Bashkirian inversion tectonics in the Moncton Basin, New Brunswick, eastern Canada	Canadian Journal of Earth Sciences	43	2006	Canadian Science Publishing	10.1139/e05-116
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55b7869fe13823bd29ba8231	2198	Prairie Formation	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	854	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5906dd0fcf58f15fea53aef7	198	Goliad Sandstone	2.1519	5.333	Smith, Arthur E.	Texas Mineral Locality Index	Rocks & Minerals	66	1991	Taylor and Francis	10.1080/00357529.1991.11761622

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2413	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	317	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b43245e138239d8684952a	177	Arab Formation	150.8	155.7	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
57126a16cf58f140fa5c33f2	87	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b3dfb4e138231cbdd6d442	1750	Dinwoody Formation	250.4	251	U.S. Geological Survey	Geological Survey research 1964, Chapter B	Professional Paper		1964	United States Geological Survey	10.3133/pp501B
55ad3126e13823763a8303a0	207	Rustler mention	253.97	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5c2fe60d1faed655488b6bad	215	Jialingjiang Formation	245	251	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
565e68f4cf58f148c57ebb1e	62	Duperow Formation	359.2	416	Ryerson, F.J. et al.	Natural CO2 accumulations in the western Williston Basin: A mineralogical analog for CO2 injection at the Weyburn site	International Journal of Greenhouse Gas Control	16	2013	Elsevier	10.1016/j.ijggc.2012.12.015
55ae4f4be13823763a830ada	260	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
5734b312cf58f14dbc2c579f	512	Monte Amarillo mention			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55ae0df7e13823763a830928	520	Seven Rivers Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5503421ae1382326932d7e6d	1129	Arab Fm	145.5	199.6	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54b4328ae138239d86855597	136	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
5502e189e1382326932d7bd2	305	Dolostones Chert			Melezhik, Victor A. et al.	Extreme 13Ccarb enrichment in ca. 2.0 Ga magnesite–stromatolite–dolomite–`red beds' association in a global context: a case for the world-wide signal enhanced by a local environment	Earth-Science Reviews	1-2	1999	Elsevier	10.1016/S0012-8252(99)00044-6
54b4324fe138239d8684b069	120	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
59081969cf58f116699a134d	87	Summerville Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54fc8912e138239936c6dc7a	1	Palaeozoic Carribuddy Group			Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
55b64a4de1382314227d0039	18	Salado mention	256.03	262.2168	Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b7869fe13823bd29ba8231	2323	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
56830ae3cf58f1479a0ab915	272	Brightholme mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55b7869fe13823bd29ba8231	332	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54c04e8fe1382389c54c36c6	12	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
557f199ce13823bc80ba25a0	1835	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
559871d1e1382390cc640d99	228	Hormoz Formation			Talbot, Christopher et al.	Potash in a salt mushroom at Hormoz Island, Hormoz Strait, Iran	Ore Geology Reviews	35	2009	Elsevier	10.1016/j.oregeorev.2008.11.005
56c1a95dcf58f15c72c903aa	349	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a0946ee1382381ff364540	278	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55baa3b5e1382373b63b89e7	215	Sedom mention	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b83b40e1382373b63b7fe6	16	Mohilla Formation	199.6	251	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
55b83b40e1382373b63b7fe6	4	Geoscience Group			Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
54c0a121e1382389c54c387a	330	Pyrite Dolomite			Renard, Stéphane et al.	Geochemical effects of an oxycombustion stream containing SO2 and O2 on carbonate rocks in the context of CO2 storage	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.05.032
56831c84cf58f1479a0aba03	29	Green River Formation	33.9	55.8		Book reviews	Sedimentology	30	1983	Wiley-Blackwell	10.1111/j.1365-3091.1983.tb00684.x
54b43246e138239d86849721	198	Culpeper mention	184.2	237	Gore, Pamela J.W.	Toward a model for open- and closed-basin deposition in ancient lacustrine sequences: The Newark Supergroup (Triassic-Jurassic), Eastern North America	Palaeogeography, Palaeoclimatology, Palaeoecology	70	1989	Elsevier	10.1016/0031-0182(89)90078-3
558e4538e13823109f3ee24f	2953	Wilcox mention	33.9	56	Pettijohn, R. A.	Geochemistry of ground water in the Gulf Coast Aquifer systems, south-central United States	Water-Resources Investigations Report		1996	United States Geological Survey	10.3133/wri964107
57c87288cf58f142fe30b3f7	360	Shoemaker Formation			Dixon, Emily M. et al.	Assessing hydrodynamic effects on jarosite dissolution rates, reaction products, and preservation on Mars	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004779
55cbfc16cf58f1b01e42470e	49	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
559c3f39e138230816dad2ff	165	Salado Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55a43da1e13823757cc6f19a	304	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
54e97acfe138237cc915120b	71	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55c48dc6cf58f1a8110b94db	98	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
56c1ca03cf58f15c72c90620	203	Quillagua Formation	5.332	11.608	Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
56c1ca03cf58f15c72c90620	161	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
5b6d936dcf58f1a92c2d33b5	128	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
54e7c15ae138237cc9150ae2	78	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b7869fe13823bd29ba8231	1228	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2fe60d1faed655488b6bad	166	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55b7869fe13823bd29ba8231	1413	Stone Corral Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7748	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4327ce138239d86852f8a	19	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
55b7869fe13823bd29ba8231	458	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c38a36cf58f17493f84562	111	Anhydrite mention			Fischer, Sebastian et al.	Kinetic modeling of laboratory CO 2 -exposure experiments performed on whole rock reservoir samples	Greenhouse Gases: Science and Technology	4	2014	Wiley-Blackwell	10.1002/ghg.1415
55b2c402e138231cbdd6ce3e	202	Paradox mention	306	319.714	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
55ad3126e13823763a8303a0	108	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
578fb2c8cf58f1bdcd2df236	122	San Andres Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2790	Castile mention	259	259.51	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1392	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b30ea3e138231cbdd6cfcd	2026	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	576	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1364	Salado mention	256.03	262.2168	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557c738ee138239225f8685b	932	Castile Formation	253.8	260.4	Wright, Ann Finley	Bibliography of geology and hydrology, eastern New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7976
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55b77fd5e1382373b63b7cce	146	Louann Formation	145.5	199.6	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
55b7869fe13823bd29ba8231	433	Minnelusa mention	282	320.05	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572ee8a5cf58f11bb5bc1a43	276	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b64a4de1382314227d0039	336	SaJado Formation			Stein, C.L. and Krumhansl, J.L.	A model for the evolution of brines in salt from the lower Salado Formation, southeastern New Mexico	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90258-X
55b7869fe13823bd29ba8231	2212	Cedar Keys Limestone	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
578b8ab6cf58f1645f54f0c6	494	Winnipegosis Formation	385.3	397.5	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
578b8ab6cf58f1645f54f0c6	87	Salado Formation	251	260.4	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1d9bbcf58f15c72c9075f	182	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1ea81cf58f15c72c908aa	327	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	580	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54fb51c0e138239936c6d400	1	Emet mention			García-Veigas, Javier et al.	Mineralogy, diagenesis and hydrochemical evolution in a probertite–glauberite–halite saline lake (Miocene, Emet Basin, Turkey)	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2010.11.023
57126a16cf58f140fa5c33f2	87	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b7869fe13823bd29ba8231	1392	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e3a8cf58f1479a0ab727	378	Salado Formation	251	260.4	LOWENSTEIN, TIM K. and HARDIE, LAWRENCE A.	Criteria for the recognition of salt-pan evaporites	Sedimentology	32	1985	Wiley-Blackwell	10.1111/j.1365-3091.1985.tb00478.x
55b7869fe13823bd29ba8231	2419	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	117	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d4bfe13823bd29ba7dc0	1234	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5590d1bfe13823109f3ef23b	192	Salado Formation	251	260.4	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
55c48dc6cf58f1a8110b94db	3	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577bca4acf58f1538dda98fd	27	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55b7869fe13823bd29ba8231	2201	Wellington Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5590c428e13823109f3ef1e1	394	Bell Canyon Sandstone	260.4	270.6	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1980	Open-File Report		1982	United States Geological Survey	
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
570fe41dcf58f114a862267f	219	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
5ab9a5fbcf58f196f620b199	303	Coboconk Formation	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
55b7869fe13823bd29ba8231	478	Pequop mention	276.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	304	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324de138239d8684aa17	5	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
54c01d34e1382389c54c3543	99	Yamba Formation	0	0.129	Harrington, N.M. et al.	Hydrological and geochemical processes controlling variations in Na+–Mg2+–Cl—SO42– groundwater brines, south-eastern Australia	Chemical Geology	251	2008	Elsevier	10.1016/j.chemgeo.2008.02.007
55b83d31e13823bd29ba865c	3594	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
55b6d4bfe13823bd29ba7dc0	5	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4324fe138239d8684b069	240	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
55c0f018cf58f16e99a3799f	34	Castile Formation	253.8	260.4	Xiong, Yongliang et al.	Experimental determination of the solubility constant for magnesium chloride hydroxide hydrate (Mg3Cl(OH)5·4H2O, phase 5) at room temperature, and its importance to nuclear waste isolation in geological repositories in salt formations	Geochimica et Cosmochimica Acta	74	2010	Elsevier	10.1016/j.gca.2010.05.029
572ee8a5cf58f11bb5bc1a43	448	Capitan mention	259.51	273.01	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	674	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a751cee13823757cc6ff3c	577	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
5579c265e138231c7c52c464	45	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b5b47ce1382314227cfdae	183	Salina mention	419.68	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
56c1ea81cf58f15c72c908aa	250	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
56c1d8a6cf58f15c72c9073f	366	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b7869fe13823bd29ba8231	3065	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1042	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ae138239d8685544	7	Greenfield Dolomite	422.05	429.8	Carlson, Ernest H.	Celestite replacements of evaporites in the Salina Group	Sedimentary Geology	54	1987	Elsevier	10.1016/0037-0738(87)90005-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
56faac60cf58f15186bf46cd	167	Calcite Dolomite			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
578fb2c8cf58f1bdcd2df236	43	Seven Rivers Formation	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
58bf0a5acf58f17947438723	76	Series Depth Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
56b99311cf58f14c238d4bdc	57	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
55b832b8e13823bd29ba8617	531	Pyrite Kaolinite Dolomite			Hansley, P. L.	Diagenetic and burial history of the Lower Permian White Rim Sandstone in the Tar Sand Triangle, Paradox Basin, southeastern Utah	Bulletin		1995	United States Geological Survey	
5ab92ea3cf58f16811edda29	336	Cl Group			Jones, Samantha Elsie et al.	A multi-proxy approach to understanding complex responses of salt-lake catchments to climate variability and human pressure: A Late Quaternary case study from south-eastern, Spain	Quaternary Science Reviews	184	2018	Elsevier	10.1016/j.quascirev.2017.12.015
55b7869fe13823bd29ba8231	1745	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e7c15ae138237cc9150ae2	70	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
54e97acfe138237cc915120b	71	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
57f555decf58f17e0fbf38b4	573	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
550b6ce8e1382369a6f9311e	78	Cadjebut Formation	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
56833ddfcf58f1479a0abbcc	207	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5503421ae1382326932d7e6d	533	Baucarit Group	1.806	65.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
570fe41dcf58f114a862267f	64	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
56834db7cf58f1479a0abca3	286	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
5a2dee30cf58f136bc551211	109	Werfen Fm	245	251	Martin, Silvana et al.	Siderite deposits in northern Italy: Early Permian to Early Triassic hydrothermalism in the Southern Alps	Lithos	284–285	2017	Elsevier	10.1016/j.lithos.2017.04.002
54b4328de138239d86855ceb	16	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b8b7f4e13823bd29ba8982	440	Bell Canyon mention	259.51	269.2975	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55b7869fe13823bd29ba8231	2173	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	68	Khok Kruat Formation	65.5	251	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55c2a9cacf58f1a8110b8a1e	72	Loeme mention	112	125	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
550901a3e138238460c4f59b	106	Cardona Fm.			De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
56c1ca03cf58f15c72c90620	105	Quillagua mention	5.332	11.608	Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
58c8ed8ccf58f1a71217fb6b	184	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
54fb3438e138239936c6d321	241	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
579f1578cf58f1168e64ad7f	256	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56833ddfcf58f1479a0abbcc	429	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55c0d379cf58f16e99a378b9	63	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57611ef6cf58f130993e9b1a	438	Kokomo Limestone	416	443.7	Vrazo, Matthew B. et al.	Buried or brined? Eurypterids and evaporites in the Silurian Appalachian basin	Palaeogeography, Palaeoclimatology, Palaeoecology		2016	Elsevier	10.1016/j.palaeo.2015.12.011
5583191be1382390b43c96ad	471	Escucha Formation			Querol, X. et al.	Distribution of sulfur in coals of the Teruel mining district, Spain	International Journal of Coal Geology	18	1991	Elsevier	10.1016/0166-5162(91)90056-O
54b43281e138239d86853bfd	160	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
558df7d7e13823109f3ee082	345	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	1755	Todilto mention	158.18	162.45	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
585b656bcf58f1a722daaf49	51	Zaragoza Formation	23.03	33.9	Zarroca, Mario et al.	The application of GPR and ERI in combination with exposure logging and retrodeformation analysis to characterize sinkholes and reconstruct their impact on fluvial sedimentation.	Earth Surface Processes and Landforms		2016	Wiley	10.1002/esp.4069
54b4328de138239d86855dfa	333	Al Nakhsh mention	5.332	23.03	Dill, H.G. et al.	Sedimentary facies, mineralogy, and geochemistry of the sulphate-bearing Miocene Dam Formation in Qatar	Sedimentary Geology	174	2005	Elsevier	10.1016/j.sedgeo.2004.11.004
55a7c745e13823757cc70251	113	Tamarisk Member	251.9	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
570fe41dcf58f114a862267f	21	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7869fe13823bd29ba8231	775	Fort Pierce Formation	119.3	148.15	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
57c87f71cf58f147df6ab61d	98	TES Dataa Mineral Group			Glotch, Timothy D. and Rogers, A. Deanne	Evidence for magma-carbonate interaction beneath Syrtis Major, Mars	Journal of Geophysical Research: Planets	118	2013	Wiley	10.1029/2012JE004230
5546ee61e138233dfd7d3ca2	219	Passaic Formation	199.6	228	Puffer, John H. and Laskowich, Chris	Volcanic diapirs in the Orange Mountain flood basalt: New Jersey, USA	Journal of Volcanology and Geothermal Research		2012	Elsevier	10.1016/j.jvolgeores.2012.05.010
55b6d4bfe13823bd29ba7dc0	1166	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54e97acfe138237cc915120b	121	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
5508f1fbe138238460c4f526	105	Frio mention	22.383	33.9	Dworkin, S.I. and Land, L.S.	The origin of aqueous sulfate in Frio pore fluids and its implication for the origin of oil field brines	Applied Geochemistry	11	1996	Elsevier	10.1016/0883-2927(96)00006-6
55b30ea3e138231cbdd6cfcd	1420	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5682e272cf58f1479a0ab716	74	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
5733004ccf58f1066ffdaeaa	54	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
578b54cdcf58f156f520e154	13	Salina Group	416	443.7	Cercone, Karen Rose	Evaporative sea-level drawdown in the Silurian Michigan basin	Geol	16	1988	GSA	10.1130/0091-7613(1988)016<0387:esldit>2.3.co;2
5a21053ecf58f18a3170d1ed	136	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5a21053ecf58f18a3170d1ed	136	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
56ac2bfdcf58f19442534c89	51	Zaragoza Formation	23.03	33.9	Gutiérrez, F. et al.	The origin, typology, spatial distribution and detrimental effects of the sinkholes developed in the alluvial evaporite karst of the Ebro River valley downstream of Zaragoza city (NE Spain)	Earth Surface Processes and Landforms	32	2007	Wiley-Blackwell	10.1002/esp.1456
579f1578cf58f1168e64ad7f	310	Salado Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
572cf900cf58f13d86a1bdc8	65	Rustler mention	253.97	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a7c745e13823757cc70251	18	Rustler mention	253.97	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	781	Cedar Keys Limestone	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557f199ce13823bc80ba25a0	788	Castile Formation	253.8	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b3055ce138231cbdd6cf97	3077	Ghanam mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
56c1d5f9cf58f15c72c90717	32	Middle Evaporite Group			SMITH, DENYS B.	POSSIBLE DISPLACIVE HALITE IN THE PERMIAN UPPER EVAPORITE GROUP OF NORTHEAST YORKSHIRE1	Sedimentology	17	1971	Wiley-Blackwell	10.1111/j.1365-3091.1971.tb01775.x
56c1d9bbcf58f15c72c9075f	195	Maha Sarakham mention	33.9	100.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b3641de138231cbdd6d189	1536	Mooringsport Formation	108.31	110.9166	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
5733004ccf58f1066ffdaeaa	2	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	2214	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327ce138239d86852f8a	157	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
5ab9a5fbcf58f196f620b199	107	Black River Group	443.7	488.3	Al-Aasm, Ihsan S. and Crowe, Richard	Fluid compartmentalization and dolomitization in the Cambrian and Ordovician successions of the Huron Domain, Michigan Basin	Marine and Petroleum Geology	92	2018	Elsevier	10.1016/j.marpetgeo.2018.02.011
5503421ae1382326932d7e6d	782	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b735f3e13823bd29ba8028	6154	Ruff Formation	419.2	427.4	Luttrell, Gwendolyn Werth et al.	Lexicon of new formal geologic names of the United States, 1976-1980	Bulletin		1986	United States Geological Survey	
55ad3126e13823763a8303a0	122	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5598f6b0e1382390cc64103f	181	Daye Formation	245	251	Xie, Guiqing et al.	Geochemical constraints on Cu–Fe and Fe skarn deposits in the Edong district, Middle–Lower Yangtze River metallogenic belt, China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2014.08.005
56c38a36cf58f17493f84562	84	Anhydrite mention			Fischer, Sebastian et al.	Kinetic modeling of laboratory CO 2 -exposure experiments performed on whole rock reservoir samples	Greenhouse Gases: Science and Technology	4	2014	Wiley-Blackwell	10.1002/ghg.1415
55baa3b5e1382373b63b89e7	148	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2142	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54fb3438e138239936c6d321	33	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5b6d22edcf58f18ba5e73c75	6	Middle Evaporire Bed			Stewart, F. H.	Replacements involving early carnallite in the potassium-bearing evaporites of Yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	31	1956	Mineralogical Society	10.1180/minmag.1956.031.233.02
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
558fda65e13823109f3eec30	1330	Gothic Formation	299	318.1	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
55b7869fe13823bd29ba8231	1395	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327ee138239d868533305	41	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
5502ed7de1382326932d7c2a	950	Smackover Formation	145.5	161.2	Warren, John	Dolomite: occurrence, evolution and economically important associations	Earth-Science Reviews	1-3	2000	Elsevier	10.1016/S0012-8252(00)00022-2
5c2ad1181faed655488b08a2	89	Marl Dozahir mention	33.9	55.8	Norouzi, Gholam-Hossain et al.	Application of magnetic and gravity methods to the exploration of sodium sulfate deposits, case study: Garmab mine, Semnan, Iran	Journal of Applied Geophysics	159	2018	Elsevier	10.1016/j.jappgeo.2018.10.003
56c44114cf58f17493f8536e	217	Salado Formation	251	260.4	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
55986cdae1382390cc640d7c	401	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5710e047cf58f16dc5c8824c	432	La Vid Group	397.5	416	Schneider, J. et al.	Fluid Evolution During Burial Diagenesis and Subsequent Orogenetic Uplift: The La Vid Group (Cantabrian Zone, Northern Spain)	Journal of Sedimentary Research	78	2008	Society for Sedimentary Geology	10.2110/jsr.2008.032
56c1d9bbcf58f15c72c9075f	4	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	2453	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
584aa178cf58f19c3c0fb294	239	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54dc2da6e138238a47f96228	181	Edwards mention	100.5	103.625	Land, Lynton S. and Prezbindowski, Dennis R.	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
55b7869fe13823bd29ba8231	1499	Prairie Formation	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2198	Prairie Formation	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c44114cf58f17493f8536e	110	Salado mention	256.03	262.2168	Dutton, Alan R.	Hydrogeochemical processes involved in salt-dissolution zones, texas panhandle, U.S.A.	Hydrological Processes	3	1989	Wiley-Blackwell	10.1002/hyp.3360030108
55a43da1e13823757cc6f19a	278	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55a82328e13823757cc7049a	1314	Saude Formation	145	251.902	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
572ecdb4cf58f1177819e19e	112	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
572ecdb4cf58f1177819e19e	35	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
5ab66103cf58f143ea8f4c06	200	Selective Formation				Graphical Abstract: Angew. Chem. Int. Ed. 13/2015	Angewandte Chemie International Edition	54	2015	Wiley-Blackwell	10.1002/anie.201590016
57ec1ab3cf58f1acfab96941	182	Zaragoza Gypsum Formation	5.332	23.03	Ortí, Federico and Rosell, Laura	Evaporative systems and diagenetic patterns in the Calatayud Basin (Miocene, central Spain)	Sedimentology	47	2000	Wiley	10.1046/j.1365-3091.2000.00321.x
54b4324de138239d8684aa17	98	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
567c9105cf58f1b2eac1a357	140	Morelos Formation	65.5	145.5	Talavera Mendoza, Oscar et al.	Water-rock-tailings interactions and sources of sulfur and metals in the subtropical mining region of Taxco, Guerrero (southern Mexico): A multi-isotopic approach	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2015.12.002
54c04e8fe1382389c54c36c6	82	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
558ff726e13823109f3eecd8	742	Description mention			Madsen, Beth M.	Core logs of three test holes in Cenozoic lake deposits near Hector, California	Bulletin		1970	United States Geological Survey	10.3133/b1296
56c1d9bbcf58f15c72c9075f	287	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1d9bbcf58f15c72c9075f	191	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b30ea3e138231cbdd6cfcd	283	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b358eee138231cbdd6d158	168	Table Group			Compiled by Hill, Thelma P.	Chemical composition of sedimentary rocks in California and Hawaii	Professional Paper		1981	United States Geological Survey	
55baa3b5e1382373b63b89e7	75	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54b4328ae138239d86855586	209	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
5579c265e138231c7c52c464	168	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	1026	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2383	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c48dc6cf58f1a8110b94db	78	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1ea81cf58f15c72c908aa	394	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
579b56dacf58f13d24f0d7ef	104	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55b6d4bfe13823bd29ba7dc0	1002	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
584aa178cf58f19c3c0fb294	97	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
56c1ea81cf58f15c72c908aa	341	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
572ecdb4cf58f1177819e19e	31	Zechstein mention	251.9	273.01	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
55a43da1e13823757cc6f19a	90	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
5599341be1382390cc641189	160	Gypsum mention			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
57bee020cf58f13d88794bee	258	Carrols Corner Formation			Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
55b30ea3e138231cbdd6cfcd	1081	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55ae9887e13823763a830cad	72	Castile Formation	253.8	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
558df7d7e13823109f3ee082	2856	Castile mention	259	259.51	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	2591	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55af1c5ce13823763a830fe9	452	Rustler mention	253.97	256.0278	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b7869fe13823bd29ba8231	2333	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	8111	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55a7c745e13823757cc70251	133	Rustler mention	253.97	256.0278	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5ce2f9b20b45c76caf8ae21e	282	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
57bedb9ccf58f13bf01999e9	82	Honaker Trail Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55b31649e138231cbdd6cff7	1589	Paradox Member	299	318.1		Geological Survey research 1967, Chapter C	Professional Paper		1967	United States Geological Survey	10.3133/pp575C
55b7869fe13823bd29ba8231	1550	Logan Creek Member			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b8b7f4e13823bd29ba8982	304	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55b7869fe13823bd29ba8231	175	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
55b30ea3e138231cbdd6cfcd	1618	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1258	Artesia Group	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a43da1e13823757cc6f19a	300	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
54b4327be138239d86852bce	48	Zechstein mention	251.9	273.01	Verweij, J.M and Simmelink, H.J	Geodynamic and hydrodynamic evolution of the Broad Fourteens Basin (The Netherlands) in relation to its petroleum systems	Marine and Petroleum Geology	19	2002	Elsevier	10.1016/S0264-8172(02)00021-1
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55b6d6a7e13823bd29ba7dcc	7902	Salt Limestone	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5b6f081fcf58f1539ffa6761	327	Fırat mention			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
559c3f39e138230816dad2ff	491	Tamarisk mention	251.9	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
579b56dacf58f13d24f0d7ef	121	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
56c1d9bbcf58f15c72c9075f	190	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	1123	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d4bfe13823bd29ba7dc0	965	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	615	Iutzi mention	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf1fccf58f13accaa0e61	79	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a43da1e13823757cc6f19a	300	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	1214	Briggs Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fda65e13823109f3eec30	1267	Ranchester Limestone	319	335	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
579b56dacf58f13d24f0d7ef	73	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54b4328de138239d86855c7b	51	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
55b6d4bfe13823bd29ba7dc0	1194	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b30ea3e138231cbdd6cfcd	1590	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
584aa178cf58f19c3c0fb294	89	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54fb3438e138239936c6d321	255	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
56c1a95dcf58f15c72c903aa	127	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54fb3438e138239936c6d321	85	Main mention	15.98	23.03	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5733004ccf58f1066ffdaeaa	114	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
572cf1fccf58f13accaa0e61	72	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579b9c02cf58f14e3ae11a33	261	Paradox Formation	299	318.1	Montgomery, David R. et al.	Continental-scale salt tectonics on Mars and the origin of Valles Marineris and associated outflow channels	Geol Soc America Bull	preprint	2006	Geological Society of America	10.1130/b26307.1
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55c2e5c8cf58f1a8110b8c08	137	Hutchinson Salt mention	273.01	298.9	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b30ea3e138231cbdd6cfcd	37	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
58bf2d90cf58f1867eb10946	180	Deception Formation	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
5733004ccf58f1066ffdaeaa	46	Clear Fork Group	260.4	270.6	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
54b4328fe138239d8685629f	216	Loeme Formation	112	125	Bosence, Dan	6 Carbonate-dominated marine rifts	Regional Geology and Tectonics: Phanerozoic Rift Systems and Sedimentary Basins		2012	Elsevier	10.1016/B978-0-444-56356-9.00005-5
55b6d4bfe13823bd29ba7dc0	53	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5598ea48e1382390cc640ff5	216	Tulomozero Formation			Hu, Guyue et al.	In situ LA–MC–ICP–MS boron isotope and zircon U–Pb age determinations of Paleoproterozoic borate deposits in Liaoning Province, northeastern China	Ore Geology Reviews	65	2015	Elsevier	10.1016/j.oregeorev.2014.09.005
5732d749cf58f1be482cdc3e	539	Prairie Evaporite Formation	385.3	397.5	A. V. Arakel	Genesis and Diagenesis of Holocene Evaporitic Sediments in Hutt and Leeman Lagoons, Western Australia	SEPM Journal of Sedimentary Research	Vol. 50	1980	Society for Sedimentary Geology	10.1306/212f7bdf-2b24-11d7-8648000102c1865d
577bca4acf58f1538dda98fd	24	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
57306580cf58f15948b1af00	254	Belayim Formation	11.608	15.97	Tadeusz Marek Peryt (1) and Volodymyr	Association of Redeposited Salt Breccias and Potash Evaporites in the Lower Miocene of Stebnyk (Carpathian Foredeep, West Ukraine)	SEPM Journal of Sedimentary Research	Vol. 67	1997	Society for Sedimentary Geology	10.1306/d4268676-2b26-11d7-8648000102c1865d
54c0a121e1382389c54c387a	243	Calcite Dolomite			Renard, Stéphane et al.	Geochemical effects of an oxycombustion stream containing SO2 and O2 on carbonate rocks in the context of CO2 storage	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.05.032
577bca4acf58f1538dda98fd	24	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5733004ccf58f1066ffdaeaa	87	Halite mention	251	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	1210	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5907fd66cf58f10b6afca82b	456	Curtis Formation	145.5	199.6	Dayvault, Richard D.	Colorful Agate and Jasper of Southeastern Utah	Rocks & Minerals	89	2014	Taylor and Francis	10.1080/00357529.2014.90466
55b30ea3e138231cbdd6cfcd	1086	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4328de138239d86855ceb	10	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
54b4327ce138239d86852db0	27	Argana mention			Hafid, M.	Triassic–early Liassic extensional systems and their Tertiary inversion, Essaouira Basin (Morocco)	Marine and Petroleum Geology	17	2000	Elsevier	10.1016/S0264-8172(98)00081-6
5502c2cae1382326932d7ae8	278	Solfifera Formation			Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
56c1ca03cf58f15c72c90620	253	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
57c8716acf58f1429a428969	135	Mineral Group	65.5	251	Thorpe, Michael T. et al.	Quantitative compositional analysis of sedimentary materials using thermal emission spectroscopy: 1. Application to sedimentary rocks	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2015JE004863
57516912cf58f129ff61ef40	113	Horton Group	318.1	359.2	Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
57131acecf58f17d8d881dcb	511	Rotliegend Sandstone	251	299	Gasiewicz, A. et al.	Gypsum-to-anhydrite transition in the Miocene of southern Poland; discussion and reply	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.223
55c0d379cf58f16e99a378b9	77	Hutchinson Salt Member	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
55ae0df7e13823763a830928	438	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b7869fe13823bd29ba8231	1398	Stone Corral Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e9f64ee138237cc9151412	308	Purbeck mention	139.8	149.2	West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
55a82328e13823757cc7049a	1212	Gypsum Spring Formation	168.65	174.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
54b4328be138239d8685567e	224	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57a39568cf58f1a4dc1b1106	41	Paradox Formation	299	318.1	Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
5503421ae1382326932d7e6d	2194	Punta Gorda Anhydrite Bed	114.58	115.94	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b6d4bfe13823bd29ba7dc0	908	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	1398	Stone Corral Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ea81cf58f15c72c908aa	217	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5b6d936dcf58f1a92c2d33b5	69	Daisy Bed	470	485.4	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
56c1effacf58f15c72c9090b	425	Salado Formation	251	260.4	CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55765b42e138234790a011e4	4	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
56c1ea81cf58f15c72c908aa	265	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	2831	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54d4bb37e138238471e7f379	32	Salado mention	256.03	262.2168	Beauheim, Richard L and Roberts, Randall M	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
54fb3438e138239936c6d321	36	Zechstein Limestone	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
578aea2bcf58f13920dc7baa	50	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
557b1abde138239225f86255	972	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
5907be0fcf58f1b18607fd07	82	Sanders Group	318.1	359.2	Smith, Jeffrey R.	Geodes and Geodes after Fossils from Heltonville Lawrence County Indiana	Rocks & Minerals	82	2007	Taylor and Francis	10.3200/RMIN.82.3.200-209
55b6d4bfe13823bd29ba7dc0	1192	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558df7d7e13823109f3ee082	1170	Magnesian Limestone	251	299	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	260	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	1448	Sybille mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4327fe138239d868537c7	306	Mo mention			Hezarkhani, Ardeshir	Hydrothermal evolution of the Sar-Cheshmeh porphyry Cu–Mo deposit, Iran: Evidence from fluid inclusions	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.11.003
55b30ea3e138231cbdd6cfcd	1086	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
577bca4acf58f1538dda98fd	178	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
55ad3126e13823763a8303a0	180	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54c15752e1382389c54c3b8f	239	Magnesian Limestone	251	299	Fowler, A.	Minerals in the Permian and Trias of North-East England	Proceedings of the Geologists' Association	67	1956	Elsevier	10.1016/S0016-7878(56)80026-6
56c1d6a4cf58f15c72c90723	215	Inmar Formation	175.6	199.6	AYALON, AVNER and LONGSTAFFE, FRED J.	Stable isotope evidence for the origin of diagenetic carbonate minerals from the Lower Jurassic Inmar Formation, southern Israel	Sedimentology	42	1995	Wiley-Blackwell	10.1111/j.1365-3091.1995.tb01275.x
56c1d8a6cf58f15c72c9073f	366	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
57177ecdcf58f1637fb099ed	449	Otoe mention	298.9	307	Giles, J. M. et al.	Lakes, Loess, and Paleosols In the Permian Wellington Formation of Oklahoma, U.S.A.: Implications For Paleoclimate and Paleogeography of the Midcontinent	Journal of Sedimentary Research	83	2013	Society for Sedimentary Geology	10.2110/jsr.2013.59
56a1e0c6cf58f19442528787	304	Anhydrite mention			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54c04652e1382389c54c3686	127	Dakota Formation	65.5	145.5	Joeckel, R.M. et al.	Sulfate-mineral crusts from pyrite weathering and acid rock drainage in the Dakota Formation and Graneros Shale, Jefferson County, Nebraska	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.044
56830ae3cf58f1479a0ab915	253	Shell Lake mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55b2c402e138231cbdd6ce3e	648	Paradox Member	299	318.1	Shawe, Daniel R. et al.	Stratigraphy of Slick Rock district and vicinity, San Miguel and Dolores Counties, Colorado	Professional Paper		1968	United States Geological Survey	10.3133/pp576A
570fe41dcf58f114a862267f	173	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55b7869fe13823bd29ba8231	631	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5590c038e13823109f3ef1c7	85	Magenta Dolomite	251.9	273.01	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
54b4328ce138239d86855aad	223	Middle Member			El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b7869fe13823bd29ba8231	964	Werner Formation	161.5	168.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	227	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558df7d7e13823109f3ee082	601	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5683349ccf58f1479a0abb4e	133	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
57bee020cf58f13d88794bee	261	Windsor mention	95.2	99.5	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
54b4328ce138239d86855aad	96	Khok Kruat Formation	65.5	251	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b7869fe13823bd29ba8231	1281	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c2e5c8cf58f1a8110b8c08	171	Zechstein Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55b6d4bfe13823bd29ba7dc0	72	Hutehinson Salt Member			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	2190	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf900cf58f13d86a1bdc8	189	Maha Sarakham Formation	65.5	145.5	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
55b39c73e138231cbdd6d2c1	960	Paradox Formation	299	318.1	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
54e97acfe138237cc915120b	34	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
55f4877fcf58f16256a22522	625	Tripoli mention	5.332	7.246	Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55a751cee13823757cc6ff3c	1122	Basal Tansil.l Fm			Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
55ad3126e13823763a8303a0	83	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54d4bb37e138238471e7f379	2	Salado mention	256.03	262.2168	Beauheim, Richard L and Roberts, Randall M	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
578fb2c8cf58f1bdcd2df236	356	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
55b73032e13823bd29ba8000	229	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
579f1578cf58f1168e64ad7f	444	Castile Formation	253.8	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b43245e138239d8684952a	212	Iroquois Formation	168.2	204.95	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
558eb5d6e13823109f3ee517	287	Unnamed Member	359.2	416	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54ef9078e138237cc9152b86	137	Salt mention	251	260.4	Jackson, Christopher A.-L. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 1: Geometry and kinematics from 3D seismic reflection and well data	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.010
58d03bf3cf58f138516d1200	703	Leduc Formation	359.2	385.3	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
56c1ea81cf58f15c72c908aa	294	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
574f1369cf58f10afd57189e	390	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
56c1ca03cf58f15c72c90620	180	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
56c1d9bbcf58f15c72c9075f	253	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1d9bbcf58f15c72c9075f	265	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558e3447e13823109f3ee1ef	173	Castile Formation	253.8	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
55b7869fe13823bd29ba8231	1796	Supai mention	275.26	313.75	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b78281e13823bd29ba8218	3079	Castile Formation	253.8	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
56a1ac99cf58f19442528389	1984	Aragonite Monohydrocalcite Dolomite			Gibson, Everett K. et al.	Chemical weathering and diagenesis of a cold desert soil from Wright Valley, Antarctica: An analog of Martian weathering processes	Journal of Geophysical Research	88	1983	Wiley-Blackwell	10.1029/JB088iS02p0A912
54b43247e138239d86849b52	266	Ipaguazu Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b7869fe13823bd29ba8231	674	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	545	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5503421ae1382326932d7e6d	1144	Khuff Fm	251	299	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b30ea3e138231cbdd6cfcd	1104	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1ea81cf58f15c72c908aa	250	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
584aa62ccf58f19d6a5f583e	244	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54b4327ce138239d86852f8a	208	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
54e49f08e138237cc914fdcc	93	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
55b7869fe13823bd29ba8231	165	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1956	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
584aa178cf58f19c3c0fb294	267	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55b7869fe13823bd29ba8231	1796	Supai mention	275.26	313.75	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	273	Big Snowy Group	326.15	335	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5579c265e138231c7c52c464	143	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5907a1e5cf58f1a696dd7cce	64	Billingham Anhydrite Formation	251.9	273.01	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
55b7869fe13823bd29ba8231	714	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	224	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b43245e138239d8684952a	173	Antalo Limestone			Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
55b6d4bfe13823bd29ba7dc0	1240	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5749d6cacf58f1b0d4fcbc51	117	Majiagou Formation	443.7	488.3	ZHANG, Jing et al.	Controlling effects of paleo-climate and paleo-ocean on formation of carbonate reservoirs	Petroleum Exploration and Development	41	2014	Elsevier	10.1016/S1876-3804(14)60016-1
54b4327ce138239d86852f70	521	Gamba Formation			Karner, Garry D. et al.	Tectonic significance of syn-rift sediment packages across the Gabon-Cabinda continental margin	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00040-8
5c19917d1faed655488915d3	46	Gesesso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
55b7869fe13823bd29ba8231	1031	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
575019eacf58f1696f3ea50a	98	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
55b78281e13823bd29ba8218	3650	San Andres Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
557cd3cfe138239225f869e5	2546	Nippewalla Group	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
579f1578cf58f1168e64ad7f	368	Tansill Formation	260.4	270.6	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1037	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	373	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54e66657e138237cc915052a	66	Arctomys Formation	501	503.5	Yonge, C.J. and Krouse, H. Roy	The origin of sulphates in Castleguard Cave, Columbia Icefields, Canada	Chemical Geology: Isotope Geoscience section	65	1987	Elsevier	10.1016/0168-9622(87)90018-2
55ad3126e13823763a8303a0	91	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5906cf0dcf58f15ad9553b8a	84	Lockport mention	424.1	428.9	Bailey, David G. et al.	Minerals of The Silurian Lockport Group Central and Western New York State	Rocks & Minerals	84	2009	Taylor and Francis	10.3200/RMIN.84.4.326-337
558e3447e13823109f3ee1ef	1061	Castile Formation	253.8	260.4	Cooper, J. B. and Glanzman, V. M.	Geohydrology of Project Gnome site, Eddy County, New Mexico	Professional Paper		1971	United States Geological Survey	
55b7869fe13823bd29ba8231	1884	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c3458ec1faed655488bed8f	794	Prairie Evaporite Formation	385.3	397.5	Stoffers, P. and Kuhn, R.	Red Sea Evaporites: A Petrographic and Geochemical Study	Initial Reports of the Deep Sea Drilling Project	23		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.23.122.1974
55b7869fe13823bd29ba8231	2402	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	179	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54e76d92e138237cc915098c	116	Furnace Creek Formation	1.806	5.332	Böhlke, J.K. et al.	Stable isotope evidence for an atmospheric origin of desert nitrate deposits in northern Chile and southern California, U.S.A.	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00124-6
54b43245e138239d8684952a	156	Khorat Group	65.5	251	Hallam, A.	Continental humid and arid zones during the jurassic and cretaceous	Palaeogeography, Palaeoclimatology, Palaeoecology	47	1984	Elsevier	10.1016/0031-0182(84)90094-4
5ce2f9b20b45c76caf8ae21e	191	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55b6d4bfe13823bd29ba7dc0	1202	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b43276e138239d86851ec2	338	Salil Formation			Vandeginste, Veerle et al.	Interplay between depositional facies, diagenesis and early fractures in the Early Cretaceous Habshan Formation, Jebel Madar, Oman	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.11.006
558fda65e13823109f3eec30	896	Thunder Springs Member	349.5	351.5	Geldon, Arthur L.	Geology of Paleozoic Rocks in the Upper Colorado River Basin in Arizona, Colorado, New Mexico, Utah, and Wyoming, Excluding the San Juan Basin	Professional Paper		2003	United States Geological Survey	10.3133/pp1411A
578fb2c8cf58f1bdcd2df236	30	Halite mention	251	299	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
58bb7f59cf58f1878850d92a	43	Anhydrite Mbr			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
56aaa9f0cf58f19442532ee1	103	Esna mention			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
55a7c745e13823757cc70251	67	Magenta Dolomite	251.9	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	348	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1d9bbcf58f15c72c9075f	273	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4328de138239d86855ceb	108	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5733004ccf58f1066ffdaeaa	77	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
5733004ccf58f1066ffdaeaa	70	Clear Fork mention	273.01	286.225	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
557cd3cfe138239225f869e5	2498	Wellington Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
5682dd16cf58f1479a0ab6de	590	Belayim Formation	11.608	15.97	MANZI, VINICIO et al.	Deep-water clastic evaporites deposition in the Messinian Adriatic foredeep (northern Apennines, Italy): did the Mediterranean ever dry out?	Sedimentology	52	2005	Wiley-Blackwell	10.1111/j.1365-3091.2005.00722.x
56833ddfcf58f1479a0abbcc	149	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
5906c7e5cf58f1587481407b	51	Lockport Group	416	443.7	Dietrich, R. V.	Rocks Rock Chips: What is the Niagara Escarpment?	Rocks & Minerals	69	1994	Taylor and Francis	10.1080/00357529.1994.9925589
557bfbc7e138239225f86664	697	Praire Evaporite Formation	385.3	397.5	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
584aa62ccf58f19d6a5f583e	244	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
59081969cf58f116699a134d	462	Curtis Formation	145.5	199.6	Kile, Daniel E. et al.	Celestine-Bearing Geodes from Wayne and Emery Counties, Southeastern Utah: Genesis and Mineralogy	Rocks & Minerals	90	2015	Taylor and Francis	10.1080/00357529.2015.1034489
557bfbc7e138239225f86664	21	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
56830ae3cf58f1479a0ab915	15	Winnipegosis Formation	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
56faac60cf58f15186bf46cd	264	Calcite mention			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
55b6d4bfe13823bd29ba7dc0	1374	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b6d4bfe13823bd29ba7dc0	453	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
575019eacf58f1696f3ea50a	98	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
54e97acfe138237cc915120b	121	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
5683349ccf58f1479a0abb4e	133	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2463	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	389	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
56c1d8a6cf58f15c72c9073f	49	Zechstein Limestone	251	260.4	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
56c1ea81cf58f15c72c908aa	224	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
559ce2b4e138230816dad59a	193	Tropic Shale	93.9	95.55	Glanzman, Richard K. and Meier, Allen L.	Preliminary report on samples collected during lithium reconnaissance studies in Utah and Idaho	Open-File Report		1979	United States Geological Survey	10.3133/ofr79279
5ce2f9b20b45c76caf8ae21e	427	Lyne Formation	323.2	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54dc2da6e138238a47f96228	187	Edwards mention	100.5	103.625	Land, Lynton S. and Prezbindowski, Dennis R.	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
558df7d7e13823109f3ee082	1194	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55ae4f4be13823763a830ada	258	Paradox Member	299	318.1	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
54b4324de138239d8684aa17	293	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
578fb2c8cf58f1bdcd2df236	338	Salado-Tansill Formation			HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
56c1d9bbcf58f15c72c9075f	197	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4328de138239d86855ceb	108	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55a43da1e13823757cc6f19a	141	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
557b1abde138239225f86255	999	Anhydrite mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
589a4380cf58f1ab398ea2c6	157	Phase Group	65.5	251	Naderi Peikam, Elahe and Jalali, Mohsen	Application of inverse geochemical modelling for predicting surface water chemistry in Ekbatan watershed, Hamedan, western Iran	Hydrological Sciences Journal	61	2016	Taylor and Francis	10.1080/02626667.2015.1016947
55b6d4bfe13823bd29ba7dc0	266	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
584aa178cf58f19c3c0fb294	89	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
559c3f39e138230816dad2ff	123	Fletcher Anhydrite Member	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
58bf2d90cf58f1867eb10946	228	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55b30ea3e138231cbdd6cfcd	2026	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	307	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b690a7e138238e2d05483f	3497	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C
55b7869fe13823bd29ba8231	2693	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b73032e13823bd29ba8000	131	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b39c73e138231cbdd6d2c1	1166	Todilto mention	158.18	162.45	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
55b83d31e13823bd29ba865c	3259	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
56c1d9bbcf58f15c72c9075f	281	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
558bbd56e13823109f3ed4ef	350	Rustler mention	253.97	256.0278	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
58cded3ccf58f12a356abeab	230	Mineral mention	307	315.2	Delgado, Gabriel et al.	Carbonate and Phosphate Precipitation by Saline Soil Bacteria in a Monitored Culture Medium	Geomicrobiology Journal	30	2013	Taylor and Francis	10.1080/01490451.2012.665148
557bfbc7e138239225f86664	311	Castile Formation	253.8	260.4	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54b4327fe138239d86853736	459	Burano Formation	237	251	Gündoğan, İbrahim et al.	Gypsiferous carbonates at Honaz Dağı (Denizli): First documentation of Triassic gypsum in western Turkey and its tectonic significance	Journal of Asian Earth Sciences	32	2008	Elsevier	10.1016/j.jseaes.2007.09.005
56831c84cf58f1479a0aba03	38	Bell Canyon Formation	260.4	270.6		Book reviews	Sedimentology	30	1983	Wiley-Blackwell	10.1111/j.1365-3091.1983.tb00684.x
557cd3cfe138239225f869e5	1667	Clear Fork Group	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5682fa41cf58f1479a0ab846	29	Facha Member	33.9	55.8	AMIRI-GARROUSSI, K.	Eocene spheroidal dolomite from the western Sirte Basin, Libya	Sedimentology	35	1988	Wiley-Blackwell	10.1111/j.1365-3091.1988.tb01237.x
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
56833ddfcf58f1479a0abbcc	325	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
57320459cf58f19ced0f7bc5	85	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	8111	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	501	Lucas Formation	385.3	397.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559dcd1ae138230816dad9be	3012	Paradox Member	299	318.1	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
5c2bea2e1faed655488b221b	132	Nugget Formation	145.5	199.6	Bhattacharya, Shuvajit et al.	Delineation of early Jurassic aged sand dunes and paleo-wind direction in southwestern Wyoming using seismic attributes, inversion, and petrophysical modeling	Journal of Natural Gas Science and Engineering	60	2018	Elsevier	10.1016/j.jngse.2018.09.022
56c1a95dcf58f15c72c903aa	433	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b6d4bfe13823bd29ba7dc0	1195	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b39c73e138231cbdd6d2c1	968	Paradox mention	306	319.714	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
55ad3126e13823763a8303a0	90	Castile mention	259	259.51	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55c2e5c8cf58f1a8110b8c08	151	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
55a82328e13823757cc7049a	960	Charles mention	332.05	346.7	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
55b7869fe13823bd29ba8231	1347	Salado mention	256.03	262.2168	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b5b47ce1382314227cfdae	151	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
557cd3cfe138239225f869e5	1667	Clear Fork Group	260.4	270.6	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	2239	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	584	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b83d31e13823bd29ba865c	3278	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
570fe41dcf58f114a862267f	33	Zechstein Limestone	251	260.4	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
55af1c5ce13823763a830fe9	529	Culebra Dolomite	251	299	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54fb3438e138239936c6d321	255	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
55b7869fe13823bd29ba8231	2790	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b47dabe138239e89d63a32	198	Space mention			Hildyard, Rebecca C. et al.	Microstructural analysis of anhydrite rocks from the Triassic Evaporites, Umbria-Marche Apennines, Central Italy: An insight into deformation mechanisms and possible slip systems	Journal of Structural Geology	31	2009	Elsevier	10.1016/j.jsg.2008.10.009
54b4327de138239d868530d9	66	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
56c1ea81cf58f15c72c908aa	250	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5712f1aacf58f16fb4cc921a	77	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
54b47dabe138239e89d63a32	198	Space mention			Hildyard, Rebecca C. et al.	Microstructural analysis of anhydrite rocks from the Triassic Evaporites, Umbria-Marche Apennines, Central Italy: An insight into deformation mechanisms and possible slip systems	Journal of Structural Geology	31	2009	Elsevier	10.1016/j.jsg.2008.10.009
55b6d4bfe13823bd29ba7dc0	161	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55af1c5ce13823763a830fe9	742	Mlnnelusa Formation			Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
57a43018cf58f11204e17fe0	827	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54be7fc1e13823299564b0b3	183	Castile mention	259	259.51	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
58c8ed8ccf58f1a71217fb6b	13	Bozkir Formation	1.806	5.332	GÜNDOGAN, Ibrahim and Helvaci, Cahit	Sedimentological and Petrographical Aspects of Upper Miocene Evaporites in the Beypazari and Çankiri-Çorum Basins, Central Anatolia, Turkey	International Geology Review	43	2001	Taylor and Francis	10.1080/00206810109465049
584aa178cf58f19c3c0fb294	74	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
55c0a774cf58f16e99a37771	1232	Monterey Formation	5.332	23.03		Annual index	Geochimica et Cosmochimica Acta		1992	Elsevier	10.1016/0016-7037(92)90001-Y
55b7869fe13823bd29ba8231	1245	Blaine Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1056	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c19917d1faed655488915d3	300	Gessoso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
56834db7cf58f1479a0abca3	286	Asmari Formation	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
56c1d6a4cf58f15c72c90723	196	Inmar Formation	175.6	199.6	AYALON, AVNER and LONGSTAFFE, FRED J.	Stable isotope evidence for the origin of diagenetic carbonate minerals from the Lower Jurassic Inmar Formation, southern Israel	Sedimentology	42	1995	Wiley-Blackwell	10.1111/j.1365-3091.1995.tb01275.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b7869fe13823bd29ba8231	611	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5502c2cae1382326932d7ae8	156	Salina Formation	416	443.7	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
557bfbc7e138239225f86664	270	Halite Anhydrite Calcite Dolomite			Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55ae0df7e13823763a830928	1339	San Andres Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
58bb7f59cf58f1878850d92a	46	Anhydrite Mbr			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
54b43281e138239d86853bfd	154	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
54e865c7e138237cc9150d7f	367	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
56c1ca03cf58f15c72c90620	73	Soledad Formation			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55b6dc28e13823bd29ba7dec	8385	See mention			Schrader, Frank Charles et al.	Useful minerals of the United States	Bulletin		1917	United States Geological Survey	10.3133/b624
559c3f39e138230816dad2ff	149	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5506a9ebe1382326932d924e	42	Sedom Formation	5.332	23.03	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
54b4328ae138239d86855525	41	Hagif Formation			Youssef, El-Sayed A.A.	Sedimentological studies of neogene evaporites in the northern Western Desert, Egypt	Sedimentary Geology	59	1988	Elsevier	10.1016/0037-0738(88)90080-2
54be1b30e138233c8bc4f9d7	204	Satanka Evaporite Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
54fb3438e138239936c6d321	489	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
56aaa9f0cf58f19442532ee1	105	Thebes Formation			MOUSSA, A. M. A. et al.	THE IMPACT OF SOLUBLE SALTS ON THE DETERIORATION OF PHARAONIC AND COPTIC WALL PAINTINGS AT AL QURNA, EGYPT: MINERALOGY AND CHEMISTRY	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00422.x
56c1d9bbcf58f15c72c9075f	370	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54fb3438e138239936c6d321	178	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
578aea2bcf58f13920dc7baa	149	Calcite Dolomite			DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54c04e8fe1382389c54c36c6	55	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
5579c265e138231c7c52c464	2	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
578b8ab6cf58f1645f54f0c6	463	Evaporite mention			LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
56c1ea81cf58f15c72c908aa	294	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54e49f08e138237cc914fdcc	102	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
56830ae3cf58f1479a0ab915	284	Whitkow mention			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55b7869fe13823bd29ba8231	2201	Wellington Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558eb5d6e13823109f3ee517	312	Rustler mention	253.97	256.0278	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b6d4bfe13823bd29ba7dc0	1165	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	720	St. Louis Limestone	318.1	359.2	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	724	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558fe155e13823109f3eec57	923	Castile mention	259	259.51	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
579b56dacf58f13d24f0d7ef	62	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
54b97a75e1382369e57e4cef	36	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b30ea3e138231cbdd6cfcd	2109	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
54b4327de138239d868530d9	39	Maha Sarakham mention	33.9	100.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55b7869fe13823bd29ba8231	1555	Salt mention	251	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ae138239d8685557f	79	Raisby Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
55a751cee13823757cc6ff3c	548	Castile mention	259	259.51	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
54b60355e138230a74d1533f	3	Abstract Shale			Jordan, Peter and Nüesch, Rolf	Deformational behavior of shale interlayers in evaporite detachment horizons, jura overthrust, Switzerland	Journal of Structural Geology	11	1989	Elsevier	10.1016/0191-8141(89)90103-X
5732032ecf58f19cbcbc550f	66	Castile Formation	253.8	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55ae9887e13823763a830cad	107	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
575019eacf58f1696f3ea50a	95	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
54b4327ee138239d86853305	78	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
55af1c5ce13823763a830fe9	143	Castile Formation	253.8	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
559c3f39e138230816dad2ff	149	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5579c265e138231c7c52c464	177	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
55b30ea3e138231cbdd6cfcd	283	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
558fe155e13823109f3eec57	302	TTletcher Anhydrite Member			Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
54b43286e138239d8685492c	17	Calcite mention			Giles, Melvyn R. and Marshall, James D.	Constraints on the development of secondary porosity in the subsurface: Re-evaluation of processes	Marine and Petroleum Geology	3	1986	Elsevier	10.1016/0264-8172(86)90048-6
559c3f39e138230816dad2ff	508	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
584aa62ccf58f19d6a5f583e	244	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
57126a16cf58f140fa5c33f2	114	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55cbfc16cf58f1b01e42470e	557	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
5579c265e138231c7c52c464	2	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
557f199ce13823bc80ba25a0	1794	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55bfc14ecf58f16e99a3703b	376	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
59c8865fcf58f1b2f91cfceb	326	Alcova Limestone	213.13	238.25	Duguid, Andrew et al.	Baseline integrity property measurement of legacy oil and gas wells for carbon storage projects	Greenhouse Gases: Science and Technology		2017	Wiley-Blackwell	10.1002/ghg.1669
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54e4d444e138237cc914feb2	16	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
58b7df47cf58f18af629a04c	110	Besalu mention			Gutiérrez, Francisco et al.	Sinkholes and caves related to evaporite dissolution in a stratigraphically and structurally complex setting, Fluvia Valley, eastern Spanish Pyrenees. Geological, geomorphological and environmental implications	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.05.018
575705decf58f1bb124e0773	59	Salado Formation	251	260.4	Silva, Matthew K. et al.	Resolution of the Long-Term Performance Issues at the Waste Isolation Pilot Plant	Risk Analysis	19	1999	Wiley-Blackwell	10.1111/j.1539-6924.1999.tb00458.x
5c19917d1faed655488915d3	44	Gesesso-Solfifera Formation			Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
56c1ca03cf58f15c72c90620	130	Quillagua mention	5.332	11.608	Pueyo, Juan Jos�? et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
54b43276e138239d86851ec2	341	Habshan Formation	99.6	145.5	Vandeginste, Veerle et al.	Interplay between depositional facies, diagenesis and early fractures in the Early Cretaceous Habshan Formation, Jebel Madar, Oman	Marine and Petroleum Geology		2013	Elsevier	10.1016/j.marpetgeo.2012.11.006
54b97a75e1382369e57e4cef	434	Haselgebirge Formation	245	251	Schorn, Anja et al.	The Haselgebirge evaporitic mélange in central Northern Calcareous Alps (Austria): Part of the Permian to Lower Triassic rift of the Meliata ocean?	Tectonophysics		2013	Elsevier	10.1016/j.tecto.2012.10.016
55917250e13823109f3ef5b1	855	Lorn Sak Formation			Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
56a038b2cf58f1079fd4ba21	199	Edwards Group	99.6	145.5	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
54b4324de138239d8684aba6	344	Gesso mention			Dela Pierre, Francesco et al.	The record of the Messinian salinity crisis in the Tertiary Piedmont Basin (NW Italy): The Alba section revisited	Palaeogeography, Palaeoclimatology, Palaeoecology	310	2011	Elsevier	10.1016/j.palaeo.2011.07.017
56a1e0c6cf58f19442528787	27	Anhydrite mention			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954
54b4327ee138239d86853305	41	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	Choosing the best ancient analogue for projected future temperatures: A case using data from fluid inclusions of middle-late Eocene halites	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.02.008
55ae4f4be13823763a830ada	281	Paradox mention	306	319.714	Hite, R. J. and Lohman, Stanley William	Geologic appraisal of Paradox basin salt deposits for water emplacement	Open-File Report		1973	United States Geological Survey	10.3133/ofr73114
564e2642cf58f141b60cac40	400	Ca Group			Schröder, S. et al.	Hydrogen detection with ChemCam at Gale crater	Icarus		2015	Elsevier	10.1016/j.icarus.2014.08.029
557cd3cfe138239225f869e5	1973	Stone Corral Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
57911b02cf58f1640927d438	78	Octon Member			Michel, Lauren A. et al.	Paleosol Diagenesis and Its Deep-Time Paleoenvironmental Implications, Pennsylvanian–Permian Lodève Basin, France	Journal of Sedimentary Research	86	2016	Society for Sedimentary Geology	10.2110/jsr.2016.41
55a0946ee1382381ff364540	88	Siltstone Sandstone	121.4	122.4925	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
56f2f98bcf58f1892b30205d	50	Kamiiso Group			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b6d4bfe13823bd29ba7dc0	1188	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57c1a06bcf58f16cbd621551	97	Mavqi'im Formation			Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic Dolomite			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54bffee9e1382389c54c3458	349	Sedom Fm	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
579b56dacf58f13d24f0d7ef	104	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55f28a1bcf58f16256a2178c	259	Ain Ghrab Formation			Jellalia, Dalila et al.	Hydro-geophysical and geochemical investigation of shallow and deep Neogene aquifer systems in Hajeb Layoun-Jilma-Ouled Asker area, Central Tunisia	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.06.016

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
54b43271e138239d86850ff4	235	Bilara Group	488.3	542	Mazumdar, A. and Strauss, H.	Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle	Precambrian Research	149	2006	Elsevier	10.1016/j.precamres.2006.06.008
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
550b6ce8e1382369a6f9311e	186	Cadjebut Formation	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
557f199ce13823bc80ba25a0	715	Castile Formation	253.8	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c2a9cacf58f1a8110b8a1e	86	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55b7869fe13823bd29ba8231	1489	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1152	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
558bbd56e13823109f3ed4ef	288	Castile mention	259	259.51	Mercer, Jerry W. and Orr, Brennon R.	Review and analysis of hydrogeologic conditions near the site of a potential nuclear-waste repository, Eddy and Lea counties, New Mexico	Open-File Report		1977	United States Geological Survey	10.3133/ofr77123
55b6d4bfe13823bd29ba7dc0	335	Wellington Formation	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54e66657e138237cc915052a	67	Arctomys Formation	501	503.5	Yonge, C.J. and Krouse, H. Roy	The origin of sulphates in Castleguard Cave, Columbia Icefields, Canada	Chemical Geology: Isotope Geoscience section	65	1987	Elsevier	10.1016/0168-9622(87)90018-2
559c3f39e138230816dad2ff	488	Tamarisk Member	251.9	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
56c1ea81cf58f15c72c908aa	215	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5a2b750ccf58f1081042119c	386	Maha Sarakham mention	33.9	100.5	Zhang, Dawen et al.	Magnetostratigraphic study of the potash-bearing strata from drilling core ZK2893 in the Sakhon Nakhon Basin, eastern Khorat Plateau	Palaeogeography, Palaeoclimatology, Palaeoecology	489	2018	Elsevier	10.1016/j.palaeo.2017.08.030
55b73032e13823bd29ba8000	181	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
58bf2d90cf58f1867eb10946	228	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55ad3126e13823763a8303a0	88	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56c1d9bbcf58f15c72c9075f	170	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b7869fe13823bd29ba8231	1043	Trinity Group	65.5	145.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
572cf1fccf58f13accaa0e61	319	Opeche Shale	251	299	Benison, K. C. and Goldstein, R. H.	Sedimentology of Ancient Saline Pans: An Example from the Permian Opeche Shale, Williston Basin, North Dakota, U.S.A.	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40907-0e47-11d7-8643000102c1865d
54b4328de138239d86855ceb	275	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
56833ddfcf58f1479a0abbcc	449	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
55b7869fe13823bd29ba8231	733	Warsaw Limestone	339	341	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ce138239d86855aad	369	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54e8ae2de138237cc9150ec9	531	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55bfc14ecf58f16e99a3703b	78	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5599341be1382390cc641189	199	Anhydrite Member			Escavy, J.I. et al.	Gypsum resources of Spain: Temporal and spatial distribution	Ore Geology Reviews		2012	Elsevier	10.1016/j.oregeorev.2012.09.001
54b4328ce138239d86855aad	439	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56833ddfcf58f1479a0abbcc	157	Zechstein mention	251.9	273.01	Kovalevych, V. M. et al.	GEOCHEMICAL AUREOLES AROUND OIL AND GAS ACCUMULATIONS IN THE ZECHSTEIN (UPPER PERMIAN) OF POLAND: ANALYSIS OF FLUID INCLUSIONS IN HALITE AND BITUMENS IN ROCK SALT	Journal of Petroleum Geology	31	2008	Wiley-Blackwell	10.1111/j.1747-5457.2008.00419.x
57a43018cf58f11204e17fe0	534	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
54e865c7e138237cc9150d7f	187	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b6d6a7e13823bd29ba7dcc	8205	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56834db7cf58f1479a0abca3	56	Asmari Formation	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
5a2b7516cf58f108104211ac	175	UXG Formation			Guo, Pei et al.	Genesis of the late Eocene bedded halite in the Qaidam Basin and its implication for paleoclimate in East Asia	Palaeogeography, Palaeoclimatology, Palaeoecology	487	2017	Elsevier	10.1016/j.palaeo.2017.09.023
55b2bc12e138231cbdd6ce12	883	Maha Sarakam Formation	65.5	145.5	Jacobson, Herbert S. et al.	Mineral investigations in northeastern Thailand	Professional Paper		1969	United States Geological Survey	10.3133/pp618
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	2813	Queen Formation	260.4	270.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5b526230cf58f1a50a464a8d	231	SYS Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012
5590d1bfe13823109f3ef23b	204	Rustler Formation	251	260.4	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
558eb5d6e13823109f3ee517	349	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
5a2cf7f0cf58f19a331caf3c	72	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
5503421ae1382326932d7e6d	503	Rodeo Fm			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
558df7d7e13823109f3ee082	2344	Salado mention	256.03	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	80	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b87207e13823bd29ba87aa	1785	Lockatong mention	213.13	227	Margolis, Jacob et al.	Annotated bibliography of studies on the geology, geochemistry, mineral resources, and geophysical character of the early Mesozoic basins of the eastern United States, 1880-1984	Bulletin		1986	United States Geological Survey	
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b78281e13823bd29ba8218	4007	Santa Rosa Sandstone	199.6	228	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5a2b750ccf58f1081042119c	44	Nong Boua Formation			Zhang, Dawen et al.	Magnetostratigraphic study of the potash-bearing strata from drilling core ZK2893 in the Sakhon Nakhon Basin, eastern Khorat Plateau	Palaeogeography, Palaeoclimatology, Palaeoecology	489	2018	Elsevier	10.1016/j.palaeo.2017.08.030
557f199ce13823bc80ba25a0	497	Castile mention	259	259.51	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54e76d92e138237cc915098c	116	Furnace Creek Formation	1.806	5.332	Böhlke, J.K. et al.	Stable isotope evidence for an atmospheric origin of desert nitrate deposits in northern Chile and southern California, U.S.A.	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00124-6
5509217ee138238460c4f689	183	Castile Formation	253.8	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
558df7d7e13823109f3ee082	1196	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	1650	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1005	Buckner mention	150.6	161.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5b6f081fcf58f1539ffa6761	160	Baykan-Sason Group			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
55b7869fe13823bd29ba8231	238	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a2cf7f0cf58f19a331caf3c	469	Zechstein mention	251.9	273.01	Sorento, Tone et al.	Upper Permian carbonates at the northern edge of the Zechstein basin, Utsira High, Norwegian North Sea	Marine and Petroleum Geology	89	2018	Elsevier	10.1016/j.marpetgeo.2017.10.030
5503421ae1382326932d7e6d	1129	Arab Fm	145.5	199.6	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1ea81cf58f15c72c908aa	202	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	2396	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ea81cf58f15c72c908aa	217	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55b7869fe13823bd29ba8231	1480	Gypsum Spring mention	170.23	170.9	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
56c1a95dcf58f15c72c903aa	517	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
54bf26f8e13823023e43db6f	586	Fort Pierce Formation	119.3	148.15	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b7869fe13823bd29ba8231	615	Iutzi mention	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558d102de13823109f3edc0f	220	Big Snowy Group	326.15	335	Perry, W. J., Jr. et al.	Petroleum potential of wilderness lands, Montana	IMAP		1982	United States Geological Survey	
57321bc8cf58f1a0ac39199e	32	Portland Sandstone	175.6	199.6	D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55b6d4bfe13823bd29ba7dc0	219	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
59080b6ccf58f111237d82af	71	Glen Rose mention	100.5	113	Lobell, Joe	Rediscovering Lampasas Celestine: Lampasas County, Texas	Rocks & Minerals	67	1992	Taylor and Francis	10.1080/00357529.1992.9926463
5590c038e13823109f3ef1c7	77	Forty-niner Member			Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
56f2f98bcf58f1892b30205d	146	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
577bdee8cf58f15bef495d06	256	Amsden Formation	318.1	359.2	HEARD, HUGH C. and RUBEY, WILLIAM W.	Tectonic Implications of Gypsum Dehydration	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[741:tiogd]2.0.co;2
54b4328de138239d86855c34	501	Gypsiferous Claystone Member			Orb, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
5683349ccf58f1479a0abb4e	91	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b7869fe13823bd29ba8231	1758	Supai mention	275.26	313.75	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
584aa178cf58f19c3c0fb294	89	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5a850dffcf58f13f065e41c5	55	Sedom Formation	5.332	23.03	Levy, Elan J. et al.	Salt precipitation and dissolution in the late Quaternary Dead Sea: Evidence from chemical and δ37Cl composition of pore fluids and halites	Earth and Planetary Science Letters	487	2018	Elsevier	10.1016/j.epsl.2018.02.003
55b7869fe13823bd29ba8231	669	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1ea81cf58f15c72c908aa	138	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
58bf2d90cf58f1867eb10946	124	Shannon Formation	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e49f08e138237cc914fdcc	74	Bay Fiord Formation	459.98	478.47	Osinski, Gordon R. and Spray, John G.	Evidence for the shock melting of sulfates from the Haughton impact structure, Arctic Canada	Earth and Planetary Science Letters	215	2003	Elsevier	10.1016/S0012-821X(03)00420-5
579fd5b3cf58f150b74d1050	58	Zaragoza Formation	23.03	33.9	Carbonel, Domingo et al.	Evaluation of trenching, ground penetrating radar (GPR) and electrical resistivity tomography (ERT) for sinkhole characterization	Earth Surface Processes and Landforms	39	2014	Wiley-Blackwell	10.1002/esp.3440
557b1abde138239225f86255	1283	Siltstone Anhydrite Dolostone			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
558df7d7e13823109f3ee082	323	Salado mention	256.03	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	2209	Michigan mention	342.08	348.8334	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b6d6a7e13823bd29ba7dcc	1971	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b7869fe13823bd29ba8231	2160	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e830cf58f1479a0ab75f	295	Interpretation Ara Group			Schr��der, Stefan et al.	A depositional model for the terminal Neoproterozoic-Early Cambrian Ara Group evaporites in south Oman	Sedimentology	50	2003	Wiley-Blackwell	10.1046/j.1365-3091.2003.00587.x
56e0624ccf58f174e7b198f4	4	Indiana mention			Stephens, D. R.	The hydrostatic compression of eight rocks	Journal of Geophysical Research	69	1964	Wiley-Blackwell	10.1029/JZ069i014p02967
57968abbcf58f180d838d23c	294	Evans mention			Wood, Warren W. et al.	Source of solutes to the coastal sabkha of Abu Dhabi	Geological Society of America Bulletin	114	2002	GSA	10.1130/0016-7606(2002)114<0259:sosttc>2.0.co;2
56830ae3cf58f1479a0ab915	94	Winnipegosis Formation	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
55b7869fe13823bd29ba8231	2714	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2468	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43245e138239d86849681	65	Juruh Mirim Formation			Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
54be1b30e138233c8bc4f9d7	85	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b7869fe13823bd29ba8231	2453	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	2317	Wellington Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b30ea3e138231cbdd6cfcd	283	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	348	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5bf90c4dcf58f1a9c3124ad5	87	Calcite Dolomite			Giustetto, Roberto et al.	Deterioration of building materials and artworks in the 'Santa Maria della Stella' church, Saluzzo (Italy): Causes of decay and possible remedies	Studies in Conservation	62	2017	Informa UK Limited	10.1080/00393630.2016.1217694
557bfbc7e138239225f86664	239	Silty mention			Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
57c8787ccf58f14528333514	469	Windjana mention			Treiman, Allan H. et al.	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin X-ray diffraction of the Windjana sample (Kimberley area, Gale Crater)	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004932
5ce2f9b20b45c76caf8ae21e	506	Grzybowo Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
5502c2cae1382326932d7ae8	278	Solfifera Formation			Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
579b56dacf58f13d24f0d7ef	40	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
57126a16cf58f140fa5c33f2	20	Brittle Bed			Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1a95dcf58f15c72c903aa	461	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
55b83b40e1382373b63b7fe6	4	Geoscience Group			Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
56c1fcefcf58f15c72c90a17	514	Maha Sarakham Formation	65.5	145.5	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x
558eb5d6e13823109f3ee517	259	Salado Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
54d4bb37e138238471e7f379	433	Salado mention	256.03	262.2168	Beauheim, Richard L and Roberts, Randall M	Hydrology and hydraulic properties of a bedded evaporite formation	Journal of Hydrology	259	2002	Elsevier	10.1016/S0022-1694(01)00586-8
570fe41dcf58f114a862267f	21	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
57516912cf58f129ff61ef40	438	Watering Brook Formation			Utting, J.	Palynology of the Windsor Group (Mississippian) in a borehole at Stewiacke, Shubenacadie Basin, Nova Scotia	Canadian Journal of Earth Sciences	17	1980	Canadian Science Publishing	10.1139/e80-103
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54df4a35e138238a47f96f37	560	Burano Formation	237	251	Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
55b31649e138231cbdd6cff7	1602	Anhydrite Dolomite				Geological Survey research 1967, Chapter C	Professional Paper		1967	United States Geological Survey	10.3133/pp575C
5734b312cf58f14dbc2c579f	543	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
56e353e7cf58f16de8a2e1bf	387	Minas Viejas mention			Millán-Garrido, Héctor	Geometry and kinematics of compressional growth structures and diapirs in the La Popa basin of northeast Mexico: Insights from sequential restoration of a regional cross section and three-dimensional analysis	Tectonics	23	2004	Wiley-Blackwell	10.1029/2003TC001540
5c2fe60d1faed655488b6bad	251	Kumugeliemu Formation	23.03	65.5	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
55ad3126e13823763a8303a0	217	Rustler Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
557f199ce13823bc80ba25a0	785	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55cbfc16cf58f1b01e42470e	49	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
54b4324fe138239d8684b069	231	Hannover Formation			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
574c1c0bcf58f1957a2a36f7	49	Upperton Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5c4005801faed655488cf82c	616	Grasberg mention			Mittlefehldt, David W. et al.	Diverse Lithologies and Alteration Events on the Rim of Noachian-Aged Endeavour Crater, Meridiani Planum, Mars: In-Situ Compositional Evidence	Journal of Geophysical Research: Planets			Wiley-Blackwell	10.1002/2017JE005474
557cd3cfe138239225f869e5	2508	Stone Corral Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
579f1578cf58f1168e64ad7f	282	Forty-niner mention			Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b4328de138239d86855c34	408	Gypsiferous Claystone Member			Orb, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
584aa62ccf58f19d6a5f583e	236	Gypsum mention			ORTÍ, FEDERICO et al.	Meganodular anhydritization: a new mechanism of gypsum to anhydrite conversion (Palaeogene-Neogene, Ebro Basin, North-east Spain)	Sedimentology	59	2012	Wiley	10.1111/j.1365-3091.2011.01305.x
5502c2cae1382326932d7ae8	793	Prairie mention	383.95	389.1	Hsu¨, K.J.	Origin of saline giants: A critical review after the discovery of the Mediterranean Evaporite	Earth-Science Reviews	8	1972	Elsevier	10.1016/0012-8252(72)90062-1
55c2a9cacf58f1a8110b8a1e	110	Maha Sarakham mention	33.9	100.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5af05c0bcf58f12f5846a45d	80	Barnett Shale	318.1	359.2	Wickard	Paragenesis of Mineralized Fractures and Diagenesis of Prominent North American Shales	The Sedimentary Record	14	2016	Society for Sedimentary Geology	10.2110/sedred.2016.4.4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	1880	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	315	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1191	Briggs Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	615	Iutzi mention	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5bf90c4dcf58f1a9c3124ad5	87	Calcite Dolomite			Giustetto, Roberto et al.	Deterioration of building materials and artworks in the 'Santa Maria della Stella' church, Saluzzo (Italy): Causes of decay and possible remedies	Studies in Conservation	62	2017	Informa UK Limited	10.1080/00393630.2016.1217694
55765b42e138234790a011e4	71	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
56c1d9bbcf58f15c72c9075f	12	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1d9bbcf58f15c72c9075f	61	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55b77fd5e1382373b63b7cce	202	Buckner mention	150.6	161.5	Stueber, Alan M. et al.	A strontium isotopic study of Smackover brines and associated solids, southern Arkansas	Geochimica et Cosmochimica Acta	48	1984	Elsevier	10.1016/0016-7037(84)90333-8
558df7d7e13823109f3ee082	1004	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b7869fe13823bd29ba8231	1252	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43288e138239d86854e95	1	Fars Formation			Aqrawi, A.A.M.	Miocene evaporitic sequence of the southern Mesopotamian Basin	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90022-K
55b7869fe13823bd29ba8231	2254	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
558bbed5e13823109f3ed4f8	252	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54e97acfe138237cc915120b	78	Evaporite Bed			Stewart, F.H.	Early gypsum in the Permian evaporites of North-Eastern England	Proceedings of the Geologists' Association	64	1953	Elsevier	10.1016/S0016-7878(53)80021-0
54b4328ae138239d8685557f	79	Raisby Formation	251.9	273.01	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
55b6d6a7e13823bd29ba7dcc	8139	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54fb3438e138239936c6d321	123	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
54bf26f8e13823023e43db6f	603	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
577db7abcf58f1449704d46	314	Red Salt Shale			BORCHERT, HERMANN	Principles of Oceanic Salt Deposition and Metamorphism	Geol Soc America Bull	80	1969	Geological Society of America	10.1130/0016-7606(1969)80[821:poosda]2.0.co;2
557bfbc7e138239225f86664	414	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55b83b40e1382373b63b7fe6	16	Mohilla Formation	199.6	251	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
54b43250e138239d8684b33f	38	Artés Formation			Pérez, Aureli Álvarez and Pérez, German Álvarez	Preservation of original aragonite structure in Desmophyllum castellolense (Scleractinia) from the Eocene Igualada Basin (NE Spain)	Palaeoworld	23	2014	Elsevier	10.1016/j.palwor.2014.04.001
598b8640cf58f11358c1f60c	192	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
5b541d97cf58f120001757f5	591	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology	399	2015	Elsevier	10.1016/j.chemgeo.2014.10.028
5734b312cf58f14dbc2c579f	101	Monte Amarillo Member			Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
55af1c5ce13823763a830fe9	411	Fletcher Anhydrite mention	259	259.51	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bf2d90cf58f1867eb10946	140	Todd River Dolostone	511	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
575019eacf58f1696f3ea50a	6	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
559dcd1ae138230816dad9be	347	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
578aea2bcf58f13920dc7baa	145	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5731caeecf58f192f36c5766	53	Karstryggen Formation	251	260.4	Peter A. Scholle (2) and Lars Stemmeri	Origin of Major Karst-Associated Celestite Mineralization in Karstryggen, Central East Greenland	SEPM Journal of Sedimentary Research	Vol. 60	1990	Society for Sedimentary Geology	10.1306/212f91a6-2b24-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	632	Briggs mention	470	511	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56830ae3cf58f1479a0ab915	15	Winnipegosis Formation	385.3	397.5	FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
54be7fc1e13823299564b0b3	224	Salado Formation	251	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
57ec17eccf58f1ac335ac1b3	433	Bambata Formation	112	125	Gindre-Chanu, Laurent et al.	Diagenetic evolution of Aptian evaporites in the Namibe Basin (south-west Angola)	Sedimentology	62	2015	Wiley	10.1111/sed.12146
54e64c66e138237cc91504d3	81	Rustler mention	253.97	256.0278	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
56c1d9bbcf58f15c72c9075f	140	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5682e272cf58f1479a0ab716	365	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
55b6d4bfe13823bd29ba7dc0	908	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5b6f081fcf58f1539ffa6761	156	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
54be1b30e138233c8bc4f9d7	120	Intersaliferous Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
570fe41dcf58f114a862267f	2	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
567c9105cf58f1b2eac1a357	140	Morelos Formation	65.5	145.5	Talavera Mendoza, Oscar et al.	Water-rock-tailings interactions and sources of sulfur and metals in the subtropical mining region of Taxco, Guerrero (southern Mexico): A multi-isotopic approach	Applied Geochemistry		2016	Elsevier	10.1016/j.apgeochem.2015.12.002
55c2a9cacf58f1a8110b8a1e	63	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
54b4328be138239d8685567e	447	Kuwait mention			Robinson, Brian W. and Gunatilaka, Ana	Stable isotope studies and the hydrological regime of sabkhas in southern Kuwait, Arabian Gulf	Sedimentary Geology	73	1991	Elsevier	10.1016/0037-0738(91)90027-B
55b3d511e138231cbdd6d40e	228	Weber Sandstone	270.6	299	Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
55b7869fe13823bd29ba8231	1725	Todilto Formation	145.5	199.6	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
56c1d607cf58f15c72c9071a	196	Seven Rivers Formation	251	299	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
558ecdcbe13823109f3ee5af	363	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
55b7869fe13823bd29ba8231	1546	Logan Gulch mention	366.8	370.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55baa3b5e1382373b63b89e7	159	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
54fc8912e138239936c6dc7a	205	Castile Formation	253.8	260.4	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
57321bc8cf58f1a0ac39199e	168	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55b690a7e138238e2d05483f	3497	Minnelusa Formation	251	299	Geological Survey (U.S.)	Geological Survey research 1963; Short papers in geology and hydrology, Articles 60-121	Professional Paper		1963	United States Geological Survey	10.3133/pp475C

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58d27a97cf58f121bb4ff118	82	Debolt Formation	318.1	359.2	Baniak, Greg M. et al.	Sabkha and Burrow-Mediated Dolomitization in the Mississippian Debolt Formation, Northwestern Alberta, Canada	Ichnos	21	2014	Taylor and Francis	10.1080/10420940.2014.930036
55b54e9de1382314227cfc23	1141	Australia Brockman Iron Formation				List of referees, list of contents, subject index and author index volume 54, 1990	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90315-C
55ad3126e13823763a8303a0	94	Castile Formation	253.8	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54b4328ae138239d8685557f	261	Ford Formation	66	100.5	Lee, Martin R. and Harwood, Gill M.	Dolomite calcitization and cement zonation related to uplift of the Raisby Formation (Zechstein carbonate), northeast England	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90030-4
5b6d22edcf58f18ba5e73c75	142	Middle Evaporite Bed			Stewart, F. H.	Replacements involving early carnallite in the potassium-bearing evaporites of Yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	31	1956	Mineralogical Society	10.1180/minmag.1956.031.233.02
56c1d607cf58f15c72c9071a	331	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
54b4324de138239d8684aa17	125	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57115a80cf58f199e340c7d5	63	Malm Formation			Hanor, J. S.	A Model for the Origin of Large Carbonate- and Evaporite-Hosted Celestine (SrSO4) Deposits	Journal of Sedimentary Research	74	2004	Society for Sedimentary Geology	10.1306/092203740168
54be1b30e138233c8bc4f9d7	120	Intersaliferous Formation			Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
559c3f39e138230816dad2ff	128	Castile Formation	253.8	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55b83d31e13823bd29ba865c	461	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
54bf26f8e13823023e43db6f	599	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
58bf2d90cf58f1867eb10946	228	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
54e865c7e138237cc9150d7f	347	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
558bbed5e13823109f3ed4f8	252	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55b7869fe13823bd29ba8231	1546	Logan Gulch mention	366.8	370.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2591	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55af1c5ce13823763a830fe9	523	Rustler Formation	251	260.4	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
54d0272be13823b501cdbc75	242	Saline River Formation	501	503.5	Michel, F.A.	Hydrogeology of the central Mackenzie Valley	Journal of Hydrology	85	1986	Elsevier	10.1016/0022-1694(86)90068-5
572cf900cf58f13d86a1bdc8	177	Rustler mention	253.97	256.0278	Powers, D. W. and Holt, R. M.	The Salt That Wasn't There: Mudflat Facies Equivalents to Halite of the Permian Rustler Formation, Southeastern New Mexico	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc408fb-0e47-11d7-8643000102c1865d
558fe155e13823109f3eec57	272	Castile mention	259	259.51	Cooper, J. B.	Ground-water investigations of the Project Gnome area, Eddy and Lea Counties, New Mexico	Open-File Report		1962	United States Geological Survey	
54b4328de138239d86855c34	72	Evaporite Member			Orti, Federico et al.	Sodium sulphate deposits of Neogene age: the Kirmir Formation, Beypazari Basin, Turkey	Sedimentary Geology	146	2002	Elsevier	10.1016/S0037-0738(01)00140-3
5a0493edcf58f1b96402aae7	332	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b7869fe13823bd29ba8231	2463	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
550901a3e138238460c4f59b	253	Guendulain Fm	199.6	251	De Las Cuevas, C. and Pueyo, J.J.	The influence of mineralogy and texture in the water content of rock salt formations. Its implication in radioactive waste disposal	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00009-9
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55b7869fe13823bd29ba8231	313	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5683006acf58f1479a0ab88f	295	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
54b4328de138239d86855ceb	245	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
5d3f58060b45c76cafa2004f	23	Zechstein Supergroup	251	260.4	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56c1d607cf58f15c72c9071a	517	Bell Canyon Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
572ee8a5cf58f11bb5bc1a43	273	Yates Formation	251	299	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
55b30ea3e138231cbdd6cfcd	1432	Organic mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55a43da1e13823757cc6f19a	274	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
5509217ee138238460c4f689	728	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55a43da1e13823757cc6f19a	138	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
54b4328ce138239d86855aad	173	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
58d05f04cf58f143d83df298	745	Zechstein mention	251.9	273.01	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55b7869fe13823bd29ba8231	1966	Muddy Creek Formation	5.332	23.03	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58d05105cf58f13f39efd424	236	Belayim Formation	11.608	15.97	Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55b7869fe13823bd29ba8231	2051	Arapien mention	161.5	165.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5733004ccf58f1066ffdaeaa	249	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55ae9887e13823763a830cad	91	Rustler Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
5748f823cf58f170c57fbbd7	102	Codroy Group	318.1	359.2	Brookes, Ian A. et al.	Quaternary interglacial and associated deposits in southwest Newfoundland	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-033
55f48ec1cf58f16256a22559	416	Burano Formation	237	251	Lugli, Stefano et al.	The deep record of the Messinian salinity crisis: Evidence of a non-desiccated Mediterranean Sea	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.05.017
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b43247e138239d86849b52	155	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
55b6d4bfe13823bd29ba7dc0	181	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
579f1578cf58f1168e64ad7f	244	Cowden Anhydrite mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
55baa3b5e1382373b63b89e7	199	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	2002	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56830b14cf58f1479a0ab918	69	Gessoso Solfifera mention	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
578b8ab6cf58f1645f54f0c6	167	Salado mention	256.03	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55b30ea3e138231cbdd6cfcd	2115	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	1107	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5712f1aacf58f16fb4cc921a	74	Perkasie Member	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
58d03bf3cf58f138516d1200	818	Sanders Group	318.1	359.2	Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	2211	Cedar Keys Limestone	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	89	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
57f555decf58f17e0fbf38b4	568	Murray mention	0.0117	0.774	Schieber, Juergen et al.	Encounters with an unearthly mudstone: Understanding the first mudstone Found on Mars	Sedimentology		2016	Wiley	10.1111/sed.12318
54df4a35e138238a47f96f37	183	Cherty mention			Boschetti, Tiziano et al.	The Bagni di Lucca thermal waters (Tuscany, Italy): an example of Ca-SO4 waters with high Na/Cl and low Ca/SO4 ratios	Journal of Hydrology	307	2005	Elsevier	10.1016/j.jhydrol.2004.10.015
5a21053ecf58f18a3170d1ed	228	Khorat Group	65.5	251	Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
56c1d9bbcf58f15c72c9075f	233	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
550b6ce8e1382369a6f9311e	276	Cadjebut mention	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
565df234cf58f148c57eb7c2	125	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Characteristics of ferrospheres in fly ashes derived from bokaro and jharia (jharkand, India) coals	International Journal of Coal Geology		2015	Elsevier	10.1016/j.coal.2015.11.013
55b6d6a7e13823bd29ba7dcc	8133	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
572ecdb4cf58f1177819e19e	269	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
55b30ea3e138231cbdd6cfcd	294	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2520	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	80	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
58bf2d90cf58f1867eb10946	177	Petermann Sandstone	485.4	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55ad3126e13823763a8303a0	208	Rustler mention	253.97	256.0278	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55b6d4bfe13823bd29ba7dc0	1297	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54fb3438e138239936c6d321	332	Zechstein mention	251.9	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5b6f081fcf58f1539ffa6761	136	Yapılar Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
598b8640cf58f11358c1f60c	192	Zhoucunchong Formation			Hu, Zhongya et al.	Resetting of Mg isotopes between calcite and dolomite during burial metamorphism: Outlook of Mg isotopes as geothermometer and seawater proxy	Geochimica et Cosmochimica Acta	208	2017	Elsevier	10.1016/j.gca.2017.03.026
5749d59dcf58f1b0821791d1	250	Prairie Evaporite Formation	385.3	397.5	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
578b8ab6cf58f1645f54f0c6	385	Minnelusa Formation	251	299	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5579c265e138231c7c52c464	329	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	49	Richfield Member	382.7	393.3	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c48dc6cf58f1a8110b94db	110	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
557cd3cfe138239225f869e5	2304	Barneston Limestone	284.3	285.5208	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
55765b42e138234790a011e4	166	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Hydrocarbon biomarkers of different lithofacies of the Salt IV formation of the Mulhouse Basin, France	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90008-Y
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
54b43281e138239d86853bfd	174	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
559c3f39e138230816dad2ff	147	Castile mention	259	259.51	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5598ea48e1382390cc640ff5	228	Lieryu Formation			Hu, Guyue et al.	In situ LA–MC–ICP–MS boron isotope and zircon U–Pb age determinations of Paleoproterozoic borate deposits in Liaoning Province, northeastern China	Ore Geology Reviews	65	2015	Elsevier	10.1016/j.oregeorev.2014.09.005
56c1d9bbcf58f15c72c9075f	122	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4328ce138239d86855aad	369	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b6d4bfe13823bd29ba7dc0	182	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
54b4324ae138239d8684a3c9	156	Eggenburgian Vorotyshcha Formation			Cendón, D.I. et al.	The importance of recycling processes in the Middle Miocene Badenian evaporite basin (Carpathian foredeep): palaeoenvironmental implications	Palaeogeography, Palaeoclimatology, Palaeoecology	212	2004	Elsevier	10.1016/j.palaeo.2004.05.021
55b30ea3e138231cbdd6cfcd	1210	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
579f1578cf58f1168e64ad7f	255	Cowden Anhydrite mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
54b4327ce138239d86852f8a	63	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
55b7869fe13823bd29ba8231	188	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2508	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b43247e138239d86849b52	220	Latest El Molino Fm.			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54fab87ce138239936c6cfbb	924	Prairie Evaporite Formation	385.3	397.5	Risacher, François and Fritz, Bertrand	Bromine geochemistry of salar de Uyuni and deeper salt crusts, Central Altiplano, Bolivia	Chemical Geology	3-4	2000	Elsevier	10.1016/S0009-2541(99)00251-X
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
577bca4acf58f1538dda98fd	24	Prairie Evaporite Formation	385.3	397.5	WARDLAW, N. C. and SCHWERDTNER, W. M.	Halite-Anhydrite Seasonal Layers in the Middle Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Geol Soc America Bull	77	1966	Geological Society of America	10.1130/0016-7606(1966)77[331:hslitm]2.0.co;2
5579c265e138231c7c52c464	54	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5681b377cf58f1ba274d4854	416	Praire Evaporite Formation	385.3	397.5	Rahimpour-Bonab, Hossain et al.	Origin and geochemistry of Miocene marine evaporites associated with red beds: Great Kavir Basin, Central Iran	Geological Journal	42	2007	Wiley-Blackwell	10.1002/gj.1069
55b7869fe13823bd29ba8231	2455	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4324de138239d8684aa17	120	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
56c1ea81cf58f15c72c908aa	291	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54fa8fa1e138239936c6ceab	41	Paradox Formation	299	318.1	Huff, G.F. and Wampler, J.M.	K□r geochemistry of carnallite from salt-cycle six of the Paradox Formation in Utah, U.S.A.	Chemical Geology: Isotope Geoscience section	80	1990	Elsevier	10.1016/0168-9622(90)90012-2
557cd3cfe138239225f869e5	1738	San Andres Limestone	269.64	279.0034	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	1185	Johnson mention	56	66	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d9bbcf58f15c72c9075f	224	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
57c19e2dcf58f16bf61df66a	141	Arab Formation	150.8	155.7	Nader, F. H. et al.	Quantification of diagenesis impact on the reservoir properties of the Jurassic Arab D and C members (Offshore, U.A.E.)	Geofluids	13	2013	Wiley	10.1111/gfl.12022
55b7869fe13823bd29ba8231	876	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559c3f39e138230816dad2ff	200	Forty-niner Member			Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4324fe138239d8684b069	255	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
558bbed5e13823109f3ed4f8	184	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
58ac40fdcf58f1946fb5ce65	127	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
578fb2c8cf58f1bdcd2df236	236	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
5590d1bfe13823109f3ef23b	179	Bell Canyon Formation	260.4	270.6	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
56c1d9bbcf58f15c72c9075f	122	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1d8a6cf58f15c72c9073f	154	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55b39203e138231cbdd6d283	1280	Green River Formation	33.9	55.8	Hosteman, J.W. et al.	World nonbauxite aluminum resources excluding alunite	Professional Paper		1990	United States Geological Survey	10.3133/pp1076C
558ecdcbe13823109f3ee5af	346	Maroon Formation	251	299	U.S. Geological Survey	Geological Survey Research 1966, Chapter B	Professional Paper		1966	United States Geological Survey	10.3133/pp550B
5a048d65cf58f1b96402a09e	160	Coboconk mention	455.62	455.725	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
5579c265e138231c7c52c464	177	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b7869fe13823bd29ba8231	1038	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	2704	Taloga Formation	261.19	261.76	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
56c1d8a6cf58f15c72c9073f	275	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
576ce503cf58f1286464ce4a	282	Castile Formation	253.8	260.4	Matalucci, R.V.	In-situ testing at the U.S. Department of energy's waste isolation pilot plant	Tunnelling and Underground Space Technology	5	1990	Elsevier	10.1016/0886-7798(90)90067-T
54e4d444e138237cc914feb2	32	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
5ce2f9b20b45c76caf8ae21e	1000	Winnipegosis Formation	385.3	397.5	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54e9f64ee138237cc9151412	517	Portland Formation	175.6	199.6	West, Ian M.	Evaporites and associated sediments of the basal Purbeck Formation (Upper Jurassic) of Dorset	Proceedings of the Geologists' Association	86	1975	Elsevier	10.1016/S0016-7878(75)80101-5
56834db7cf58f1479a0abca3	291	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
55b78281e13823bd29ba8218	1950	Salado mention	256.03	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55ae9887e13823763a830cad	99	Salado mention	256.03	262.2168	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
55b7869fe13823bd29ba8231	1880	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
559d4d6ee138230816dad784	27	Castile Formation	253.8	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
55b83d31e13823bd29ba865c	698	Gypsum mention			Stone, Ralph Walter	Gypsum deposits of the United States	Bulletin		1920	United States Geological Survey	10.3133/b697
5730cdcccf58f16acaf6b5aa	59	Potash mention			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
54b4328de138239d86855c7b	44	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H	Recognizing acid lakes and groundwaters in the rock record	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(02)00155-0
584aa178cf58f19c3c0fb294	89	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
574ee6e1cf58f1ba70939d9f	46	Windsor Group	318.1	359.2	Roberts, Wyn and Williams, Paul F.	Evidence for early Mesozoic extensional faulting in Carboniferous rocks, southern New Brunswick, Canada	Canadian Journal of Earth Sciences	30	1993	Canadian Science Publishing	10.1139/e93-113
5712f1aacf58f16fb4cc921a	82	Passaic Formation	199.6	228	El Tabakh, M. et al.	Origin of fibrous gypsum in the Newark rift basin, eastern North America	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.88
55b6d4bfe13823bd29ba7dc0	1237	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5579c265e138231c7c52c464	1	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55f4877fcf58f16256a22522	8	Sulphur Limestone			Caruso, A. et al.	Carbonate deposition and diagenesis in evaporitic environments: The evaporative and sulphur-bearing limestones during the settlement of the Messinian Salinity Crisis in Sicily and Calabria	Palaeogeography, Palaeoclimatology, Palaeoecology		2015	Elsevier	10.1016/j.palaeo.2015.03.035
58bb7f59cf58f1878850d92a	113	Red River mention	446.15	450.75	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
56c1d9bbcf58f15c72c9075f	370	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
56c1ea81cf58f15c72c908aa	187	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
55e66dddcf58f1195f1b51c2	187	Anhydrite Limestone			Dawson, P.R. and Munson, D.E.	Numerical simulation of creep deformations around a room in a deep potash mine	International Journal of Rock Mechanics and Mining Sciences & Geomechanics Abstracts	20	1983	Elsevier	10.1016/0148-9062(83)91612-1
55b6d4bfe13823bd29ba7dc0	521	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55a751cee13823757cc6ff3c	554	Castile mention	259	259.51	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
5506a9ebe1382326932d924e	300	Amora Formation	0.0114	1.806	Neugebauer, Ina et al.	Lithology of the long sediment record recovered by the ICDP Dead Sea Deep Drilling Project (DSDDP)	Quaternary Science Reviews		2014	Elsevier	10.1016/j.quascirev.2014.08.013
54b4324de138239d8684aa17	190	Intermediate Sandstone			García-Veigas, Javier et al.	Salt deposition and brine evolution in the Granada Basin (Late Tortonian, SE Spain)	Palaeogeography, Palaeoclimatology, Palaeoecology		2013	Elsevier	10.1016/j.palaeo.2012.11.010
57ebec8acf58f19da2c7bc12	272	Jiushidaoban Formation	260.4	270.6	LIU, YingChao et al.	Formation of the Dongmozhazhua Pb-Zn Deposit in the Thrust-Fold Setting of the Tibetan Plateau, China: Evidence from Fluid Inclusion and Stable Isotope Data	Resource Geology	61	2011	Wiley	10.1111/j.1751-3928.2011.00174.x
55ad3126e13823763a8303a0	186	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
5579c265e138231c7c52c464	60	Zechstein Limestone	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
5a21053ecf58f18a3170d1ed	122	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
559c3f39e138230816dad2ff	195	Magenta Dolomite	251.9	273.01	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
55c0d379cf58f16e99a378b9	77	Hutchinson Salt Member	251	299	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57c4b51dcf58f18ca41d0d6f	233	Calcite Aragonite Dolomite			Sun, Ziyong et al.	Hydrogeological and hydrogeochemical control of groundwater salinity in an arid inland basin: Dunhuang Basin, northwestern China	Hydrological Processes	30	2016	Wiley	10.1002/hyp.10760
558e3094e13823109f3ee1d7	47	Paradox Member	299	318.1	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
54e865c7e138237cc9150d7f	140	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
57a43018cf58f11204e17fe0	471	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55c031c0cf58f16e99a373c0	629	Praire Evaporite Formation	385.3	397.5	Ayora, Carlos et al.	X-ray microanalysis of fluid inclusions and its application to the geochemical modeling of evaporite basins	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90444-8
54b43270e138239d86850df6	79	Schisto-Calcaire Subgroup			Préat, Alain et al.	A peritidal evaporite environment in the Neoproterozoic of South Gabon (Schisto-Calcaire Subgroup, Nyanga Basin)	Precambrian Research	177	2010	Elsevier	10.1016/j.precamres.2009.12.003
56c1d9bbcf58f15c72c9075f	370	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54be7fc1e13823299564b0b3	239	Lyons Sandstone	251	299	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55b7869fe13823bd29ba8231	2198	Prairie Formation	359.2	416	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55a0946ee1382381ff364540	99	Castile mention	259	259.51	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55f2ced1cf58f16256a21973	261	Sahwal Marl mention			Richards, L. et al.	Macrostructures vs microstructures in evaporite detachments: An example from the Salt Range, Pakistan	Journal of Asian Earth Sciences		2015	Elsevier	10.1016/j.jseaes.2015.04.015
5b526230cf58f1a50a464a8d	230	SYS Fm			Guo, Pei et al.	Palaeohydrological evolution of the late Cenozoic saline lake in the Qaidam Basin, NE Tibetan Plateau: Tectonic vs. climatic control	Global and Planetary Change	165	2018	Elsevier	10.1016/j.gloplacha.2018.03.012

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b5b47ce1382314227cfdae	165	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
557cd3cfe138239225f869e5	2627	Wellington Formation	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d4bfe13823bd29ba7dc0	1234	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57320459cf58f19ced0f7bc5	86	Seven Rivers Formation	251	299	Amos Bein (2) et al.	Fluid Inclusions in Bedded Permian Halite, Palo Duro Basin, Texas: Evidence for Modification of Seawater in Evaporite Brine-Pools and Subsequent Early Diagenesis	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d4267672-2b26-11d7-8648000102c1865d
5590d1bfe13823109f3ef23b	200	Rustler mention	253.97	256.0278	Mercer, Jerry W. and Orr, R.B.	Interim data report on the geohydrology of the proposed waste isolation pilot plant site, southeast New Mexico	Water-Resources Investigations Report		1979	United States Geological Survey	10.3133/wri7998
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b7869fe13823bd29ba8231	1186	Clear Fork mention	273.01	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54beddace13823023e43d931	207	Calcite Dolomite			Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
55b7869fe13823bd29ba8231	2403	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	2465	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55c07511cf58f16e99a375dc	1192	Monterey Formation	5.332	23.03		Annual index	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90280-V
57c19e14cf58f16bf61df64c	171	Opeche Shale	251	299	Benison, K. C.	Acid saline fluid inclusions: examples from modern and Permian extreme lake systems	Geofluids	13	2013	Wiley	10.1111/gfl.12053
56830b14cf58f1479a0ab918	69	Gessoso Solfifera mention	5.332	7.246	RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
55c36968cf58f1a8110b9014	83	Salina Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
54bf26f8e13823023e43db6f	599	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
5a2dee30cf58f136bc551211	109	Werfen Fm	245	251	Martin, Silvana et al.	Siderite deposits in northern Italy: Early Permian to Early Triassic hydrothermalism in the Southern Alps	Lithos	284–285	2017	Elsevier	10.1016/j.lithos.2017.04.002
55b7869fe13823bd29ba8231	1539	EXPLANATION mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54bf26f8e13823023e43db6f	605	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
579f1578cf58f1168e64ad7f	89	Rustler Formation	251	260.4	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
5907fd66cf58f10b6afca82b	533	Curtis Formation	145.5	199.6	Dayvault, Richard D.	Colorful Agate and Jasper of Southeastern Utah	Rocks & Minerals	89	2014	Taylor and Francis	10.1080/00357529.2014.90466
5683349ccf58f1479a0abb4e	103	Castile mention	259	259.51	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
5a39ee95cf58f1314cf12808	63	Sedom mention	5.332	23.03	Alsop, G.I. et al.	Fault and fracture patterns around a strike-slip influenced salt wall	Journal of Structural Geology	106	2018	Elsevier	10.1016/j.jsg.2017.10.010
57e65deecf58f186b6da86bd	167	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
54b4324fe138239d8684b069	451	Hannover Formation			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
54e865c7e138237cc9150d7f	314	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
5590c428e13823109f3ef1e1	274	Salado mention	256.03	262.2168	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1980	Open-File Report		1982	United States Geological Survey	
54eba4f0e138237cc9151b1e	59	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5503421ae1382326932d7e6d	959	Castile Fm	253.8	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b6d6a7e13823bd29ba7dcc	8138	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
5682e272cf58f1479a0ab716	381	San Andres mention	150.6	154.8	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
584aa178cf58f19c3c0fb294	205	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
557f199ce13823bc80ba25a0	1766	SollstOl'e Rustler Formation			Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
54b4327ce138239d86852f8a	47	Rotliegend mention	251	299	Gluyas, Jon et al.	Element mobility during diagenesis: sulphate cementation of Rotliegend sandstones, Southern North Sea	Marine and Petroleum Geology	14	1997	Elsevier	10.1016/S0264-8172(97)00038-X
5d3f58060b45c76cafa2004f	193	Rotliegend Group	251	299	Jackson, Christopher A-L. et al.	Salt thickness and composition influence rift structural style, northern North Sea, offshore Norway	Basin Research			Wiley	10.1111/bre.12332
55b6d6a7e13823bd29ba7dcc	1945	NEW MEXICO mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
56c1d9bbcf58f15c72c9075f	12	Maha Sarakham Formation	65.5	145.5	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54e865c7e138237cc9150d7f	335	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55b7869fe13823bd29ba8231	1034	Smackover mention	150.6	158.8535	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e7c15ae138237cc9150ae2	70	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026
55b7869fe13823bd29ba8231	460	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55ae0df7e13823763a830928	2981	San Andres mention	150.6	154.8	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
5a21527bcf58f1a7a6b3677b	325	Schisto-Calcaire Group			Préat, Alain et al.	Paleoenvironments, δ13C and δ18O signatures in the Neoproterozoic carbonates of the Comba Basin, Republic of Congo: Implications for regional correlations and Marinoan event	Journal of African Earth Sciences	137	2018	Elsevier	10.1016/j.jafrearsci.2017.09.002
558df7d7e13823109f3ee082	345	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56830ae3cf58f1479a0ab915	61	Shell Lake Member			FU, QILONG et al.	Dolomitization of the Middle Devonian Winnipegosis carbonates in south-central Saskatchewan, Canada	Sedimentology	53	2006	Wiley-Blackwell	10.1111/j.1365-3091.2006.00794.x
557f199ce13823bc80ba25a0	840	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5ce2f9b20b45c76caf8ae21e	194	Porphyrotopic mention			Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54b43247e138239d86849b52	142	Molino Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
54be1b30e138233c8bc4f9d7	158	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55b30ea3e138231cbdd6cfcd	1104	Madison Limestone	318.1	359.2	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	2508	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54be7fc1e13823299564b0b3	308	Salina Formation	416	443.7	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
5683006acf58f1479a0ab88f	675	Prairie Evaporite Formation	385.3	397.5	KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
557cd3cfe138239225f869e5	849	Wichita Group	251	299	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55f28a1bcf58f16256a2178c	259	Ain Ghrab Formation			Jellalia, Dalila et al.	Hydro-geophysical and geochemical investigation of shallow and deep Neogene aquifer systems in Hajeb Layoun-Jilma-Ouled Asker area, Central Tunisia	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.06.016
55b6d4bfe13823bd29ba7dc0	601	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
57126a16cf58f140fa5c33f2	177	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
54b4328ee138239d86855f3a	195	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
558df7d7e13823109f3ee082	1009	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	148	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
54c04e8fe1382389c54c36c6	118	Abu Dhabi mention	-6E-05	0.01143	Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55b7869fe13823bd29ba8231	1884	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b7869fe13823bd29ba8231	460	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
54bf26f8e13823023e43db6f	574	Icaiche Formation	56	63.8	Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
55b73032e13823bd29ba8000	288	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
55b7869fe13823bd29ba8231	1281	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5b6f081fcf58f1539ffa6761	142	Yapılar Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
558eb5d6e13823109f3ee517	1511	Rustler Formation	251	260.4	Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
578aea2bcf58f13920dc7baa	19	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
5a048d65cf58f1b96402a09e	245	Cobourg Formation	449.75	451.4025	Petts, D.C. et al.	The source and evolution of paleofluids responsible for secondary minerals in low-permeability Ordovician limestones of the Michigan Basin	Applied Geochemistry	86	2017	Elsevier	10.1016/j.apgeochem.2017.09.011
55b6d4bfe13823bd29ba7dc0	905	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
558e3094e13823109f3ee1d7	52	Paradox mention	306	319.714	Hite, R. J.	Geology of the Lisbon Valley potash deposits, San Juan County, Utah	Open-File Report		1978	United States Geological Survey	
54fb3438e138239936c6d321	36	Zechstein Limestone	251	260.4	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
557cd3cfe138239225f869e5	2285	Foraker Limestone	293.27	296.0833	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b5b47ce1382314227cfdae	183	Salina mention	419.68	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54b43247e138239d86849b52	226	Santa-Lucia Fm			Rouchy, J.M. et al.	The central palaeo-Andean basin of Bolivia (Potosi area) during the late Cretaceous and early Tertiary: reconstruction of ancient saline lakes using sedimentological, paleoecological and stable isotope records	Palaeogeography, Palaeoclimatology, Palaeoecology	105	1993	Elsevier	10.1016/0031-0182(93)90083-U
584aa178cf58f19c3c0fb294	267	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
54b4324fe138239d8684b069	235	Rotliegend mention	251	299	Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
54fc8912e138239936c6dc7a	109	Salado mention	256.03	262.2168	Williams, George E.	Milankovitch-band cyclicity in bedded halite deposits contemporaneous with Late Ordovician-Early Silurian glaciation, Canning Basin, Western Australia	Earth and Planetary Science Letters	1-4	1991	Elsevier	10.1016/0012-821X(91)90156-C
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
54bf26f8e13823023e43db6f	600	Angarskaya Formation			Claypool, George E. et al.	The age curves of sulfur and oxygen isotopes in marine sulfate and their mutual interpretation	Chemical Geology		1980	Elsevier	10.1016/0009-2541(80)90047-9
57e65deecf58f186b6da86bd	76	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55b6d4bfe13823bd29ba7dc0	1140	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
58b6daf1cf58f11f2b0dde84	825	Maha Sarakham mention	33.9	100.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
55b7869fe13823bd29ba8231	135	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54b4328ce138239d86855aad	660	Halite mention	251	299	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bf7e39e13823023e43de1a	571	Rotliegend Sandstone	251	299	Spöt, Christoph and Pak, Edwin	A strontium and sulfur isotopic study of Permo-Triassic evaporites in the Northern Calcareous Alps, Austria	Chemical Geology	131	1996	Elsevier	10.1016/0009-2541(96)00017-4
558ae2efe138236ee2216030	42	Salado Formation	251	260.4	Maleki, Hamid and Chaturvedi, Lokesh	Prediction of room closure and stability of panel 1 in the Waste Isolation Pilot Plant	International Journal of Rock Mechanics and Mining Sciences	34	1997	Elsevier	10.1016/S1365-1609(97)00232-3
55b7869fe13823bd29ba8231	1409	Minnelusa Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58bf2d90cf58f1867eb10946	228	Giles Creek Dolostone	501	511	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
57c8787ccf58f14528333514	334	Windjana mention			Treiman, Allan H. et al.	Mineralogy, provenance, and diagenesis of a potassic basaltic sandstone on Mars: CheMin X-ray diffraction of the Windjana sample (Kimberley area, Gale Crater)	Journal of Geophysical Research: Planets	121	2016	Wiley	10.1002/2015JE004932
56c1a95dcf58f15c72c903aa	192	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
54b4328ee138239d86855f3a	195	Ervilia Bed			Peryt, Tadeusz Marek	The beginning, development and termination of the Middle Miocene Badenian salinity crisis in Central Paratethys	Sedimentary Geology		2006	Elsevier	10.1016/j.sedgeo.2006.03.014
55a0946ee1382381ff364540	114	Castile Formation	253.8	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
56c1effacf58f15c72c9090b	88	Mudstone Anhydrite Dolomite			CATHRO, DONNA L. et al.	Halite saltern in the Canning Basin, Western Australia: a sedimentological analysis of drill core from the Ordovician-Silurian Mallowa Salt	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01992.x
55b6d4bfe13823bd29ba7dc0	1060	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55af1c5ce13823763a830fe9	167	Magenta mention	251.9	273.01	Snyder, R. P. et al.	Evaluation of breccia pipes in southeastern New Mexico and their relation to the Waste Isolation Pilot Plant (WIPP) site, with a section on drill-stem tests	Open-File Report		1982	United States Geological Survey	10.3133/ofr82968
55b7869fe13823bd29ba8231	473	Flagstaff Limestone	33.9	55.8	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5ce2f9b20b45c76caf8ae21e	487	Middleton Dale Anhydrite Formation	346.7	358.9	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
56c1d607cf58f15c72c9071a	289	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55ae0df7e13823763a830928	443	Yeso Formation	251	299	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
550af900e1382369a6f92edb	293	Mancos Shale	65.5	145.5	Tuttle, Michele L.W. et al.	Contaminants from cretaceous black shale: II. Effect of geology, weathering, climate, and land use on salinity and selenium cycling, Mancos Shale landscapes, southwestern United States	Applied Geochemistry		2014	Elsevier	10.1016/j.apgeochem.2013.12.011
55c48dc6cf58f1a8110b94db	154	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
557b4c6fe138239225f86356	131	Salt mention	251	260.4	Leith, William	Geologic and engineering constraints on the feasibility of clandestine nuclear testing by decoupling in large underground cavities	Open-File Report		2000	United States Geological Survey	10.3133/ofr0128
55b7869fe13823bd29ba8231	2890	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5a0493edcf58f1b96402aae7	277	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55a0946ee1382381ff364540	118	Salado mention	256.03	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
55b78281e13823bd29ba8218	1941	Salado mention	256.03	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	1978	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	692	Bertie Formation	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5503421ae1382326932d7e6d	1100	Rus Fm	33.9	55.8	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
558ebfafe13823109f3ee557	798	Minnelusa Formation	251	299	U.S. Geological Survey	National energy resource issues; geologic perspective and the role of geologic information	Bulletin		1988	United States Geological Survey	10.3133/b1850
557bfbc7e138239225f86664	502	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5683006acf58f1479a0ab88f	114	Stassfurt Formation			KÜSTER, YVONNE et al.	Bromide distribution characteristics of different Zechstein 2 rock salt sequences of the Southern Permian Basin: a comparison between bedded and domal salts	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01038.x
55c2a9cacf58f1a8110b8a1e	206	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5c31af5a1faed655488b9e89	35	Jialingjiang Formation	245	251	XU, Zhengqi et al.	Geological and geochemical evolution of forming of kalium-rich brine in Sichuan Basin	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13226
55b6d4bfe13823bd29ba7dc0	192	Anhydrite Carbonate Shale			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
56a1e0c6cf58f19442528787	304	Anhydrite mention			Hangx, Suzanne J. T. et al.	Mechanical behavior of anhydrite caprock and implications for CO 2 sealing capacity	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2009JB006954
55b7869fe13823bd29ba8231	175	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b31649e138231cbdd6cff7	1602	Anhydrite Dolomite				Geological Survey research 1967, Chapter C	Professional Paper		1967	United States Geological Survey	10.3133/pp575C
55b7869fe13823bd29ba8231	785	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1d8a6cf58f15c72c9073f	358	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
55917250e13823109f3ef5b1	1656	Khorat Group	65.5	251	Shawe, D. R.	Geology and mineral deposits of Thailand	Open-File Report		1984	United States Geological Survey	
579b56dacf58f13d24f0d7ef	40	Nippewalla Group	251	299	Benison, Kathleen C.	A Martian analog in Kansas: Comparing Martian strata with Permian acid saline lake deposits	Geol	34	2006	Geological Society of America	10.1130/g22176.1
55c2a9cacf58f1a8110b8a1e	206	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
558df7d7e13823109f3ee082	605	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b6d4bfe13823bd29ba7dc0	68	Hutchinson Salt Member	251	299	Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
5897de3fcf58f1081e8c64e1	203	Murray mention	0.0117	0.774	Young, B. W. and Chan, M. A.	Gypsum veins in Triassic Moenkopi mudrocks of southern Utah: Analogs to calcium sulfate veins on Mars	Journal of Geophysical Research: Planets		2017	Wiley-Blackwell	10.1002/2016JE005118
54e865c7e138237cc9150d7f	367	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
55f28a1bcf58f16256a2178c	259	Ain Ghrab Formation			Jellalia, Dalila et al.	Hydro-geophysical and geochemical investigation of shallow and deep Neogene aquifer systems in Hajeb Layoun-Jilma-Ouled Asker area, Central Tunisia	Journal of African Earth Sciences		2015	Elsevier	10.1016/j.jafrearsci.2015.06.016
5503421ae1382326932d7e6d	1128	Hith mention	199.6	251	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5c29b7d41faed655488ae938	220	Luocheng mention			Ji, Dongping et al.	Mississippian anthracites in Guangxi Province, southern China: Petrological, mineralogical, and rare earth element evidence for high-temperature solutions	International Journal of Coal Geology	197	2018	Elsevier	10.1016/j.coal.2018.08.006
55b7869fe13823bd29ba8231	2251	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	1306	Castile Formation	253.8	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b7869fe13823bd29ba8231	2769	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
58bb7f59cf58f1878850d92a	428	Bighorn Dolomite	443.7	488.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
55f36cb9cf58f16256a21d8b	32	Oligo-Miocene Zaragoza Formation			Acero, P. et al.	Evaluation of geochemical and hydrogeological processes by geochemical modeling in an area affected by evaporite karstification	Journal of Hydrology		2015	Elsevier	10.1016/j.jhydrol.2015.07.028
578b8ab6cf58f1645f54f0c6	43	Castile mention	259	259.51	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
54e865c7e138237cc9150d7f	214	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
570fe41dcf58f114a862267f	230	Zechstein mention	251.9	273.01	Hryniv, S. P. and Peryt, T. M.	Sulfate Cavity Filling in the Lower Werra Anhydrite (Zechstein, Permian), Zdrada Area, Northern Poland: Evidence for Early Diagenetic Evaporite Paleokarst Formed Under Sedimentary Cover	Journal of Sedimentary Research	73	2003	Society for Sedimentary Geology	10.1306/100602730451
5aba329acf58f10db4023201	174	Itararé Subgroup			Bulia, Isabella Longhi and Enzweiler, Jacinta	The hydrogeochemistry of bottled mineral water in São Paulo state, Brazil	Journal of Geochemical Exploration	188	2018	Elsevier	10.1016/j.gexplo.2018.01.007
5682e272cf58f1479a0ab716	400	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
55b83b40e1382373b63b7fe6	390	Mohilla Formation	199.6	251	Kushnir, Jacob	The partitioning of seawater cations during the transformation of gypsum to anhydrite	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90234-4
5579c265e138231c7c52c464	28	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55a43da1e13823757cc6f19a	292	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e865c7e138237cc9150d7f	119	Magnesian Limestone	251	299	Hollingworth, S.E.	The correlation of gypsum-anhydrite deposits and the associated strata in the North of England	Proceedings of the Geologists' Association	3-4	1942	Elsevier	10.1016/S0016-7878(42)80020-6
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5b6f081fcf58f1539ffa6761	734	Belayim Formation	11.608	15.97	Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
55ad3126e13823763a8303a0	122	Salado mention	256.03	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
57321bc8cf58f1a0ac39199e	46	Ebbadalen Formation			D. W. Holliday	The Petrology of Secondary Gypsum Rocks: A Review	SEPM Journal of Sedimentary Research	Vol. 40	1970	Society for Sedimentary Geology	10.1306/74d7202c-2b21-11d7-8648000102c1865d
55b7869fe13823bd29ba8231	304	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56b99311cf58f14c238d4bdc	57	Otto Fiord Formation	299	359.2	Pollard, Wayne H.	Icing processes associated with high Arctic perennial springs, Axel Heiberg Island, Nunavut, Canada	Permafrost and Periglacial Processes	16	2005	Wiley-Blackwell	10.1002/ppp.515
558eb5d6e13823109f3ee517	356	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b7869fe13823bd29ba8231	1289	Castile Formation	253.8	260.4	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5682e272cf58f1479a0ab716	390	San Andres Formation	251	299	HOVORKA, SUSAN	Depositional environments of marine-dominated bedded halite, Permian San Andres Formation, Texas	Sedimentology	34	1987	Wiley-Blackwell	10.1111/j.1365-3091.1987.tb00591.x
558df7d7e13823109f3ee082	2953	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55765d21e138234790a011ee	149	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5ce2f9b20b45c76caf8ae21e	567	Ballagan Formation	345.3	359.2	Millward, David et al.	Early Mississippian evaporites of coastal tropical wetlands	Sedimentology			Wiley-Blackwell	10.1111/sed.12465
55a0946ee1382381ff364540	257	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5503421ae1382326932d7e6d	1135	Cool Creek mention	478.47	479.625	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
557b1abde138239225f86255	1273	Calcareous mention			Tuttle, M. L. et al.	Geochemistry of two interbeds in the Pennsylvanian Paradox Formation, Utah and Colorado; a record of deposition and diagenesis of repetitive cycles in a marine basin	Bulletin		1996	United States Geological Survey	
55b7869fe13823bd29ba8231	701	Maccrady Formation	340.53	349.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56f2f98bcf58f1892b30205d	199	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b73032e13823bd29ba8000	379	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
590173d4cf58f19960f445d2	684	Turquoise Graphite Siderite Dolomite				Classified Advertisements	Rocks & Minerals	34	1959	Taylor and Francis	10.1080/00357529.1959.11766806
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
54b4328ae138239d86855597	136	Salado Formation	251	260.4	Spötl, Christoph	The Alpine Haselgebirge Formation, Northern Calcareous Alps (Austria): Permo-Scythian evaporites in an alpine thrust system	Sedimentary Geology	65	1989	Elsevier	10.1016/0037-0738(89)90009-2
54be7fc1e13823299564b0b3	308	Salina Formation	416	443.7	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
55ae0df7e13823763a830928	2806	Queen Formation	260.4	270.6	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a751cee13823757cc6ff3c	1578	Castile Formation	253.8	260.4	Scholle, Peter A. and Halley, Robert B.	Upper Paleozoic depositional and diagenetic facies in a mature petroleum province (a field guide to the Guadalupe and Sacramento mountains)	Open-File Report		1980	United States Geological Survey	10.3133/ofr80383
5503421ae1382326932d7e6d	1129	Arab Fm	145.5	199.6	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54e7c7dae138237cc9150b09	625	Madison Limestone	318.1	359.2	Pearce, Julie K. et al.	SO2 impurity impacts on experimental and simulated CO2–water–reservoir rock reactions at carbon storage conditions	Chemical Geology		2015	Elsevier	10.1016/j.chemgeo.2014.10.028
56c1d9bbcf58f15c72c9075f	260	Basal Anhydrite Member			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
54b4327de138239d868530d9	39	Maha Sarakham Formation	65.5	145.5	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
56f2f98bcf58f1892b30205d	146	QZ mention			MURAMATSU, Yoichi and KOMATSU, Ryo	Microthermometric Evidence for the Formation of Ca-rich Hypersaline Brine and CO 2 -rich Fluid in the Mori Geothermal Reservoir, Japan	Resource Geology	49	1999	Wiley-Blackwell	10.1111/j.1751-3928.1999.tb00029.x
55b7869fe13823bd29ba8231	1428	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e4d444e138237cc914feb2	121	Castile Formation	253.8	260.4	Becker, M.L. et al.	U–Pb calcite age of the Late Permian Castile Formation, Delaware Basin: a constraint on the age of the Permian–Triassic boundary (?)	Earth and Planetary Science Letters	203	2002	Elsevier	10.1016/S0012-821X(02)00877-4
56c1d9bbcf58f15c72c9075f	182	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55ae2542e13823763a8309bd	167	Maha Sarakam Formation	65.5	145.5	Hite, R. J.	Progress report on the potash deposits of the Khorat Plateau, Thailand	Open-File Report		1982	United States Geological Survey	
590149b7cf58f18c4d09edf2	701	Barkevikite Quartzite Augite Dolomite				Classified Advertisements	Rocks & Minerals	35	1960	Taylor and Francis	10.1080/00357529.1960.11766562
558ec3e3e13823109f3ee570	114	Salado Formation	251	260.4	Wells, J. G. and Drellack, S. L.	Geologic and well-construction data for the H-8 borehole complex near the proposed Waste Isolation Pilot Plant site, southeastern New Mexico	Water-Resources Investigations Report		1982	United States Geological Survey	
56c1a95dcf58f15c72c903aa	326	Nippewalla Group	251	299	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
5b6eacbfcf58f13a71cc91a3	29	Magnesian Limestone	251	299	Stewart, F. H.	The petrology of the evaporites of the Eskdale no. 2 boring, east Yorkshire. Part I. The lower evaporite bed	Mineralogical Magazine and Journal of the Mineralogical Society	28	1949	Mineralogical Society	10.1180/minmag.1949.28.206.01
550c651ce1382369a6f9352b	383	Magnesian Limestone	251	299	BELL, F.G.	Chapter 12 Construction Materials	Engineering Geology and Geotechnics		1980	Elsevier	10.1016/B978-0-408-00355-1.50015-1
54b43246e138239d86849834	158	Calcite Monohydrocalcite Dolomite			Teller, James T. and Last, Williams M.	Paleohydrological indicators in playas and salt lakes, with examples from Canada, Australia, and Africa	Palaeogeography, Palaeoclimatology, Palaeoecology	76	1990	Elsevier	10.1016/0031-0182(90)90114-M
590777cbcf58f196b33265eb	205	Beekmantown Group	443.7	488.3	Robinson, George W. et al.	Minerals of the Beekmantown Group, Southeastern Ontario, Southern Quebec, and Northwestern New York	Rocks & Minerals	86	2011	Taylor and Francis	10.1080/00357529.2011.622227
558eb5d6e13823109f3ee517	351	Forty-niner mention			Davies, P.B.	Variable-density ground-water flow and paleohydrology in the Waste Isolation Pilot Plant (WIPP) region, southeastern New Mexico	Open-File Report		1989	United States Geological Survey	10.3133/ofr88490
55b30ea3e138231cbdd6cfcd	1992	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
55b7869fe13823bd29ba8231	1506	Madison mention	332.35	358.9	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55baa3b5e1382373b63b89e7	135	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
56830b14cf58f1479a0ab918	366	Rosetta Formation			RYAN, WILLIAM B. F.	Decoding the Mediterranean salinity crisis	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.01031.x
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
56c1d9bbcf58f15c72c9075f	265	Basal Anhydrite mention			Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55a43da1e13823757cc6f19a	133	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
54b43281e138239d86853bfd	158	Maha Sarakham mention	33.9	100.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
557f199ce13823bc80ba25a0	840	Salado mention	256.03	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55c2a9cacf58f1a8110b8a1e	206	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43245e138239d86849681	303	CarmSpolis Member			Petri, Setembrino	Cretaceous paleogeographic maps of Brazil	Palaeogeography, Palaeoclimatology, Palaeoecology		1987	Elsevier	10.1016/0031-0182(87)90077-0
55c48dc6cf58f1a8110b94db	51	Windsor mention	95.2	99.5	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b5b47ce1382314227cfdae	25	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
56c1d607cf58f15c72c9071a	399	Capitan Formation	260.4	270.6	SCHOLLE, PETER A. et al.	Late-stage calcites in the Permian Capitan Formation and its equivalents, Delaware Basin margin, west Texas and New Mexico: evidence for replacement of precursor evaporites	Sedimentology	39	1992	Wiley-Blackwell	10.1111/j.1365-3091.1992.tb01035.x
55b7869fe13823bd29ba8231	2769	Gypsum mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
57c86f06cf58f141c6f7b1e5	62	Clay mention	175.6	199.6	Bridges, J. C. et al.	Diagenesis and clay mineral formation at Gale Crater, Mars	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004757
54b4324fe138239d8684b069	231	Hannover Formation			Legler, Berit and Schneider, Jörg W.	Marine ingressions into the Middle/Late Permian saline lake of the Southern Permian Basin (Rotliegend, Northern Germany) possibly linked to sea-level highstands in the Arctic rift system	Palaeogeography, Palaeoclimatology, Palaeoecology	267	2008	Elsevier	10.1016/j.palaeo.2008.06.009
557bfbc7e138239225f86664	414	Paradox Formation	299	318.1	Raup, Omer B. and Hite, Robert J.	Lithology of evaporite cycles and cycle boundaries in the upper part of the Paradox Formation of the Hermosa Group of Pennsylvanian age in the Paradox Basin, Utah and Colorado	Bulletin		1992	United States Geological Survey	
5a3dff46cf58f12be0bde56e	47	Zaragoza Formation	23.03	33.9	Desir, G. et al.	Rapid subsidence in damaging sinkholes: Measurement by high-precision leveling and the role of salt dissolution	Geomorphology	303	2018	Elsevier	10.1016/j.geomorph.2017.12.004
55b7869fe13823bd29ba8231	112	Supai Formation	251	299	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b30ea3e138231cbdd6cfcd	1972	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
58d05f04cf58f143d83df298	745	Zechstein mention	251.9	273.01	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55b7869fe13823bd29ba8231	2508	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b6d6a7e13823bd29ba7dcc	7423	Gypsum mention			Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b8b7f4e13823bd29ba8982	263	Castile Formation	253.8	260.4	Schneider, Robert et al.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1979	Circular		1982	United States Geological Survey	
55b78281e13823bd29ba8218	801	Yeso Formation	251	299	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
54be7fc1e13823299564b0b3	305	Carmel Formation	161.2	175.6	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8
57126a16cf58f140fa5c33f2	53	Bellerophon Formation	251	299	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
578fb2c8cf58f1bdcd2df236	193	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2
54e76d92e138237cc915098c	116	Furnace Creek Formation	1.806	5.332	Böhlke, J.K. et al.	Stable isotope evidence for an atmospheric origin of desert nitrate deposits in northern Chile and southern California, U.S.A.	Chemical Geology	1-2	1997	Elsevier	10.1016/S0009-2541(96)00124-6
58d05f04cf58f143d83df298	745	Zechstein mention	251.9	273.01	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
5590c038e13823109f3ef1c7	85	Magenta Dolomite	251.9	273.01	Stevens, Ken and Beyeler, Walt	Determination of diffusivities in the Rustler Formation from exploratory-shaft construction at the Waste Isolation Pilot Plant in southeastern New Mexico	Water-Resources Investigations Report		1985	United States Geological Survey	10.3133/wri854020
55b5b776e1382314227cfdc2	1323	Salina Group	416	443.7		Geochimica et Cosmochimica Acta List of Referees, List of Contents, Subject Index, and Author Index	Geochimica et Cosmochimica Acta		1990	Elsevier	10.1016/0016-7037(90)90256-K
54b43288e138239d86854eed	48	Albert Formation	318.1	359.2	Chowdhury, Ali H. and Noble, James P.A.	Feldspar albitization and feldspar cementation in the Albert Formation reservoir sandstones, New Brunswick, Canada	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90083-5
578fb2c8cf58f1bdcd2df236	215	San Andres mention	150.6	154.8	HOVORKA, SUSAN D. et al.	Marine to nonmarine facies transition in Permian evaporites of the Palo Duro Basin, Texas: Geochemical response	Geological Society of America Bulletin	105	1993	GSA	10.1130/0016-7606(1993)105<1119:mtnfti>2.3.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58bb7f59cf58f1878850d92a	91	Red River Formation	443.7	488.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
55b7869fe13823bd29ba8231	447	Supai mention	275.26	313.75	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
579f1578cf58f1168e64ad7f	288	Tamarisk mention	251.9	273.01	Holt, R. M. and Powers, D. W.	Evaluation of halite dissolution at a radioactive waste disposal site, Andrews County, Texas	Geological Society of America Bulletin	122	2010	Geological Society of America	10.1130/b30052.1
575019eacf58f1696f3ea50a	28	Salina mention	419.68	429.4	Fritz, P. et al.	Stable isotopes in sulphate minerals from the Salina formation in southwestern Ontario	Canadian Journal of Earth Sciences	25	1988	Canadian Science Publishing	10.1139/e88-022
5579c265e138231c7c52c464	74	Main Dolomite	251	260.4	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
55b78281e13823bd29ba8218	3882	Queen Formation	260.4	270.6	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5590aa05e13823109f3ef13c	161	Halite Lithologies Anhydrite Dolomite			Raup, O. B. and Hite, R. J.	Preliminary lithologic and mineralogical data from the Delhi-Taylor Oil Company, Cane Creek No. 1 corehole, Grand County, Utah	Open-File Report		1991	United States Geological Survey	
54beddace13823023e43d931	209	Furnace Creek Formation	1.806	5.332	Ericksen, George E. et al.	Chemistry, mineralogy and origin of the clay-hill nitrate deposits, Amargosa River valley, Death Valley region, California, U.S.A.	Chemical Geology	67	1988	Elsevier	10.1016/0009-2541(88)90008-3
5c2fd7d01faed655488b6a28	201	Pyrite Dolomite			Wang, Changle et al.	Geological and geochemical constraints on the origin of the Early Cambrian Kalaizi Fe–Ba deposit in Western Kunlun, NW China	Ore Geology Reviews	100	2018	Elsevier	10.1016/j.oregeorev.2017.09.025
55c031c0cf58f16e99a373c0	629	Praire Evaporite Formation	385.3	397.5	Ayora, Carlos et al.	X-ray microanalysis of fluid inclusions and its application to the geochemical modeling of evaporite basins	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90444-8
55aec932e13823763a830dda	1935	Haygood Limestone			Prensky, S. E.	Bibliography of well-log applications; annual update, October 1, 1992 to September 30, 1993	Open-File Report		1993	United States Geological Survey	
56c1ca03cf58f15c72c90620	180	Soledad mention			Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
56c1ca03cf58f15c72c90620	130	Quillagua mention	5.332	11.608	Pueyo, Juan Jos�� et al.	Neogene evaporites in desert volcanic environments: Atacama Desert, northern Chile	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00428.x
55a7c745e13823757cc70251	113	Tamarisk Member	251.9	273.01	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
56c1b6a3cf58f15c72c904b4	195	Gessoso-Solfifera Formation			SCHREIBER, B. CHARLOTTE et al.	Depositional environments of Upper Miocene (Messinian) evaporite deposits of the Sicilian Basin*	Sedimentology	23	1976	Wiley-Blackwell	10.1111/j.1365-3091.1976.tb00107.x
55c5aa50cf58f1a8110b9982	23	Burano Formation	237	251	Belkin, H. et al.	Fluid inclusions in minerals from the geothermal fields of Tuscany, Italy	Geothermics	14	1985	Elsevier	10.1016/0375-6505(85)90094-X
584aa178cf58f19c3c0fb294	312	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5b6d3f1ecf58f193bb367046	10	Magnesian Limestone	251	299	Raymond, L. R.	Recent secondary minerals in the Billingham anhydrite mine	Mineralogical Magazine and Journal of the Mineralogical Society	32	1959	Mineralogical Society	10.1180/minmag.1959.32.245.09
58bb7f59cf58f1878850d92a	415	Duperow Fm.	359.2	385.3	Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
558df7d7e13823109f3ee082	3333	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5590aba6e13823109f3ef147	13	Paradox Member	299	318.1	Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
56e0624ccf58f174e7b198f4	4	Indiana mention			Stephens, D. R.	The hydrostatic compression of eight rocks	Journal of Geophysical Research	69	1964	Wiley-Blackwell	10.1029/JZ069i014p02967
54ef9078e138237cc9152b86	137	Salt mention	251	260.4	Jackson, Christopher A.-L. et al.	Enigmatic structures within salt walls of the Santos Basin—Part 1: Geometry and kinematics from 3D seismic reflection and well data	Journal of Structural Geology		2015	Elsevier	10.1016/j.jsg.2015.01.010
5733004ccf58f1066ffdaeaa	77	Clear Fork Formation	270.6	299	C. Robertson Handford (3)	Coastal Sabkha and Salt Pan Deposition of the Lower Clear Fork Formation (Permian), Texas	SEPM Journal of Sedimentary Research	Vol. 51	1981	Society for Sedimentary Geology	10.1306/212f7da1-2b24-11d7-8648000102c1865d
55979088e1382390cc6408a4	119	Mineral Primary Calcite Dolomite			Aghbelagh, Yousef Beiraghdar and Yang, Jianwen	Effect of graphite zone in the formation of unconformity-related uranium deposits: Insights from reactive mass transport modeling	Journal of Geochemical Exploration	144	2014	Elsevier	10.1016/j.gexplo.2014.01.020
57126a16cf58f140fa5c33f2	87	Burano Formation	237	251	Schreiber, B. C. and Helman, M. L.	Criteria for Distinguishing Primary Evaporite Features from Deformation Features in Sulfate Evaporites	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.043
55b7869fe13823bd29ba8231	2533	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
55b7869fe13823bd29ba8231	1034	Smackover mention	150.6	158.8535	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a7c745e13823757cc70251	143	Rustler Formation	251	260.4	Snyder, R. P.	Dissolution of halite and gypsum, and hydration of anhydrite to gypsum, Rustler Formation, in the vicinity of the Waste Isolation Pilot Plant, southeastern New Mexico	Open-File Report		1985	United States Geological Survey	
55b7869fe13823bd29ba8231	1086	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
557cd3cfe138239225f869e5	2701	Day Creek Dolomite	261.19	264.01	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55ae0df7e13823763a830928	2981	San Andres mention	150.6	154.8	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
572ea708cf58f10f9db0ebad	266	Nodule Formation			Susan D. Hovorka	Halite Pseudomorphs After Gypsum in Bedded Anhydrite--Clue to Gypsum-Anhydrite Relationships	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a5f-2b26-11d7-8648000102c1865d
58d05f04cf58f143d83df298	131	Khuff Formation	199.6	251	Warren, J. K.	Evaporites, brines and base metals: Low-temperature ore emplacement controlled by evaporite diagenesis	Australian Journal of Earth Sciences	47	2000	Taylor and Francis	10.1046/j.1440-0952.2000.00781.x
55ad3126e13823763a8303a0	170	Salado Formation	251	260.4	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
57a43018cf58f11204e17fe0	429	Hualapai mention	5.332	23.03	Faulds, James E. et al.	Paleogeographic implications of late Miocene lacustrine and nonmarine evaporite deposits in the Lake Mead region: Immediate precursors to the Colorado River	Geosphere	12	2016	Geological Society of America	10.1130/ges01143.1
55ae9887e13823763a830cad	116	Salado Formation	251	260.4	Jones, C. L.	Geologic data for borehole ERDA-9, Eddy County, New Mexico	Open-File Report		1981	United States Geological Survey	10.1007/s10641-018-0772-9
584aa178cf58f19c3c0fb294	87	Watrous mention	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
559871d1e1382390cc640d99	138	Hormoz mention			Talbot, Christopher et al.	Potash in a salt mushroom at Hormoz Island, Hormoz Strait, Iran	Ore Geology Reviews	35	2009	Elsevier	10.1016/j.oregeorev.2008.11.005
577b5e79cf58f13907e5e76d	57	Prairie mention	383.95	389.1	De MILLE, G. et al.	Collapse Structures Related to Evaporites of the Prairie Formation, Saskatchewan	Geol Soc America Bull	75	1964	Geological Society of America	10.1130/0016-7606(1964)75[307:csrteo]2.0.co;2
5736d8aecf58f1a5bde13e12	79	Magnesite Quartz Dolomite			Jordan, P. G. et al.	Gypsum-anhydrite differentiation by SEM using the back-scattered electron-signal	Journal of Sedimentary Research	61	1991	Society for Sedimentary Geology	10.1306/d426777b-2b26-11d7-8648000102c1865d
55b30ea3e138231cbdd6cfcd	1152	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
56c1d8a6cf58f15c72c9073f	80	Zechstein mention	251.9	273.01	PERYT, TADEUSZ MAREK	The anatomy of a sulphate platform and adjacent basin system in the Leba sub-basin of the Lower Werra Anhydrite (Zechstein, Upper Permian), northern Poland	Sedimentology	41	1994	Wiley-Blackwell	10.1111/j.1365-3091.1994.tb01393.x
58bf2d90cf58f1867eb10946	145	Arumbera Sandstone	511	635	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
55b7869fe13823bd29ba8231	1043	Trinity Group	65.5	145.5	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
54e8ae2de138237cc9150ec9	531	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
55b78281e13823bd29ba8218	920	Tansill mention	259.4	261.1975	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
56c1ea81cf58f15c72c908aa	194	Passaic mention	199.5	237	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
5734b312cf58f14dbc2c579f	482	Sijes Formation	1.806	65.5	Orti, F. and Alonso, R. N.	Gypsum-Hydroboracite Association in the Sijes Formation (Miocene, NW Argentina): Implications for the Genesis of Mg-Bearing Borates	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc4092f-0e47-11d7-8643000102c1865d
54b4327de138239d868530d9	66	Gaoyan Formation	33.9	55.8	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
54b4328ae138239d868553d8	134	Gypsum mention			El Sayed A.A., Youssef	Depositional and diagenetic models of some miocene evaporites on the Red Sea coast, Egypt	Sedimentary Geology	48	1986	Elsevier	10.1016/0037-0738(86)90079-5
55a43da1e13823757cc6f19a	133	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
5579c265e138231c7c52c464	50	Zechstein mention	251.9	273.01	Hryniv, Sophiya and M. Peryt, Tadeusz	Strontium distribution and celestite occurrence in Zechstein (Upper Permian) anhydrites of West Poland	Chemie der Erde - Geochemistry	70	2010	Elsevier	10.1016/j.chemer.2010.01.002
584aa178cf58f19c3c0fb294	81	Watrous Formation	170.9	174.7	Kendall, Alan C.	Late diagenetic calcitization of anhydrite from the Mississippian of Saskatchewan, western Canada	Sedimentology	48	2001	Wiley	10.1111/j.1365-3091.2001.00350.x
5c19917d1faed655488915d3	1230	Winnipegosis Formation	385.3	397.5	Garrison, R.E., Schreiber, C., Bernoulli, D., Fabricius, F.H., Kidd, R.B., Melieres, F.	Sedimentary Petrology and Structures of Messinian Evaporitic Sediments in the Mediterranean Sea, Leg 42A, Deep Sea Drilling Project	Initial Reports of the Deep Sea Drilling Project	42 Pt. 1		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.42-1.123.1978
572ecdb4cf58f1177819e19e	35	Zechstein Limestone	251	260.4	Tadeusz Marek Peryt (1) and Federico O	Sulfate Platform-Basin Transition of the Lower Werra Anhydrite (Zechstein, Upper Permian), Western Poland: Facies and Petrography	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267b9f-2b26-11d7-8648000102c1865d
54e7c15ae138237cc9150ae2	190	NaCl mention			Ossorio, M. et al.	The gypsum–anhydrite paradox revisited	Chemical Geology		2014	Elsevier	10.1016/j.chemgeo.2014.07.026

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328de138239d86855ceb	261	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
56c1ea81cf58f15c72c908aa	164	Passaic Formation	199.6	228	EL-TABAKH, MOHAMED et al.	Evolution of late Triassic rift basin evaporites (Passaic Formation): Newark Basin, Eastern North America	Sedimentology	44	1997	Wiley-Blackwell	10.1046/j.1365-3091.1997.d01-47.x
54dc2da6e138238a47f96228	246	Edwards mention	100.5	103.625	Land, Lynton S. and Prezbindowski, Dennis R.	The origin and evolution of saline formation water, Lower Cretaceous carbonates, south-central Texas, U.S.A.	Journal of Hydrology	54	1981	Elsevier	10.1016/0022-1694(81)90152-9
54b4328de138239d86855ceb	242	Khorat Group	65.5	251	El Tabakh, Mohamed et al.	Origin of dolomites in the Cretaceous Maha Sarakham evaporites of the Khorat Plateau, northeast Thailand	Sedimentary Geology	157	2003	Elsevier	10.1016/S0037-0738(02)00235-X
558df7d7e13823109f3ee082	2363	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b30ea3e138231cbdd6cfcd	1956	Madison mention	332.35	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
58bf2d90cf58f1867eb10946	135	Chandler Formation	501	538.8	Schmid, Susanne	Chemostratigraphy and palaeo-environmental characterisation of the Cambrian stratigraphy in the Amadeus Basin, Australia	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2017.01.019
54e8ae2de138237cc9150ec9	2093	Magnesian Limestone	251	299	Sherlock, R.L.	A correlation of the British Permotriassic Rocks Part 1. North England, Scotland, and Ireland	Proceedings of the Geologists' Association	37	1926	Elsevier	10.1016/S0016-7878(26)80026-4
55cbfc16cf58f1b01e42470e	49	Burano Formation	237	251	Capecchiacci, F. et al.	A combined geochemical and isotopic study of the fluids discharged from the Montecatini thermal system (NW Tuscany, Italy)	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.03.010
55b7869fe13823bd29ba8231	669	Salina Group	416	443.7	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56c1a95dcf58f15c72c903aa	423	Nippewalla mention	273.01	279.7525	Benison, Kathleen Counter and Goldstein, Robert H.	Evaporites and siliciclastics of the Permian Nippewalla Group of Kansas, USA: a case for non-marine deposition in saline lakes and saline pans	Sedimentology	48	2001	Wiley-Blackwell	10.1046/j.1365-3091.2001.00362.x
557cd3cfe138239225f869e5	1738	San Andres Limestone	269.64	279.0034	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55b6d4bfe13823bd29ba7dc0	453	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b7869fe13823bd29ba8231	3011	Wichita mention	279.75	286.225	Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
56834db7cf58f1479a0abca3	286	Asmari mention	5.332	23.03	Ehrenberg, S. N. et al.	STRONTIUM ISOTOPE STRATIGRAPHY OF THE ASMARI FORMATION (OLIGOCENE - LOWER MIOCENE), SW IRAN	Journal of Petroleum Geology	30	2007	Wiley-Blackwell	10.1111/j.1747-5457.2007.00107.x
5683349ccf58f1479a0abb4e	96	Castile Formation	253.8	260.4	Billo, S. M.	PETROLOGY AND KINETICS OF GYPSUM—ANHYDRITE TRANSITIONS	Journal of Petroleum Geology	10	1987	Wiley-Blackwell	10.1111/j.1747-5457.1987.tb00997.x
55b6d4bfe13823bd29ba7dc0	37	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A
55b6d4bfe13823bd29ba7dc0	1315	Anhydrite mention			Jones, C.L.	Petrography of evaporites from the Wellington Formation near Hutchinson, Kansas	Bulletin		1965	United States Geological Survey	10.3133/b1201A

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5598d566e1382390cc640f84	225	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
589a4380cf58f1ab398ea2c6	182	Sylvite Biotite Calcite Dolomite			Naderi Peikam, Elahe and Jalali, Mohsen	Application of inverse geochemical modelling for predicting surface water chemistry in Ekbatan watershed, Hamedan, western Iran	Hydrological Sciences Journal	61	2016	Taylor and Francis	10.1080/02626667.2015.1016947
57c1a08dcf58f16cbd62157f	210	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57474ebdcf58f1b6f0394e11	294	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
5713034ccf58f175a32a0111	217	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5c2f443f1faed655488b5ed9	301	Cal Dol Qz Gp			Santo, A. et al.	Deep seated fault-related volcanogenic H 2 S as the key agent of high sinkhole concentration areas	Earth Surface Processes and Landforms			Wiley	10.1002/esp.4526
55c36968cf58f1a8110b9014	308	Salina Group	416	443.7	Brennan, Sean T and Lowenstein, Tim	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-
577959b6cf58f16b6b61b62a	230	California mention			INGERSON, EARL	NONRADIOGENIC ISOTOPES IN GEOLOGY: A REVIEW	Geol Soc America Bull	64	1953	Geological Society of America	10.1130/0016-
54bedb19e13823023e43d91d	200	Alwinsal Willowbrook Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□a isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55997d5ee1382390cc641332	27	Surface Dolomite			Gac, J.Y. et al.	Chemical model for origin and distribution of elements in salts and brines during evaporation of waters. Application to some saline lakes of Tibesti, Chad	Physics and Chemistry of the Earth		1979	Elsevier	10.1016/0079-1946(79)90018-1
55b78281e13823bd29ba8218	1937	Salado Formation	251	260.4	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5503421ae1382326932d7e6d	1283	Paradox Formation	299	318.1	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5c31d9181faed655488ba2e1	42	Retiro Fm	113	114.05	Basso, M. et al.	THREE-DIMENSIONAL SEISMIC GEOMORPHOLOGY OF PALEOKARST IN THE CRETACEOUS MACAÉ GROUP CARBONATES, CAMPOS BASIN, BRAZIL	Journal of Petroleum Geology	41	2018	Wiley	10.1111/jpg.12719
55b3d511e138231cbdd6d40e	228	Weber Sandstone	270.6	299	Sanford, R. F.	Hydrogeology of Jurassic and Triassic wetlands in the Colorado Plateau and the origin of tabular sandstone uranium deposits	Professional Paper		1994	United States Geological Survey	
5cd2be170b45c76caf88002e	21	Francis Group	305.425	305.7125	Ciceri, Davide et al.	Fertilizing Properties of Potassium Feldspar Altered Hydrothermally	Communications in Soil Science and Plant Analysis	50	2019	Informa UK Limited	10.1080/00103624.2019.1566922
557cd3cfe138239225f869e5	1323	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55baa3b5e1382373b63b89e7	210	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54eba4f0e138237cc9151b1e	448	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
57474ebdcf58f1b6f0394e11	107	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
54bedb19e13823023e43d91d	154	Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□a isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54bbc09fe138232081278603	153	Prairie Fm	385.3	397.5	Osadetz, K.G. et al.	Thermal history of Canadian Williston basin from apatite fission-track thermochronology—implications for petroleum systems and geodynamic history	Tectonophysics	349	2002	Elsevier	10.1016/S0040-1951(02)00055-0
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55bfc14ecf58f16e99a3703b	189	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
54c060fbe1382389c54c3757	22	Sylvite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bedb19e13823023e43d91d	118	Esterhazy Member			Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
57c91310cf58f17b7ba8638b	101	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
57c91310cf58f17b7ba8638b	116	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54b4328ce138239d86855aad	380	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54bffee9e1382389c54c3458	349	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
577db7abcf58f14497044d46	336	Ronnenberg Potash Bed			BORCHERT, HERMANN	Principles of Oceanic Salt Deposition and Metamorphism	Geol Soc America Bull	80	1969	Geological Society of America	10.1130/0016-7606(1969)80[821:poosda]2.0.co;2
55b78281e13823bd29ba8218	1941	Salado mention	256.028	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
574fae1acf58f142f8fdc4f8	557	Prairie Evaporite Formation	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
54b4328ae138239d868555586	37	Patience Lake Member			Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
55bfc14ecf58f16e99a3703b	365	Haynesville Formation	150.8	155.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
57474ebdcf58f1b6f0394e11	303	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
55c2ce13cf58f1a8110b8b48	354	Brine mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57126f9fcf58f142fd277238	35	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
5c1c9dec1faed65548896fba	29	Syenite Sandstone			Geilfus, Christoph-Martin	Chloride in soil: From nutrient to soil pollutant	Environmental and Experimental Botany	157	2019	Elsevier	10.1016/j.envexpbot.2018.10.035
55a69d57e13823757cc6fac4	38	Gypsum Shale			Daniels, Jeffrey J. et al.	Geophysical well-log measurements in three drill holes at Salt Valley, Utah	Open-File Report		1980	United States Geological Survey	10.3133/ofr8136
55986cdae1382390cc640d7c	376	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5503421ae1382326932d7e6d	1425	Paradox Fm	299	318.1	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
57c91310cf58f17b7ba8638b	101	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
54bf6fcfe13823023e43dda9	466	Salado Formation	251	260.4	Fletcher, I.R et al.	Sequential closure of K–Ca and Rb–Sr isotopic systems in Archaean micas	Chemical Geology	138	1997	Elsevier	10.1016/S0009-2541(97)00005-3
5713034ccf58f175a32a0111	123	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	332	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55a82328e13823757cc7049a	1632	Prairie Formation	359.2	416	Sandberg, C. A.	Geology of the Williston basin, North Dakota, Montana, and South Dakota, with reference to subsurface disposal of radioactive wastes	Open-File Report		1962	United States Geological Survey	10.3133/ofr62115
54bedb19e13823023e43d91d	132	Estedwzy Member			Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55af15f4e13823763a830fbb	473	Fe-oxide Salado Formation			Hauff, P. L.	Corrensite; mineralogical ambiguities and geologic significance	Open-File Report		1981	United States Geological Survey	10.3133/ofr81850
577c41d6cf58f188cebdd1fb	277	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54c060fbe1382389c54c3757	335	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54be7fc1e13823299564b0b3	169	Salado Formation	251	260.4	Holser, W.T. and Kaplan, I.R.	Isotope geochemistry of sedimentary sulfates	Chemical Geology		1966	Elsevier	10.1016/0009-2541(66)90011-8

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5590aba6e13823109f3ef147	279	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
57bedb9ccf58f13bf01999e9	82	Honaker Trail Formation	299	318.1	Trudgill, B. D.	Evolution of salt structures in the northern Paradox Basin: controls on evaporite deposition, salt wall growth and supra-salt stratigraphic architecture	Basin Research	23	2011	Wiley	10.1111/j.1365-2117.2010.00478.x
55ad3126e13823763a8303a0	118	Salado mention	256.028	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54d899b7e138238471e803b7	105	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
54b43281e138239d86853c09	679	Potash Bed			Tan, B.K.	Seventh Regional Conference on Geology, Mineral and Hydrocarbon Resources of Southeast Asia (GEOSEA VII), Bangkok, 5–8 November 1991	Journal of Southeast Asian Earth Sciences	7	1992	Elsevier	10.1016/0743-9547(92)90005-V
57a39568cf58f1a4dc1b1106	41	Paradox Formation	299	318.1	Lawton, Timothy F. et al.	Provenance of a Permian erg on the western margin of Pangea: Depositional system of the Kungurian (late Leonardian) Castle Valley and White Rim sandstones and subjacent Cutler Group, Paradox Basin, Utah, USA	Geosphere	11	2015	Geological Society of America	10.1130/ges01174.1
551ddd48e138236e51a99900	17	Prairie Evaporite Formation	385.3	397.5	Hill, D.G.	Multiple log potash assay	Journal of Applied Geophysics	30	1993	Elsevier	10.1016/0926-9851(93)90037-Y
575d04f6cf58f198893b8def	145	Prairie Evaporite Formation	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
57309914cf58f1615003f490	87	Paradox mention	306	319.714	Omer B. Raup and Beth M. Madsen	Danburite in Evaporites of the Paradox Basin, Utah	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f88d2-2b24-11d7-8648000102c1865d
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a0493edcf58f1b96402aae7	281	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5a0493edcf58f1b96402aae7	128	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5845c16dcf58f1ac4c93ec02	4	BIRO Biochemistry Group			Bálint, M. et al.	Studies on proteins and protein complexes of muscle by means of proteolysis V. Fragmentation of light meromyosin by trypsin	Journal of Molecular Biology	37	1968	Elsevier	10.1016/0022-2836(68)90271-4
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54bedb19e13823023e43d91d	200	Alwinsal Willowbrook Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□a isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
576f2916cf58f12d806616ca	32	Prairie Evaporite Formation	385.3	397.5	Tallin, J. E. et al.	Waste management schemes of potash mines in Saskatchewan	Canadian Journal of Civil Engineering	17	1990	Canadian Science Publishing	10.1139/l90-061
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
575d04f6cf58f198893b8def	136	Maha Sarakham Formation	65.5	145.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5598d566e1382390cc640f84	121	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55c2a9cacf58f1a8110b8a1e	94	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
56a038b2cf58f1079fd4ba21	104	Salina Group	416	443.7	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
5730cdcccf58f16acaf6b5aa	288	McNutt Potash Member			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
54be90c7e13823299564b137	54	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
574f9a2fcf58f13bebe8af72	542	Prairie Evaporite Formation	385.3	397.5	McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
55b30ea3e138231cbdd6cfcd	1650	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55b73032e13823bd29ba8000	323	Paradox Formation	299	318.1	Rueger, B. F.	Palynology and its relationship to climatically induced depositional cycles in the Middle Pennsylvanian (Desmoinesian) Paradox Formation of southeastern Utah	Bulletin		1996	United States Geological Survey	
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
57474ebdcf58f1b6f0394e11	294	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
577c41d6cf58f188cebdd1fb	318	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5713034ccf58f175a32a0111	339	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b78281e13823bd29ba8218	1944	Salado mention	256.028	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5713034ccf58f175a32a0111	313	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	134	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5509217ee138238460c4f689	77	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c2a9cacf58f1a8110b8a1e	91	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5734ae60cf58f14cf9f691bb	264	Gharif Formation	270.6	299	Hartmann, B. H. et al.	Diagenesis and Pore-Water Evolution in Permian Sandstones, Gharif Formation, Sultanate of Oman	Journal of Sedimentary Research	70	2000	Society for Sedimentary Geology	10.1306/2dc40925-0e47-11d7-8643000102c1865d
5713034ccf58f175a32a0111	208	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c36968cf58f1a8110b9014	265	Salina Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55b78281e13823bd29ba8218	1941	Salado mention	256.028	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55986cdae1382390cc640d7c	412	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006
55c00a00cf58f16e99a3727f	21	Salado mention	256.028	262.2168	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5a0495c3cf58f1b96402acf5	45	Hecho Group	33.9	55.8	Blasco, Mónica et al.	Geochemistry, geothermometry and influence of the concentration of mobile elements in the chemical characteristics of carbonate-evaporitic thermal systems. The case of the Tiermas geothermal system (Spain)	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.07.013
56faac60cf58f15186bf46cd	264	Calcite mention			Parkhurst, David L.	Geochemical mole-balance modeling with uncertain data	Water Resources Research	33	1997	Wiley-Blackwell	10.1029/97WR01125
54be1b30e138233c8bc4f9d7	85	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
5d35e56c0b45c76caf93f034	468	Kootenai mention	113	145	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	USGS	10.3133/pp1402C
5c319a241faed655488b9bcc	117	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
5713034ccf58f175a32a0111	123	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
57c91310cf58f17b7ba8638b	101	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
54b4328ce138239d86855aad	439	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55b82002e1382373b63b7f4f	60	Salina Group	416	443.7	Graf, Donald L.	Chemical osmosis, reverse chemical osmosis, and the origin of subsurface brines	Geochimica et Cosmochimica Acta	46	1982	Elsevier	10.1016/0016-7037(82)90277-0

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5749d59dcf58f1b0821791d1	96	Windsor Group	318.1	359.2	Evans, Robert	Sedimentation of the Mississippian evaporites of the Maritimes: an alternative model	Canadian Journal of Earth Sciences	7	1970	Canadian Science Publishing	10.1139/e70-129
57474ebdcf58f1b6f0394e11	294	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
54be90c7e13823299564b137	533	Dawson Bay Formation	385.3	397.5	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
5713034ccf58f175a32a0111	235	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
563bc6dacf58f13ba85ac0d9	290	Strontianite Sylvite Dolomite			Kazemi Nia Korrani, Aboulghasem et al.	Coupling IPhreeqc with UTCHEM to model reactive flow and transport	Computers & Geosciences		2015	Elsevier	10.1016/j.cageo.2015.06.004
575d04f6cf58f198893b8def	136	Maha Sarakham Formation	65.5	145.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
5598d566e1382390cc640f84	232	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
54c060fbe1382389c54c3757	218	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
5cfd8fb70b45c76caf8df5a0	2	Francis Group	305.425	305.7125	Padma, C. M. and Mahadevan, C. K.	On the Preparation of Multiphased Mixed Crystals from NaBr and KCl	Materials and Manufacturing Processes	22	2007	Informa UK Limited	10.1080/10426910701190808
54be90c7e13823299564b137	9	Mannville Group	99.6	145.5	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
54b4328ce138239d86855aad	29	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
59952a0acf58f109849f13d8	1	FULL PAPER Complex Formation			Steinhauser, Stefan et al.	Complex Formation of ICL670 and Related Ligands with Fe III and Fe II	European Journal of Inorganic Chemistry	2004	2004	Wiley-Blackwell	10.1002/ejic.200400363
572e90c3cf58f10a55fa1b31	373	Salado Formation	251	260.4	Enrique Casas (2) and Tim K. Lowenstei	Carnallite Mineralization in the Nonmarine, Qaidam Basin, China: Evidence for the Early Diagenetic Origin of Potash Evaporites	SEPM Journal of Sedimentary Research	Vol. 62	1992	Society for Sedimentary Geology	10.1306/d4267a05-2b26-11d7-8648000102c1865d
54eba4f0e138237cc9151b1e	448	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
575d04f6cf58f198893b8def	475	Prairie Evaporite Formation	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5713034ccf58f175a32a0111	84	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
58d05105cf58f13f39efd424	376	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
5713034ccf58f175a32a0111	143	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
598c0bc9cf58f14465ea778f	53	Tropico Group	1.806	65.5	Abbey, William J. et al.	Deep UV Raman spectroscopy for planetary exploration: The search for in situ organics	Icarus	290	2017	Elsevier	10.1016/j.icarus.2017.01.039
54b4328ae138239d86855586	204	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
575d04f6cf58f198893b8def	145	Prairie Evaporite Formation	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
54b4328ce138239d86855aad	329	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54b4328ce138239d86855aad	439	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5713034ccf58f175a32a0111	143	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	202	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5503421ae1382326932d7e6d	1425	Paradox Fm	299	318.1	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
58b6daf1cf58f11f2b0dde84	251	Maha Sarakham Fm	65.5	145.5	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
5753f377cf58f159e9b156db	91	Prairie Evaporite Formation	385.3	397.5	Stimpson, B. and Chen, Rui	Measurement of rock elastic moduli in tension and in compression and its practical significance	Canadian Geotechnical Journal	30	1993	Canadian Science Publishing	10.1139/t93-028
5a0493edcf58f1b96402aae7	349	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
56c14b57cf58f15c72c8fcdf	1	Experimental Systems Group			Walker, David et al.	Synthesis and thermal decomposition of tetragonal RbClO 4 and volume of fluid O 2 from 2 to 9 GPa	Geochemistry, Geophysics, Geosystems	2	2001	Wiley-Blackwell	10.1029/2001GC000154
54b4328be138239d8685581	136	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A
54b4328ae138239d86855586	204	Prairie Evaporite Formation	385.3	397.5	Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
5753de61cf58f152826f3b93	31	Prairie Evaporite Formation	385.3	397.5	Gendzwill, D. J. and Stead, D.	Rock mass characterization around Saskatchewan potash mine openings using geophysical techniques: a review	Canadian Geotechnical Journal	29	1992	Canadian Science Publishing	10.1139/t92-073
5509217ee138238460c4f689	96	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
575d04f6cf58f198893b8def	155	Ibura Member			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55bf8aa9e138232db707b806	107	Prairie Formation	359.2	416	Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
55b8484be13823bd29ba869d	393	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
5a0493edcf58f1b96402aae7	349	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5c31bcfc1faed655488b9f63	234	Platinum Group			Calvo, Guiomar et al.	The cost of mineral depletion in Latin America: An exergoecology view	Resources Policy	59	2018	Elsevier	10.1016/j.resourpol.2018.06.007
577c41d6cf58f188cebdd1fb	39	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54d899b7e138238471e803b7	130	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
5c319a241faed655488b9bcc	117	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
54eba4f0e138237cc9151b1e	500	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
54bedb19e13823023e43d91d	35	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□Sr and K□a isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
56a1ac99cf58f19442528389	1984	Aragonite Monohydrocalcite Dolomite			Gibson, Everett K. et al.	Chemical weathering and diagenesis of a cold desert soil from Wright Valley, Antarctica: An analog of Martian weathering processes	Journal of Geophysical Research	88	1983	Wiley-Blackwell	10.1029/JB088iS02p0A912
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5590aba6e13823109f3ef147	272	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
54b4328ce138239d86855aad	442	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55997d5ee1382390cc641332	27	Surface Dolomite			Gac, J.Y. et al.	Chemical model for origin and distribution of elements in salts and brines during evaporation of waters. Application to some saline lakes of Tibesti, Chad	Physics and Chemistry of the Earth		1979	Elsevier	10.1016/0079-1946(79)90018-1
55986cdae1382390cc640d7c	418	Il mention			Hou, Zengqian et al.	The Miocene Gangdese porphyry copper belt generated during post-collisional extension in the Tibetan Orogen	Ore Geology Reviews	36	2009	Elsevier	10.1016/j.oregeorev.2008.09.006

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ce138239d86855aad	29	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5713034ccf58f175a32a0111	40	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	142	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
557f199ce13823bc80ba25a0	809	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
55b389aae138231cbdd6d262	4190	Khewra mention	488.3	542	U.S. Geological Survey	Geological Survey research 1970, Chapter D	Professional Paper		1970	United States Geological Survey	10.3133/pp700D
5b199d0dcf58f13e9d9dc48e	331	Cobar mention	407.6	427.4	Seccombe, P. K. et al.	Sulfur isotope and fluid inclusion geochemistry of metamorphic Cu–Au vein deposits, central Cobar area, NSW, Australia	Australian Journal of Earth Sciences	64	2017	Informa UK Limited	10.1080/08120099.2017.1297330
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5713034ccf58f175a32a0111	92	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
568315efcf58f1479a0ab9a9	254	Arcs mention	373.25	375.7	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5598d566e1382390cc640f84	121	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5713034ccf58f175a32a0111	333	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a9580a7cf58f113f376dc29	305	Bana Formation			Clauer, Norbert et al.	Illitization decrypted by B and Li isotope geochemistry of nanometer-sized illite crystals from bentonite beds, East Slovak Basin	Chemical Geology	477	2018	Elsevier	10.1016/j.chemgeo.2017.10.027
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
54b4328be138239d8685581	136	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A
55baa3b5e1382373b63b89e7	401	Louann Fm.	145.5	199.6	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55c2e5c8cf58f1a8110b8c08	186	Zechstein mention	251.902	273.01	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54bedb19e13823023e43d91d	39	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55c0d379cf58f16e99a378b9	258	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
550ab33ee138238460c4fe4c	302	Oseberg mention	161.2	175.6	Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
55c2e5c8cf58f1a8110b8c08	140	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
57474ebdcf58f1b6f0394e11	274	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
565e95f0cf58f148c57ebc6b	249	Mt. Simon mention			Verba, Circe et al.	Geochemical alteration of simulated wellbores of CO2 injection sites within the Illinois and Pasco Basins	International Journal of Greenhouse Gas Control		2014	Elsevier	10.1016/j.ijggc.2014.01.015
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
55c48dc6cf58f1a8110b94db	633	Prairie Evaporite Formation	385.3	397.5	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
577c41d6cf58f188cebdd1fb	270	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
58b88f2dcf58f11400b8036b	24	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Vermicular kaolinite relics in fly ash derived from Bokaro and Jharia coals (Jharkhand, India)	International Journal of Coal Geology		2016	Elsevier	10.1016/j.coal.2016.06.011
557f199ce13823bc80ba25a0	809	Salado Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
550b6ce8e1382369a6f9311e	185	Cadjebut mention	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
5c63492c1faed6554895a764	34	Pembina Member	75.9333	80.725	Nicholls, Elizabeth L. and Isaak, Henry	Stratigraphic and taxonomic significance of Tusoteuthis longa Logan (Coleoidea, Teuthida) from the Pembina Member, Pierre Shale (Campanian), of Manitoba	Journal of Paleontology	61	1987	Cambridge University Press (CUP)	10.1017/S0022336000029085
5713034ccf58f175a32a0111	40	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54bedb19e13823023e43d91d	119	Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
559dcd1ae138230816dad9be	6626	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
57005981cf58f180b6e9fd1c	99	Space Group			Emons, H.-H. et al.	Crystal chemistry of MX • MgX2 • 6H2O type compounds	Zeitschrift f•r anorganische und allgemeine Chemie	563	1988	Wiley-Blackwell	10.1002/zaac.19885630122
55c2a9cacf58f1a8110b8a1e	98	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55c48dc6cf58f1a8110b94db	633	Prairie Evaporite Formation	385.3	397.5	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5c319a241faed655488b9bcc	94	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5749d6cacf58f1b0d4fcbc51	117	Majiagou Formation	443.7	488.3	ZHANG, Jing et al.	Controlling effects of paleo-climate and paleo-ocean on formation of carbonate reservoirs	Petroleum Exploration and Development	41	2014	Elsevier	10.1016/S1876-3804(14)60016-1
577c41d6cf58f188cebdd1fb	35	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
54b4328ae138239d8685555a	94	Pythagorion Formation			Stamatakis, M.G. et al.	Geochemistry and diagenesis of Miocene lacustrine siliceous sedimentary and pyroclastic rocks, Mytilinii basin, Samos Island, Greece	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90084-5
55987173e1382390cc640d97	108	Potash Exploration Group			Talbot, C.J. et al.	Potash in salt extruded at Sar Pohl diapir, Southern Iran	Ore Geology Reviews	35	2009	Elsevier	10.1016/j.oregeorev.2008.11.002
5c2fe60d1faed655488b6bad	166	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
57c91310cf58f17b7ba8638b	101	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5713034ccf58f175a32a0111	181	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5907a1e5cf58f1a696dd7cce	65	Boulby Halite Formation	251	260.4	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
5713034ccf58f175a32a0111	211	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c2a9cacf58f1a8110b8a1e	47	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56aac400cf58f194425330c8	1	Umm Ishrin Sandstone	488.3	542	AL-NADDAF, M.	THE EFFECT OF SALTS ON THERMAL AND HYDRIC DILATATION OF POROUS BUILDING STONE	Archaeometry	51	2009	Wiley-Blackwell	10.1111/j.1475-4754.2008.00407.x
551ebe79e138236e51a99ca8	116	Mengkan Formation			Xiao, Feng	Gravity correlation imaging with a moving data window	Journal of Applied Geophysics		2015	Elsevier	10.1016/j.jappgeo.2014.11.004
55a0946ee1382381ff364540	118	Salado mention	256.028	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
54e733ace138237cc9150889	58	Prairie Formation	359.2	416	Benison, Kathleen Counter and Goldstein, Robert H.	Permian paleoclimate data from fluid inclusions in halite	Chemical Geology	154	1999	Elsevier	10.1016/S0009-2541(98)00127-2
55c0d379cf58f16e99a378b9	250	Salado mention	256.028	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
558df7d7e13823109f3ee082	668	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5a958ebecf58f119a3139f5e	100	IUSS Working Group			Uzarowicz, Łukasz et al.	Technogenic soils (Technosols) developed from fly ash and bottom ash from thermal power stations combusting bituminous coal and lignite. Part II. Mineral transformations and soil evolution	CATENA	162	2018	Elsevier	10.1016/j.catena.2017.11.005
55c48dc6cf58f1a8110b94db	330	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
577c41d6cf58f188cebdd1fb	108	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54c060fbe1382389c54c3757	160	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55ae2542e13823763a8309bd	344	Maha Sarakham Formation	65.5	145.5	Hite, R. J.	Progress report on the potash deposits of the Khorat Plateau, Thailand	Open-File Report		1982	United States Geological Survey	
54b43288e138239d86854eed	107	Albert Formation	318.1	359.2	Chowdhury, Ali H. and Noble, James P.A.	Feldspar albitization and feldspar cementation in the Albert Formation reservoir sandstones, New Brunswick, Canada	Marine and Petroleum Geology	10	1993	Elsevier	10.1016/0264-8172(93)90083-5
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
57320585cf58f19d17198262	35	Mineral Dolomite	65.5	251	Gerald M. Friedman	Methane-Generated Lithified Dolostone of Holocene Age: Eastern Mediterranean	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c7-2b26-11d7-8648000102c1865d
5cfd18500b45c76caf8de971	222	Electrochemical Formation			Zhang, Zhimin and Lu, Xuchen	Preparation process of magnesium alloys by complex salt dehydration-electrochemical codeposition	Materials and Manufacturing Processes	34	2019	Informa UK Limited	10.1080/10426914.2019.1566616
54bec599e13823761771fc4d	58	Belly River Formation	73.25	83.6	Morrison, J.O. and Brand, U.	An evaluation of diagenesis and chemostratigraphy of upper cretaceous molluscs from the Canadian Interior Seaway	Chemical Geology: Isotope Geoscience section	72	1988	Elsevier	10.1016/0168-9622(88)90027-9
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
5a0493edcf58f1b96402aae7	372	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
57474ebdcf58f1b6f0394e11	83	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
55a43da1e13823757cc6f19a	159	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
575d04f6cf58f198893b8def	157	Ibura mention			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
59cf6b49cf58f1781e18231b	59	Kaolin Oil Shale			Alhassawi, Hassan and Romero-Zerón, Laura	Novel surfactant delivery system for controlling surfactant adsorption onto solid surfaces. Part II: Dynamic adsorption tests	The Canadian Journal of Chemical Engineering	93	2015	Wiley-Blackwell	10.1002/cjce.22231
5732032ecf58f19cbcbc550f	46	Salado Formation	251	260.4	C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
550b6ce8e1382369a6f9311e	185	Cadjebut mention	382.7	387.7	Kendrick, M.A. et al.	Halogens and noble gases in sedimentary formation waters and Zn–Pb deposits: A case study from the Lennard Shelf, Australia	Applied Geochemistry	26	2011	Elsevier	10.1016/j.apgeochem.2011.07.007
57e65deecf58f186b6da86bd	93	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
55c176c1cf58f1a8110b808a	2210	UK mention				Goldschmidt Abstracts 2008- B	Geochimica et Cosmochimica Acta	72	2008	Elsevier	10.1016/j.gca.2008.05.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b43281e138239d86853bfd	102	Prairie Evaporite Formation	385.3	397.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
57c91310cf58f17b7ba8638b	85	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
54eba4f0e138237cc9151b1e	500	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55ae0df7e13823763a830928	1352	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b67d1ae1382373b63b7852	1233	Salado Formation	251	260.4		List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
559c3f39e138230816dad2ff	160	Salado Formation	251	260.4	Bachman, George Odell	Regional geology and Cenozoic history of Pecos region, southeastern New Mexico	Open-File Report		1980	United States Geological Survey	10.3133/ofr801099
5598d566e1382390cc640f84	232	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
579402adcf58f19c7e2e0966	60	Cardona Formation			Taberner, C. et al.	Basin infill architecture and evolution from magnetostratigraphic cross-basin correlations in the southeastern Pyrenean foreland basin	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1155:biaaef>2.3.co;2
55c48dc6cf58f1a8110b94db	209	Paradox mention	306	319.714	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57e65deecf58f186b6da86bd	158	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5598d566e1382390cc640f84	191	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
54c04e8fe1382389c54c36c6	55	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
55b8b478e1382373b63b81e1	13	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
5a0493edcf58f1b96402aae7	371	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
58bf0a5acf58f17947438723	57	Hontomín Formation			Dávila, Gabriela et al.	Experimental and modeling study of the interaction between a crushed marl caprock and CO2-rich solutions under different pressure and temperature conditions	Chemical Geology		2017	Elsevier	10.1016/j.chemgeo.2016.10.034
5713034ccf58f175a32a0111	143	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
56a038b2cf58f1079fd4ba21	104	Salina Group	416	443.7	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
55bfc14ecf58f16e99a3703b	23	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
54b4328ae138239d868555586	41	Patience Lake Member			Chipley, Don B.L. and Kurtis Kyser, T.	Fluid inclusion evidence for the deposition and diagenesis of the Patience Lake Member of the Devonian Prairie Evaporite Formation, Saskatchewan, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90054-7
58b88f2dcf58f11400b8036b	24	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Vermicular kaolinite relics in fly ash derived from Bokaro and Jharia coals (Jharkhand, India)	International Journal of Coal Geology		2016	Elsevier	10.1016/j.coal.2016.06.011
54c060fbe1382389c54c3757	154	Sylvite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54b4328ce138239d86855aad	24	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55c35bc5cf58f1a8110b8fcc	141	Boulby mention			Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
55c35bc5cf58f1a8110b8fcc	109	Haynesville Formation	150.8	155.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
550b37f5e1382369a6f9303e	46	McMurray Formation	99.6	145.5	Jasechko, Scott et al.	Quantifying saline groundwater seepage to surface waters in the Athabasca oil sands region	Applied Geochemistry	27	2012	Elsevier	10.1016/j.apgeochem.2012.06.007
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55c48dc6cf58f1a8110b94db	209	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
56a038b2cf58f1079fd4ba21	105	Salina Group	416	443.7	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
565df1c6cf58f148c57eb7bf	177	Mullite Hematite Magnetite Dolomite			Shreya, Neha et al.	Multi-technique study of fly ash from the Bokaro and Jharia coalfields (Jharkhand state, India): A contribution to its use as a geoliner	International Journal of Coal Geology	152	2015	Elsevier	10.1016/j.coal.2015.10.006
5713034ccf58f175a32a0111	88	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
598c0beccf58f14465ea77bf	404	Gejiu mention			Mlnlu, Fu and Kwak, Teunis A. P.	Geology, Geochemistry, and Fluid Inclusions of the Gejiu Tin-Polymetallic Field, People's Republic of China	International Geology Review	36	1994	Taylor and Francis	10.1080/00206819409465461
551ddd48e138236e51a99900	17	Prairie Evaporite Formation	385.3	397.5	Hill, D.G.	Multiple log potash assay	Journal of Applied Geophysics	30	1993	Elsevier	10.1016/0926-9851(93)90037-Y
54b4328ce138239d86855aad	329	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5503421ae1382326932d7e6d	2346	Prairie mention	383.95	389.1	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
579aa26fcf58f10fc4765e10	130	Prairie Formation	359.2	416	Grasby, Stephen E. and Chen, Zhouheng	Subglacial recharge into the Western Canada Sedimentary Basin—Impact of Pleistocene glaciation on basin hydrodynamics	Geol Soc America Bull	117	2005	Geological Society of America	10.1130/b25571.1
5732032ecf58f19cbcbc550f	13	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5a0493edcf58f1b96402aae7	361	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
57126f9fcf58f142fd277238	35	Salina Group	416	443.7	Satterfield, C. L. et al.	Paleobrine Temperatures, Chemistries, and Paleoenvironments of Silurian Salina Formation F-1 Salt, Michigan Basin, U.S.A., from Petrography and Fluid Inclusions in Halite	Journal of Sedimentary Research	75	2005	Society for Sedimentary Geology	10.2110/jsr.2005.044
54b4328be138239d8685581	621	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A
5713034ccf58f175a32a0111	142	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c01a9ecf58f16e99a37305	497	Rustler Formation	251	260.4	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
54fb3438e138239936c6d321	596	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
57474ebdcf58f1b6f0394e11	83	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
55b5b47ce1382314227cfdae	227	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54bffee9e1382389c54c3458	349	Sedom Fm	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
5503421ae1382326932d7e6d	1387	Angara Fm	513	542	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55b529fde1382314227cfb1d	31	Elk Point Formation	385.3	397.5	Lipson, Joseph I.	K-A dating of sediments	Geochimica et Cosmochimica Acta	10	1956	Elsevier	10.1016/0016-7037(56)90013-8
5503421ae1382326932d7e6d	1345	Olinda Fm			Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55c36968cf58f1a8110b9014	196	Carribuddy Group	416	443.7	Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
55090847e138238460c4f5cc	540	Magnesite Dolomite			Harrison, Wendy J. et al.	Geochemical interactions resulting from carbon dioxide disposal on the seafloor	Applied Geochemistry	10	1995	Elsevier	10.1016/0883-2927(95)00018-F
575d04f6cf58f198893b8def	157	Ibura mention			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
57e65deecf58f186b6da86bd	81	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
574f1369cf58f10afd57189e	102	Prairie Evaporite mention	385.3	397.5	Wardlaw, N. C. and Watson, D. W.	MIDDLE DEVONIAN SALT FORMATIONS AND THEIR BROMIDE CONTENT, ELK POINT AREA, ALBERTA	Canadian Journal of Earth Sciences	3	1966	Canadian Science Publishing	10.1139/e66-022
5713034ccf58f175a32a0111	339	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
558df7d7e13823109f3ee082	1219	Salado Formation	251	260.4	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
56a11434cf58f1079fd4cab7	25	Paradox Formation	299	318.1	Huntoon, Peter W.	Incredible Tale of Texasgulf Well 7 and Fracture Permeability, Paradox Basin, Utah	Ground Water	24	1986	Wiley-Blackwell	10.1111/j.1745-6584.1986.tb03713.x
56c1fcefcf58f15c72c90a17	511	Khorat Group	65.5	251	Racey, A. et al.	STRATIGRAPHY AND RESERVOIR POTENTIAL OF THE MESOZOIC KHORAT GROUP, NE THAILAND: Part 1: Stratigraphy and Sedimentary Evolution	Journal of Petroleum Geology	19	1996	Wiley-Blackwell	10.1111/j.1747-5457.1996.tb00511.x

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
5598d566e1382390cc640f84	147	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
54b4328ce138239d86855aad	442	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54faf2e4e138239936c6d161	250	Rotliegend mention	251	299	Lüders, Volker et al.	Chemistry and isotopic composition of Rotliegend and Upper Carboniferous formation waters from the North German Basin	Chemical Geology	3-4	2010	Elsevier	10.1016/j.chemgeo.2010.06.006
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
5c31a7df1faed655488b9d7b	598	Majiagou Formation	443.7	488.3	WANG, Zhentao and ZHENG, Mianping	Potash-Forming Regularity of the Ordovician Marine Northern Shaanxi Salt Basin: Insight from Review and Prospect of the Deep Geology of the Ordos Basin	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13648
57474ebdcf58f1b6f0394e11	83	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
54b4328ce138239d86855aad	28	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5713034ccf58f175a32a0111	211	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5732032ecf58f19cbcbc550f	223	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b67d1ae1382373b63b7852	1233	Salado Formation	251	260.4		List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
598a3b9bcf58f1576a61cf09	427	IUSS Working Group			Uzarowicz, Łukasz et al.	Technogenic soils (Technosols) developed from fly ash and bottom ash from thermal power stations combusting bituminous coal and lignite. Part I. Properties, classification, and indicators of early pedogenesis	CATENA	157	2017	Elsevier	10.1016/j.catena.2017.05.010
54eba4f0e138237cc9151b1e	76	Boulby Shale			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
54bedb19e13823023e43d91d	39	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
574c1c0bcf58f1957a2a36f7	224	Clover Hill Formation			Petrychenko, Oleh et al.	Seawater composition during deposition of Viséan evaporites in the Moncton Subbasin of New Brunswick as inferred from the fluid inclusion study of halite	Canadian Journal of Earth Sciences	39	2002	Canadian Science Publishing	10.1139/e01-066
5713034ccf58f175a32a0111	40	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55bf96d4cf58f16e99a36eea	214	Sedom mention	5.332	23.03	Yechieli, Yoseph et al.	The source and age of groundwater brines in the Dead Sea area, as deduced from 36Cl and 14C	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00065-8
55b33067e138231cbdd6d081	2360	Tropic mention			Gregory, H.E.	The geology and geography of the Paunsaugunt region, Utah	Professional Paper		1951	United States Geological Survey	10.3133/pp226
54d899b7e138238471e803b7	105	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
55a0946ee1382381ff364540	7	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
57e65deecf58f186b6da86bd	81	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
57c91310cf58f17b7ba8638b	5	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
575d04f6cf58f198893b8def	157	Ibura mention			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
54be90c7e13823299564b137	758	Prairie Evaporite Formation	385.3	397.5	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
55ae0df7e13823763a830928	1357	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54e64c66e138237cc91504d3	30	Salado Formation	251	260.4	Brookins, Douglas G.	Seawater 87Sr86Sr for the Late Permian Delaware Basin evaporites (New Mexico, U.S.A.)	Chemical Geology	69	1988	Elsevier	10.1016/0009-2541(88)90035-6
5703039bcf58f1ab94954a91	204	Complex Formation			Steinhauser, Stefan et al.	Complex Formation of 2, 6-Bis-(2?-hydroxyphenyl)pyridine with AlIII, FeIII and CuII	Zeitschrift f□r anorganische und allgemeine Chemie	630	2004	Wiley-Blackwell	10.1002/zaac.200400235
56f91e34cf58f17eb9911efa	297	Chitistone Limestone	199.6	251	Barton, Paul B.	Metallogenesis	Reviews of Geophysics	21	1983	Wiley-Blackwell	10.1029/RG021i006p01407
57e65deecf58f186b6da86bd	198	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
54b43281e138239d86853c10	261	Maha Sarakham Formation	65.5	145.5	Suwanich, Parkorn	Clay-mineral assemblages from some levels of K-118 drill core of Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90038-Q
5713034ccf58f175a32a0111	10	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5590c428e13823109f3ef1e1	358	Rustler Formation	251	260.4	Schneider, Robert and Trask, N. J.	U.S. Geological Survey research in radioactive waste disposal; fiscal year 1980	Open-File Report		1982	United States Geological Survey	
57bee020cf58f13d88794bee	214	Windsor Group	318.1	359.2	Hayward, N. et al.	Magnetic anomalies associated with salt tectonism, deep structure and regional tectonics in the Maritimes Basin, Atlantic Canada	Basin Research	26	2014	Wiley	10.1111/bre.12029
5a21053ecf58f18a3170d1ed	124	Anhydrite mention			Li, Minghui et al.	Origins of the Mid-Cretaceous evaporite deposits of the Sakhon Nakhon Basin in Laos: Evidence from the stable isotopes of halite	Journal of Geochemical Exploration	184	2018	Elsevier	10.1016/j.gexplo.2017.11.001
5713034ccf58f175a32a0111	40	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54be90c7e13823299564b137	758	Prairie Evaporite Formation	385.3	397.5	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
55b6269be1382314227cff85	1406	Salado Formation	251	260.4		List of referees, list of contents, subject index and author index vol. 52, 1988	Geochimica et Cosmochimica Acta	52	1988	Elsevier	10.1016/0016-7037(88)90175-5
5713034ccf58f175a32a0111	200	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b529fde1382314227cfb1d	24	Elk Point Formation	385.3	397.5	Lipson, Joseph I.	K-A dating of sediments	Geochimica et Cosmochimica Acta	10	1956	Elsevier	10.1016/0016-7037(56)90013-8
5713034ccf58f175a32a0111	182	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54fb3438e138239936c6d321	596	Zechstein mention	251.902	273.01	García-Veigas, Javier et al.	Zechstein saline brines in Poland, evidence of overturned anoxic ocean during the Late Permian mass extinction event	Chemical Geology	3-4	2011	Elsevier	10.1016/j.chemgeo.2011.09.016
5a0493edcf58f1b96402aae7	89	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55baa3b5e1382373b63b89e7	93	Halite mention	251	299	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
55ad3126e13823763a8303a0	149	Salado mention	256.028	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
55c0d379cf58f16e99a378b9	307	Wellington mention	279.003	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57e65deecf58f186b6da86bd	157	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
54bedb19e13823023e43d91d	21	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55b75831e13823bd29ba8108	3693	Harmony Formation	488.3	501	Edited by Scott, Richard W., Jr. et al.	Advances related to United States and international mineral resources; developing frameworks and exploration technologies	Bulletin		1993	United States Geological Survey	
54d899b7e138238471e803b7	105	Angara mention	513	542	Petrychenko, Oleh Y. et al.	Early Cambrian seawater chemistry from fluid inclusions in halite from Siberian evaporites	Chemical Geology	219	2005	Elsevier	10.1016/j.chemgeo.2005.02.003
5732032ecf58f19cbcbc550f	223	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5713034ccf58f175a32a0111	179	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
54bffee9e1382389c54c3458	139	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
5713034ccf58f175a32a0111	76	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5989d928cf58f1325fd87abd	104	Clay Quartz Calcite Dolomite			Gueciouer, A. et al.	Valorization of KCl/PHPA system of water-based drilling fluid in presence of reactive clay: Application on Algerian field	Applied Clay Science	146	2017	Elsevier	10.1016/j.clay.2017.06.007
54bedb19e13823023e43d91d	137	Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54fb03c7e138239936c6d1e1	231	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
54b43280e138239d86853816d	337	Il mention			Pal, Dipak C. et al.	Contrasting fluid inclusion characteristics of staniferous and non-staniferous pegmatites of Southeast Bastar, Central India	Journal of Asian Earth Sciences	28	2006	Elsevier	10.1016/j.jseaes.2005.10.008
575d04f6cf58f198893b8def	155	Ibura Member			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5a0493edcf58f1b96402aae7	361	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5590aba6e13823109f3ef147	178	Description mention			Raup, Omer B. and Hite, R. J.	Preliminary stratigraphic and lithologic data from the Delhi-Taylor Oil Company, Shafer No. 1 corehole, San Juan County, Utah	Open-File Report		1991	United States Geological Survey	
558df7d7e13823109f3ee082	3447	Salina Formation	416	443.7	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5a2b750ccf58f1081042119c	61	Nam Noy Formation			Zhang, Dawen et al.	Magnetostratigraphic study of the potash-bearing strata from drilling core ZK2893 in the Sakhon Nakhon Basin, eastern Khorat Plateau	Palaeogeography, Palaeoclimatology, Palaeoecology	489	2018	Elsevier	10.1016/j.palaeo.2017.08.030
5503421ae1382326932d7e6d	1387	Angara Fm	513	542	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
58bc7562cf58f12d483cfce3	64	Mengyejing Fm	65.5	99.6	Wu, Chihua et al.	Mid-Cretaceous desert system in the Simao Basin, southwestern China, and its implications for sea-level change during a greenhouse climate	Palaeogeography, Palaeoclimatology, Palaeoecology		2017	Elsevier	10.1016/j.palaeo.2016.12.048
55b5b47ce1382314227cfdae	227	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
5598d566e1382390cc640f84	191	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5713034ccf58f175a32a0111	182	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c319eacf58f1a8110b8db1	185	Sedom Fm	5.332	23.03	Klein-BenDavid, Ofra et al.	The evolution of marine evaporitic brines in inland basins: The Jordan-Dead Sea Rift valley	Geochimica et Cosmochimica Acta	68	2004	Elsevier	10.1016/j.gca.2003.08.002
55ae0df7e13823763a830928	1357	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
55b39c73e138231cbdd6d2c1	936	Hermosa mention	298.9	312	Condon, Steven M.	Geologic framework of pre-Cretaceous rocks in the Southern Ute Indian Reservation and adjacent areas, southwestern Colorado and northwestern New Mexico	Professional Paper		1992	United States Geological Survey	
5713034ccf58f175a32a0111	149	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54c060fbe1382389c54c3757	202	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55a0946ee1382381ff364540	147	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5713034ccf58f175a32a0111	92	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	83	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a0493edcf58f1b96402aae7	89	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5713034ccf58f175a32a0111	143	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5730cdcccf58f16acaf6b5aa	59	Potash mention			Donald G. Harville (2) and Steven J. F	Modes of Diagenesis Responsible for Observed Succession of Potash Evaporites in the Salado Formation, Delaware Basin, New Mexico	SEPM Journal of Sedimentary Research	Vol. 56	1986	Society for Sedimentary Geology	10.1306/212f89fe-2b24-11d7-8648000102c1865d
559dcd1ae138230816dad9be	6625	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
58d042d8cf58f13a8ae55cf9	186	Corella/Doherty Formation			Oliver, N. H. S.	Hydrothermal history of the Mary Kathleen Fold Belt, Mt Isa Block, Queensland	Australian Journal of Earth Sciences	42	1995	Taylor and Francis	10.1080/08120099508728201
564d7e07cf58f141b60ca7df	34	Chromite Chrysotile Cronstedtite Dolomite			Zolotov, Mikhail Yu.	Aqueous fluid composition in CI chondritic materials: Chemical equilibrium assessments in closed systems	Icarus	220	2012	Elsevier	10.1016/j.icarus.2012.05.036
55a0946ee1382381ff364540	22	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5598d566e1382390cc640f84	121	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ce138239d86855aad	24	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
55bf8aa9e138232db707b806	174	Esterhazy mention			Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
57437547cf58f1350bacb6cd	18	Brine Formation			CUI, Xiangmei et al.	Simulated Dynamic Evaporation of Yiliping Salt Lake Brine	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12279_6
565df1c6cf58f148c57eb7bf	177	Mullite Hematite Magnetite Dolomite			Shreya, Neha et al.	Multi-technique study of fly ash from the Bokaro and Jharia coalfields (Jharkhand state, India): A contribution to its use as a geoliner	International Journal of Coal Geology	152	2015	Elsevier	10.1016/j.coal.2015.10.006
56f92519cf58f1816ed1a1d2	61	Salado Formation	251	260.4	Phinney, William C.	Petrological evolution of the crust and mantle	Reviews of Geophysics	21	1983	Wiley-Blackwell	10.1029/RG021i006p01358
55b5b47ce1382314227cfdae	227	Salina Group	416	443.7	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
55c00a00cf58f16e99a3727f	106	Salado Formation	251	260.4	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
57474ebdcf58f1b6f0394e11	129	Esterhitzy Member			Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5907a1e5cf58f1a696dd7cce	65	Boulby Halite Formation	251	260.4	Genis, Jac et al.	Exceptional Volkovskite Crystals from Zechstein Evaporites at the Boulby Mine, Cleveland, England	Rocks & Minerals	91	2016	Taylor and Francis	10.1080/00357529.2016.1193698
57c91310cf58f17b7ba8638b	149	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
5713034ccf58f175a32a0111	217	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54b4324be138239d8684a5e1	152	Mirabilite Dolomite			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
55b67d1ae1382373b63b7852	1233	Salado Formation	251	260.4		List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
54fb03c7e138239936c6d1e1	231	Baogutu mention			Shen, Ping et al.	Methane-rich fluid evolution of the Baogutu porphyry Cu–Mo–Au deposit, Xinjiang, NW China	Chemical Geology	1-2	2010	Elsevier	10.1016/j.chemgeo.2010.04.016
55765d21e138234790a011ee	233	Salt IV Formation			Sinninghe Damsté, Jaap S. et al.	Variations in abundances and distributions of isoprenoid chromans and long-chain alkylbenzenes in sediments of the Mulhouse Basin: a molecular sedimentary record of palaeosalinity	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90009-Z
56c14b57cf58f15c72c8fcdf	1	Experimental Systems Group			Walker, David et al.	Synthesis and thermal decomposition of tetragonal RbClO 4 and volume of fluid O 2 from 2 to 9 GPa	Geochemistry, Geophysics, Geosystems	2	2001	Wiley-Blackwell	10.1029/2001GC000154
58bb7f59cf58f1878850d92a	386	EdiacaranCambrian Ara Group			Husinec, Antun	Sequence stratigraphy of the Red River Formation, Williston Basin, USA: Stratigraphic signature of the Ordovician Katian greenhouse to icehouse transition	Marine and Petroleum Geology		2016	Elsevier	10.1016/j.marpetgeo.2016.07.003
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
5c2fe60d1faed655488b6bad	222	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	The Mesozoic-Cenozoic tectonic settings, paleogeography and evaporitic sedimentation of Tethyan blocks within China: Implications for potash formation	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.002
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
5c63492c1faed6554895a764	34	Pembina mention			Nicholls, Elizabeth L. and Isaak, Henry	Stratigraphic and taxonomic significance of Tusoteuthis longa Logan (Coleoidea, Teuthida) from the Pembina Member, Pierre Shale (Campanian), of Manitoba	Journal of Paleontology	61	1987	Cambridge University Press (CUP)	10.1017/S0022336000029085
54b43281e138239d86853c10	98	Middle Clastic mention			Suwanich, Parkorn	Clay-mineral assemblages from some levels of K-118 drill core of Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90038-Q
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57474ebdcf58f1b6f0394e11	83	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
55928493e138236ee2218034	338	Harmony Formation	488.3	501	Theodore, Ted G. et al.	Geochemical and fluid zonation in the skarn environment at the tomboy—minnie gold deposits, Lander County, Nevada	Journal of Geochemical Exploration	25	1986	Elsevier	10.1016/0375-6742(86)90009-9
54b43289e138239d868552af	19	Northern Limestone			Fruth, I. and Scherreiks, R.	Hauptdolomit (Norian) — stratigraphy, paleogeography and diagenesis	Sedimentary Geology	32	1982	Elsevier	10.1016/0037-0738(82)90050-1
54b4328ce138239d86855aad	24	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5598d566e1382390cc640f84	195	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55c2e5c8cf58f1a8110b8c08	242	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
5b6f081fcf58f1539ffa6761	245	Middle Sulha Member			Yeşilova, Çetin et al.	Evaporitic sedimentation in the Southeastern Anatolian Foreland Basin: New insights on the Neotethys closure	Sedimentary Geology	369	2018	Elsevier	10.1016/j.sedgeo.2018.03.012
5c319a241faed655488b9bcc	5	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
55b67d1ae1382373b63b7852	1235	Petroleum Clay Formation				List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
55b5b47ce1382314227cfdae	227	Salina mention	419.675	429.4	Das, Nachiketa et al.	Chemistry of fluid inclusions in halite from the Salina Group of the Michigan basin: Implications for Late Silurian seawater and the origin of sedimentary brines	Geochimica et Cosmochimica Acta	54	1990	Elsevier	10.1016/0016-7037(90)90321-B
54c060fbe1382389c54c3757	148	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
58ac40fdcf58f1946fb5ce65	123	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
54b43281e138239d86853bfd	18	Maha Sarakham Formation	65.5	145.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
588fb778cf58f1ab403bd26c	1	Longman Group	23.03	33.9	Watson, A.J. and Huebner, E.	Modulation of cytoskeletal organization during insect follicle cell morphogenesis	Tissue and Cell	18	1986	Elsevier	10.1016/0040-8166(86)90074-1
565df234cf58f148c57eb7c2	125	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Characteristics of ferrospheres in fly ashes derived from bokaro and jharia (jharkand, India) coals	International Journal of Coal Geology		2015	Elsevier	10.1016/j.coal.2015.11.013
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
55b30ea3e138231cbdd6cfcd	1432	Organic mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55c00a00cf58f16e99a3727f	21	Salado mention	256.028	262.2168	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
5717e228cf58f18b267dc491	1	Anglo American Group			Neumann, Reiner et al.	The mineral phase quantification of vermiculite and interstratified clay minerals-containing ores by X-ray diffraction and Rietveld method after K cation exchange	Minerals Engineering	24	2011	Elsevier	10.1016/j.mineng.2011.05.017
54b43281e138239d86853bfd	102	Prairie Evaporite Formation	385.3	397.5	Utha-Aroon, Cherdsak	Continental origin of the Maha Sarakham evaporites, northeastern Thailand	Journal of Southeast Asian Earth Sciences	8	1993	Elsevier	10.1016/0743-9547(93)90021-G
55b3641de138231cbdd6d189	3249	Pierre Shale	65.5	145.5	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
5c319a241faed655488b9bcc	170	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
55b78281e13823bd29ba8218	1944	Salado mention	256.028	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
5509217ee138238460c4f689	124	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
57c8716acf58f1429a428969	120	Spectral Library Mineral Group			Thorpe, Michael T. et al.	Quantitative compositional analysis of sedimentary materials using thermal emission spectroscopy: 1. Application to sedimentary rocks	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2015JE004863

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54bedb19e13823023e43d91d	200	Alwinsal Willowbrook Esterhazy Member			Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
5598d566e1382390cc640f84	121	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55c48dc6cf58f1a8110b94db	43	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
559d4d6ee138230816dad784	110	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
55ad3126e13823763a8303a0	133	Salado mention	256.028	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54c060fbe1382389c54c3757	149	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
56c27ba3cf58f17493f8373a	140	Berea Sandstone	353.35	362.225	Hallet, B. et al.	Weathering by segregation ice growth in microcracks at sustained subzero temperatures: Verification from an experimental study using acoustic emissions	Permafrost and Periglacial Processes	2	1991	Wiley-Blackwell	10.1002/ppp.3430020404
5c2567d81faed655488a6dd8	286	Prairie Formation	359.2	416	Koděra, Peter et al.	Identification of anhydrous CaCl2 and KCaCl3 in natural inclusions by Raman spectroscopy	Chemical Geology	493	2018	Elsevier	10.1016/j.chemgeo.2018.07.017
557b4c6fe138239225f86356	114	Salt mention	251	260.4	Leith, William	Geologic and engineering constraints on the feasibility of clandestine nuclear testing by decoupling in large underground cavities	Open-File Report		2000	United States Geological Survey	10.3133/ofr0128
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5713034ccf58f175a32a0111	76	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57e65deecf58f186b6da86bd	76	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
54bedb19e13823023e43d91d	55	Esterhazy Member			Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
54bedb19e13823023e43d91d	39	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb–Sr and K–Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
55c00a00cf58f16e99a3727f	106	Salado Formation	251	260.4	Ayora, Carlos et al.	The chemical and hydrological evolution of an ancient potash-forming evaporite basin as constrained by mineral sequence, fluid inclusion composition, and numerical simulation	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90093-0
55bfc14ecf58f16e99a3703b	354	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
572f9e49cf58f1399347bfef	148	Cayman Formation	5.332	23.03	Brian Jones	Processes Associated with Microbial Biofilms in the Twilight Zone of Caves: Examples from the Cayman Islands	SEPM Journal of Sedimentary Research	Vol. 65A	1995	Society for Sedimentary Geology	10.1306/d426812b-2b26-11d7-8648000102c1865d
574387f1cf58f13ba5abe123	9	Majiagou mention	443.7	488.3	FAN, Fu et al.	Differences on Condition and Mechanism of Potash Deposited in O2 m5-6 Subsection of Northern Shaanxi Salt Basin	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12269_7
55b6d6a7e13823bd29ba7dcc	8136	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
54b4328ae138239d8685555a	47	Pythagorion mention			Stamatakis, M.G. et al.	Geochemistry and diagenesis of Miocene lacustrine siliceous sedimentary and pyroclastic rocks, Mytilinii basin, Samos Island, Greece	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90084-5
5713034ccf58f175a32a0111	84	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c85be2cf58f1a8110ba4b2	167	KCl Limestone			Pickard, William F.	Geochemical constraints on sustainable development: Can an advanced global economy achieve long-term stability?	Global and Planetary Change	61	2008	Elsevier	10.1016/j.gloplacha.2007.10.005
56c1d9bbcf58f15c72c9075f	99	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54c04e8fe1382389c54c36c6	55	Evans Member			Wood, Warren W. et al.	Chemical openness and potential for misinterpretation of the solute environment of coastal sabkhat	Chemical Geology	215	2005	Elsevier	10.1016/j.chemgeo.2004.06.043
5c3539e11faed655488c10ed	212	Prairie Evaporite mention	385.3	397.5	Hsu, K.J. and Cita, M.B.	The Origin of the Mediterranean Evaporite	Initial Reports of the Deep Sea Drilling Project	13		International Ocean Discovery Program (IODP)	10.2973/dsdp.proc.13.143.1973

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
578b54cdcf58f156f520e154	13	Salina Group	416	443.7	Cercone, Karen Rose	Evaporative sea-level drawdown in the Silurian Michigan basin	Geol	16	1988	GSA	10.1130/0091-7613(1988)016<0387:eslditx2.3.co;2
56f914c7cf58f17b8c878422	1207	Salado Formation	251	260.4	DePaolo, Donald J.	Geochemical evolution of the crust and mantle	Reviews of Geophysics	21	1983	Wiley-Blackwell	10.1029/RG021i006p01347
54bedb19e13823023e43d91d	200	Alwinsal Willowbrook Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
574fae1acf58f142f8fdc4f8	557	Prairie Evaporite Formation	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
55c2a9cacf58f1a8110b8a1e	86	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5a2f2335cf58f1a999f75445	10	Australian Shale			Grawunder, Anja et al.	Rare earth elements in Permian salts and brines, Thuringia, Germany	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.09.001
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
54c060fbe1382389c54c3757	343	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
57c1a08dcf58f16cbd62157f	210	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
5598d566e1382390cc640f84	80	Mengye Formation			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
54b4328ce138239d86855aad	334	Maha Sarakham mention	33.9	100.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
5cfd8fb70b45c76caf8df585	2	Francis Group	305.425	305.7125	Mahadevan, C. K. and Saravanan, R. S. S.	Nucleation Parameters of Pure and Impurity Added MgSO 4 ·7H 2 O Single Crystals	Materials and Manufacturing Processes	22	2007	Informa UK Limited	10.1080/10426910701190782
58d3f839cf58f116f62ab501	145	Stagea Mineral Group			Pavlova, G. G. and Borovikov, A. A.	Silver–antimony deposits of Central Asia: physico-chemical model of formation and sources of mineralisation	Australian Journal of Earth Sciences	57	2010	Taylor and Francis	10.1080/08120091003736540
55bf8aa9e138232db707b806	104	Prairie Formation	359.2	416	Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
55b30ea3e138231cbdd6cfcd	1052	Flow mention			Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5713034ccf58f175a32a0111	312	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5598d566e1382390cc640f84	238	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
57c91310cf58f17b7ba8638b	116	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55c01a9ecf58f16e99a37305	497	Rustler mention	253.965	256.0278	Siegel, Malcolm D. and Anderholm, Scott	Geochemical evolution of groundwater in the Culebra dolomite near the Waste Isolation Pilot Plant, southeastern New Mexico, USA	Geochimica et Cosmochimica Acta	58	1994	Elsevier	10.1016/0016-7037(94)90012-4
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5713034ccf58f175a32a0111	72	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
59065e90cf58f130f8d92aa2	175	Diopside Dioptase Dolomite			Kelly, Charles J.	Mineral Identifications	Rocks & Minerals	42	1967	Taylor and Francis	10.1080/00357529.1967.11765257
54bedb19e13823023e43d91d	200	Alwinsal Willowbrook Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
577c41d6cf58f188cebdd1fb	277	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
572ee8a5cf58f11bb5bc1a43	91	Castile Formation	253.8	260.4	Dana S. Ulmer-Scholle and Peter A. Sch	Silicification of Evaporites in Permian (Guadalupian) Back-Reef Carbonates of the Delaware Basin, West Texas and New Mexico	SEPM Journal of Sedimentary Research	Vol. 63	1993	Society for Sedimentary Geology	10.1306/d4267c53-2b26-11d7-8648000102c1865d
58b6daf1cf58f11f2b0dde84	257	Salado Formation	251	260.4	Warren, John Keith	Salt usually seals, but sometimes leaks: Implications for mine and cavern stabilities in the short and long term	Earth-Science Reviews		2017	Elsevier	10.1016/j.earscirev.2016.11.008
558df7d7e13823109f3ee082	2344	Salado mention	256.028	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55c0d379cf58f16e99a378b9	44	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
54bec599e13823761771fc4d	58	Belly River Formation	73.25	83.6	Morrison, J.O. and Brand, U.	An evaluation of diagenesis and chemostratigraphy of upper cretaceous molluscs from the Canadian Interior Seaway	Chemical Geology: Isotope Geoscience section	72	1988	Elsevier	10.1016/0168-9622(88)90027-9
55b2cdb4e138231cbdd6ce74	348	UNITS mention			Brown, C. Erwin	Determination of rock properties by borehole-geophysical and physical-testing techniques and ground-water quality and movement in the Durham Triassic basin, North Carolina	Professional Paper		1988	United States Geological Survey	10.3133/pp1432
57e65deecf58f186b6da86bd	76	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5713034ccf58f175a32a0111	75	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c2a9cacf58f1a8110b8a1e	102	Maha Sarakham Formation	65.5	145.5	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5713034ccf58f175a32a0111	335	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
568315efcf58f1479a0ab9a9	383	Cairn Formation	359.2	385.3	VANDEGINSTE, VEERLE et al.	Thermochemical sulphate reduction in the Upper Devonian Cairn Formation of the Fairholme carbonate complex (South-West Alberta, Canadian Rockies): evidence from fluid inclusions and isotopic data	Sedimentology	56	2009	Wiley-Blackwell	10.1111/j.1365-3091.2008.00978.x
55bfc14ecf58f16e99a3703b	577	Prairie Evaporite Formation	385.3	397.5	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5713034ccf58f175a32a0111	208	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
579402adcf58f19c7e2e0966	60	Cardona Formation			Taberner, C. et al.	Basin infill architecture and evolution from magnetostratigraphic cross-basin correlations in the southeastern Pyrenean foreland basin	Geological Society of America Bulletin	111	1999	GSA	10.1130/0016-7606(1999)111<1155:biaaef>2.3.co;2
577c41d6cf58f188cebdd1fb	318	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
57c3d54ccf58f146d5b258bd	57	Zechstein Group	251	260.4	Drijkoningen, Guy et al.	Seismic time-lapse effects of solution salt mining - a feasibility study	Geophysical Prospecting	60	2012	Wiley	10.1111/j.1365-2478.2011.00979.x
559dcd1ae138230816dad9be	6625	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
58011622cf58f191bd5caf15	28	POWELL Group			HOLLAND, T. J. B. and POWELL, R.	An improved and extended internally consistent thermodynamic dataset for phases of petrological interest, involving a new equation of state for solids	Journal of Metamorphic Geology	29	2011	Wiley	10.1111/j.1525-1314.2010.00923.x
58d05105cf58f13f39efd424	350	Carnallite mention			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
57c91310cf58f17b7ba8638b	116	Clean Chamber Formation			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
559d4d6ee138230816dad784	30	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
5503421ae1382326932d7e6d	1445	Prairie Evaporite Formation	385.3	397.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
574f9a2fcf58f13bebe8af72	46	Typical Bed			McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
58d03bf3cf58f138516d1200	146	Evaporation mention			Warren, J. K.	Evaporites, brines and base metals: Fluids, flow and 'the evaporite that was'	Australian Journal of Earth Sciences	44	1997	Taylor and Francis	10.1080/08120099708728302
55c07511cf58f16e99a375dc	1197	Monterey Formation	5.332	23.03		Annual index	Geochimica et Cosmochimica Acta	56	1992	Elsevier	10.1016/0016-7037(92)90280-V
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
577c41d6cf58f188cebdd1fb	318	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
55b8b478e1382373b63b81e1	26	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55765c3ce138234790a011e9	58	Salt IV mention			Hofmann, P. et al.	Organic matter of the Mulhouse Basin, France: a synthesis	Organic Geochemistry	20	1993	Elsevier	10.1016/0146-6380(93)90003-T
5cfd18500b45c76caf8de971	222	Electrochemical Formation			Zhang, Zhimin and Lu, Xuchen	Preparation process of magnesium alloys by complex salt dehydration-electrochemical codeposition	Materials and Manufacturing Processes	34	2019	Informa UK Limited	10.1080/10426914.2019.1566616
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
57474ebdcf58f1b6f0394e11	107	Prairie Formation	359.2	416	Koehler, G. et al.	Paleomagnetic and isotopic evidence for the diagenesis and alteration of evaporites in the Paleozoic Elk Point Basin, Saskatchewan, Canada	Canadian Journal of Earth Sciences	34	1997	Canadian Science Publishing	10.1139/e17-130
54eba4f0e138237cc9151b1e	80	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5713034ccf58f175a32a0111	143	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54bedb19e13823023e43d91d	200	Alwinsal Willowbrook Esterhazy Member			Baadsgaard, H.	Rb□Sr and K□Ca isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
5cfd18500b45c76caf8de971	222	Electrochemical Formation			Zhang, Zhimin and Lu, Xuchen	Preparation process of magnesium alloys by complex salt dehydration-electrochemical codeposition	Materials and Manufacturing Processes	34	2019	Informa UK Limited	10.1080/10426914.2019.1566616
558bbed5e13823109f3ed4f8	265	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
55b832b8e13823bd29ba8617	589	Hermosa mention	298.9	312	Hansley, P. L.	Diagenetic and burial history of the Lower Permian White Rim Sandstone in the Tar Sand Triangle, Paradox Basin, southeastern Utah	Bulletin		1995	United States Geological Survey	
578b8ab6cf58f1645f54f0c6	53	Salado mention	256.028	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
5598d566e1382390cc640f84	232	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
559871d1e1382390cc640d99	398	Hormoz mention			Talbot, Christopher et al.	Potash in a salt mushroom at Hormoz Island, Hormoz Strait, Iran	Ore Geology Reviews	35	2009	Elsevier	10.1016/j.oregeorev.2008.11.005
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55bfc14ecf58f16e99a3703b	200	Louann Formation	145.5	199.6	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
577b5e79cf58f13907e5e76d	60	Prairie Formation	359.2	416	De MILLE, G. et al.	Collapse Structures Related to Evaporites of the Prairie Formation, Saskatchewan	Geol Soc America Bull	75	1964	Geological Society of America	10.1130/0016-7606(1964)75[307:csrteo]2.0.co;2
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
557f199ce13823bc80ba25a0	245	Rustler Formation	251	260.4	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5c3193251faed655488b9b0a	31	Majiagou Formation	443.7	488.3	ZHAO, Haitong et al.	Isotopic Geochemistry of Evaporite-Carbonate Sediments in Majiagou Formation Euxinic Systems with Implications for Evaluating Ordovician Northern Shaanxi Epicontinental Sea, Ordos Basin	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13524
55a0946ee1382381ff364540	144	Salado mention	256.028	262.2168	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
580e3bc6cf58f172dd1b8676	493	Tumbalunda mention			Laurent, Gindre-Chanu et al.	Origin and diagenetic evolution of gypsum and microbialitic carbonates in the Late Sag of the Namibe Basin (SW Angola)	Sedimentary Geology		2016	Elsevier	10.1016/j.sedgeo.2016.06.015
55c48dc6cf58f1a8110b94db	43	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55a0946ee1382381ff364540	109	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
5a0493edcf58f1b96402aae7	361	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
557ff66ee13823bc80ba2925	468	Kootenai mention	113	145	Henderson, Thomas	Geochemistry of ground-water in two sandstone aquifer systems in the Northern Great Plains in parts of Montana and Wyoming	Professional Paper		1985	United States Geological Survey	
55933be0e138236ee2218336	88	Bunter Sandstone	245	251	Wolfgramm, M and Schmidt Mumm, A	Spatial correlation of fluid inclusion generations: reconstructing fluid flow during basin evolution	Journal of Geochemical Exploration		2000	Elsevier	10.1016/S0375-6742(00)00033-9
54fa8fa1e138239936c6ceab	284	Prairie Evaporite mention	385.3	397.5	Huff, G.F. and Wampler, J.M.	K□Ar geochemistry of carnallite from salt-cycle six of the Paradox Formation in Utah, U.S.A.	Chemical Geology: Isotope Geoscience section	80	1990	Elsevier	10.1016/0168-9622(90)90012-2
559871d1e1382390cc640d99	26	Hormoz mention			Talbot, Christopher et al.	Potash in a salt mushroom at Hormoz Island, Hormoz Strait, Iran	Ore Geology Reviews	35	2009	Elsevier	10.1016/j.oregeorev.2008.11.005
57c91310cf58f17b7ba8638b	149	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5509217ee138238460c4f689	90	Rustler Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c2e5c8cf58f1a8110b8c08	140	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
58ac40fdcf58f1946fb5ce65	127	Anhydrite Aragonite Calcite Dolomite			Long, Ma et al.	Hydrochemical and isotopic characters of surface water in agricultural oases of the Tianshan Mountains, Northwest China	Arid Land Research and Management	30	2016	Taylor and Francis	10.1080/15324982.2015.1056326
54bffee9e1382389c54c3458	276	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
57437547cf58f1350bacb6cd	18	Brine Formation			CUI, Xiangmei et al.	Simulated Dynamic Evaporation of Yiliping Salt Lake Brine	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12279_6
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5713034ccf58f175a32a0111	10	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54b4327ee138239d868532b9	322	Calcite Dolomite			Xing, Lina et al.	Groundwater hydrochemical characteristics and processes along flow paths in the North China Plain	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2013.03.017
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
575d04f6cf58f198893b8def	160	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
55b7869fe13823bd29ba8231	2688	Anhydrite mention			Dean, Walter E. and Johnson, Kenneth Sutherland	Anhydrite deposits of the United States and characteristics of anhydrite important for storage of radioactive wastes	Bulletin		1989	United States Geological Survey	10.3133/b1794
5713034ccf58f175a32a0111	95	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
55b30ea3e138231cbdd6cfcd	1650	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
551ebe79e138236e51a99ca8	116	Mengkan Formation			Xiao, Feng	Gravity correlation imaging with a moving data window	Journal of Applied Geophysics		2015	Elsevier	10.1016/j.jappgeo.2014.11.004
54bedb19e13823023e43d91d	200	Alwinsal Willowbrook Esterhazy Member			Baadsgaard, H.	$^{87}Rb/^{87}Sr$ and $^{40}K/^{40}Ca$ isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
5a0493edcf58f1b96402aae7	174	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55b8b478e1382373b63b81e1	13	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55a0946ee1382381ff364540	147	Salado Formation	251	260.4	Jones, C. L.	Potash resources in part of Los Medanos area of Eddy and Lea Counties, New Mexico	Open-File Report		1975	United States Geological Survey	
54be90c7e13823299564b137	48	Prairie Formation	359.2	416	Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
5a0493edcf58f1b96402aae7	144	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5a2f2335cf58f1a999f75445	10	Australian Shale			Grawunder, Anja et al.	Rare earth elements in Permian salts and brines, Thuringia, Germany	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.09.001
5a0493edcf58f1b96402aae7	262	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
57320585cf58f19d17198262	35	Mineral mention	307	315.2	Gerald M. Friedman	Methane-Generated Lithified Dolostone of Holocene Age: Eastern Mediterranean	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c7-2b26-11d7-8648000102c1865d
574fae1acf58f142f8fdc4f8	47	Prairie Evaporite mention	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
575d04f6cf58f198893b8def	145	Prairie Evaporite Formation	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5c2fc9b61faed655488b690e	438	Pillara mention			Hanley, Jacob J. and Gysi, Alexander P.	The role of hydrocarbons in ore formation at the Pillara Mississippi Valley-type Zn-Pb deposit, Canning Basin, Western Australia	Ore Geology Reviews	102	2018	Elsevier	10.1016/j.oregeorev.2018.09.012
54eba4f0e138237cc9151b1e	80	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
54c060fbe1382389c54c3757	325	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
5713034ccf58f175a32a0111	333	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5c31a7df1faed655488b9d7b	228	Majiagou Formation	443.7	488.3	WANG, Zhentao and ZHENG, Mianping	Potash-Forming Regularity of the Ordovician Marine Northern Shaanxi Salt Basin: Insight from Review and Prospect of the Deep Geology of the Ordos Basin	Acta Geologica Sinica - English Edition	92	2018	Wiley	10.1111/1755-6724.13648
55088ec0e138237a6f73918a	313	Carnallite mention			Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
575d04f6cf58f198893b8def	157	Ibura mention			Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5503421ae1382326932d7e6d	1353	Prairie Fm	385.3	397.5	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
54b43279e138239d8685255d	203	Chemical Mineralogy Formation			Talbot, C.J.	Hydrothermal salt—but how much?	Marine and Petroleum Geology	25	2008	Elsevier	10.1016/j.marpetgeo.2007.05.005
57e65deecf58f186b6da86bd	167	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
559dcd1ae138230816dad9be	6625	Paradox mention	306	319.714	Weir, G. W. and Puffett, W. P.	Incomplete manuscript on stratigraphy and structural geology and uranium-vanadium and copper deposits of the Lisbon Valley area, Utah-Colorado	Open-File Report		1981	United States Geological Survey	10.3133/ofr8139
577c41d6cf58f188cebdd1fb	35	Prairie Evaporite mention	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b30ea3e138231cbdd6cfcd	2016	Madison mention	332.345	358.9	Busby, J. F. et al.	Geochemical evolution of water in the Madison Aquifer in parts of Montana, South Dakota, and Wyoming	Professional Paper		1991	United States Geological Survey	
5c319a241faed655488b9bcc	27	Mengyejing mention	65.5	99.6	SHEN, Lijian et al.	Degree of Brine Evaporation and Origin of the Mengyejing Potash Deposit: Evidence from Fluid Inclusions in Halite	Acta Geologica Sinica - English Edition	91	2017	Wiley	10.1111/1755-6724.13070
54b4328be138239d8685581	621	Prairie Evaporite Formation	385.3	397.5	Sonnenfeld, Peter	The color of rock salt—A review	Sedimentary Geology	94	1995	Elsevier	10.1016/0037-0738(94)00093-A
579cc800cf58f111052984df	15	Vorotyshcha Salt-bearing Formation			Kotarba, Maciej J. et al.	Unique Quaternary environment for discoveries of woolly rhinoceroses in Starunia, fore-Carpathian region, Ukraine: Geochemical and geoelectric studies	Geol	36	2008	Geological Society of America	10.1130/g24654a.1
5703039bcf58f1ab94954a91	1	Complex Formation			Steinhauser, Stefan et al.	Complex Formation of 2, 6-Bis-(2?-hydroxyphenyl)pyridine with AlIII, FeIII and CuII	Zeitschrift f�r anorganische und allgemeine Chemie	630	2004	Wiley-Blackwell	10.1002/zaac.200400235
5a0493edcf58f1b96402aae7	144	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54be90c7e13823299564b137	43	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
5732032ecf58f19cbcbc550f	13	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5713034ccf58f175a32a0111	339	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5c2d0a801faed655488b3dfb	344	Dwyka mention	283.5	302.5	Kamenetsky, Vadim S. et al.	Composition and emplacement of the Benfontein kimberlite sill complex (Kimberley, South Africa): Textural, petrographic and melt inclusion constraints	Lithos	324	2019	Elsevier	10.1016/j.lithos.2018.11.017
574f9a2fcf58f13bebe8af72	542	Prairie Evaporite Formation	385.3	397.5	McIntosh, R. A. and Wardlaw, N. C.	Barren halite bodies in the sylvinite mining zone at Esterhazy, Saskatchewan	Canadian Journal of Earth Sciences	5	1968	Canadian Science Publishing	10.1139/e68-120
55b3055ce138231cbdd6cf97	3564	Marada mention			Goudarzi, Gus H.	Geology and mineral resources of Libya - a reconnaissance	Professional Paper		1970	United States Geological Survey	10.3133/pp660
57c91310cf58f17b7ba8638b	101	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
565df234cf58f148c57eb7c2	125	Mullite Hematite Magnetite Dolomite			Valentim, Bruno et al.	Characteristics of ferrospheres in fly ashes derived from bokaro and jharia (jharkand, India) coals	International Journal of Coal Geology		2015	Elsevier	10.1016/j.coal.2015.11.013
5779e785cf58f193564e9502	283	Point Formation			LIPSON, JOSEPH	POTASSIUM-ARGON DATING OF SEDIMENTARY ROCKS	Geol Soc America Bull	69	1958	Geological Society of America	10.1130/0016-7606(1958)69[137:pdosr]2.0.co;2
57f35142cf58f1865059d378	95	Ternary Complex Formation			Jakusch, Tamás and Kiss, Tamás	Characterisation of Ternary Complex Formation Between [Ru III (edta)] - and Various Bidentate Ligands	Zeitschrift für anorganische und allgemeine Chemie	639	2013	Wiley	10.1002/zaac.201300111
557f199ce13823bc80ba25a0	891	Salado mention	256.028	262.2168	Brokaw, Arnold Leslie	Geology and hydrology of the Carlsbad potash area, Eddy and Lea Counties, New Mexico	Open-File Report		1972	United States Geological Survey	10.3133/ofr7249
5598d566e1382390cc640f84	158	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c2ce13cf58f1a8110b8b48	415	Ca Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5713034ccf58f175a32a0111	334	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
559d4d6ee138230816dad784	62	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
57d0097ccf58f145d627bfaf	49	Maha Sarakhan Formation			Zhang, Xi-Ying et al.	Reconstruction of Late Cretaceous coastal paleotemperature from halite deposits of the Late Cretaceous Nongbok Formation (Khorat Plateau, Laos)	Palaeoworld	25	2016	Elsevier	10.1016/j.palwor.2015.11.004
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5713034ccf58f175a32a0111	334	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
54c060fbe1382389c54c3757	332	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c35bc5cf58f1a8110b8fcc	185	Salina Group	416	443.7	Horita, Juske et al.	Chemical evolution of seawater during the Phanerozoic Implications from the record of marine evaporites	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(01)00884-5
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5713034ccf58f175a32a0111	10	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b8484be13823bd29ba869d	393	Paradox mention	306	319.714	Bartsch-Winkler, Susan B. et al.	Mineral resources of the Negro Bill Canyon Wilderness Study Area, Grand County, Utah	Bulletin		1990	United States Geological Survey	10.3133/b1754D
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5590c401e13823109f3ef1e0	6	Oil mention	471.8	488.3	Taylor, O. J.	Hydrologic-information needs for oil-shale development, northwestern Colorado	Water-Resources Investigations Report		1982	United States Geological Survey	10.3133/wri824076
57c91310cf58f17b7ba8638b	5	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5713034ccf58f175a32a0111	335	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5713034ccf58f175a32a0111	211	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a0493edcf58f1b96402aae7	332	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c0d379cf58f16e99a378b9	307	Wellington mention	279.003	282	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5713034ccf58f175a32a0111	125	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
598a49bfcf58f15ca64bd3cd	183	Perovskite Dolomite			Abersteiner, Adam et al.	Petrographic and melt-inclusion constraints on the petrogenesis of a magmaclast from the Venetia kimberlite cluster, South Africa	Chemical Geology	455	2017	Elsevier	10.1016/j.chemgeo.2016.08.029
563bc6dacf58f13ba85ac0d9	290	Strontianite Sylvite Dolomite			Kazemi Nia Korrani, Aboulghasem et al.	Coupling IPhreeqc with UTCHEM to model reactive flow and transport	Computers & Geosciences		2015	Elsevier	10.1016/j.cageo.2015.06.004
54bedb19e13823023e43d91d	35	Prairie Evaporite Formation	385.3	397.5	Baadsgaard, H.	Rb□r and K□a isotope systematics in minerals from potassium horizons in the prairie evaporite formation, Saskatchewan, Canada	Chemical Geology: Isotope Geoscience section	66	1987	Elsevier	10.1016/0168-9622(87)90022-4
5713034ccf58f175a32a0111	84	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57e65deecf58f186b6da86bd	118	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
59cf6b49cf58f1781e18231b	59	Quartz Albite Dolomite			Alhassawi, Hassan and Romero-Zerón, Laura	Novel surfactant delivery system for controlling surfactant adsorption onto solid surfaces. Part II: Dynamic adsorption tests	The Canadian Journal of Chemical Engineering	93	2015	Wiley-Blackwell	10.1002/cjce.22231
5713034ccf58f175a32a0111	297	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55b8b478e1382373b63b81e1	13	Castile Formation	253.8	260.4	Brookins, Douglas G. et al.	Potassium-argon dating of polyhalite in southeastern New Mexico	Geochimica et Cosmochimica Acta	44	1980	Elsevier	10.1016/0016-7037(80)90153-2
55b3641de138231cbdd6d189	3249	Pierre Shale	65.5	145.5	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
5713034ccf58f175a32a0111	149	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
56a03702cf58f1079fd4b9f0	155	Quartz Dolomite			Dewaele, S. et al.	Fluid evolution along multistage composite fault systems at the southern margin of the Lower Palaeozoic Anglo-Brabant fold belt, Belgium	Geofluids	4	2004	Wiley-Blackwell	10.1111/j.1468-8123.2004.00096.x
5a0493edcf58f1b96402aae7	198	Carnallite mention			Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
550ec333e1382369a6f93f25	323	Zechstein mention	251.902	273.01	Stewart, S	Exploring the continental shelf for low geological risk nuclear waste repository sites using petroleum industry databases: a UK case study	Engineering Geology	67	2002	Elsevier	10.1016/S0013-7952(02)00150-3
55b67d1ae1382373b63b7852	1235	Petroleum Clay Formation				List of referees, list of contents, subject index and author index	Geochimica et Cosmochimica Acta		1988	Elsevier	10.1016/0016-7037(88)90120-2
55bfc14ecf58f16e99a3703b	189	Louann mention	145	174.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
5598d566e1382390cc640f84	170	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55ae0df7e13823763a830928	1357	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
56a69cadcf58f1944252e14d	30	Augusta Victoria Formation			Campos, Eduardo A. et al.	Magmatic Fluid Inclusions from the Zaldivar Deposit, Northern Chile: The Role of Early Metal-bearing Fluids in a Porphyry Copper System	Resource Geology	56	2006	Wiley-Blackwell	10.1111/j.1751-3928.2006.tb00262.x
558df7d7e13823109f3ee082	2101	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
577959b6cf58f16b6b61b62a	230	California mention			INGERSON, EARL	NONRADIOGENIC ISOTOPES IN GEOLOGY: A REVIEW	Geol Soc America Bull	64	1953	Geological Society of America	10.1130/0016-7606(1953)64[301:niigar]2.0.co;2
575d04f6cf58f198893b8def	475	Prairie Evaporite Formation	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
574fae1acf58f142f8fdc4f8	47	Prairie Evaporite mention	385.3	397.5	Mossman, D. J. et al.	Mineralogy of clay marker seams in some Saskatchewan potash mines	Canadian Journal of Earth Sciences	19	1982	Canadian Science Publishing	10.1139/e82-187
5713034ccf58f175a32a0111	77	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
55bf8aa9e138232db707b806	107	Prairie Formation	359.2	416	Koehler, Geoff and Kyser, T.K.	The significance of hydrogen and oxygen stable isotopic fractionations between carnallite and brine at low temperature: Experimental and empirical results	Geochimica et Cosmochimica Acta	60	1996	Elsevier	10.1016/0016-7037(96)00127-5
55b6d6a7e13823bd29ba7dcc	8138	Salt mention	251	260.4	Darton, Nelson Horatio	"Red Beds" and associated formations in New Mexico, with an outline of the geology of the state	Bulletin		1928	United States Geological Survey	
55b78281e13823bd29ba8218	1944	Salado mention	256.028	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
577c41d6cf58f188cebdd1fb	60	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54c060fbe1382389c54c3757	261	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55baa3b5e1382373b63b89e7	96	Sedom Fm	5.332	23.03	Stein, M. et al.	The impact of brine-rock interaction during marine evaporite formation on the isotopic Sr record in the oceans: evidence from Mt. Sedom, Israel	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00370-7
57e65deecf58f186b6da86bd	81	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
57c91310cf58f17b7ba8638b	116	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
5713034ccf58f175a32a0111	335	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5a0493edcf58f1b96402aae7	363	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5713034ccf58f175a32a0111	88	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57e65deecf58f186b6da86bd	3	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
55c36968cf58f1a8110b9014	58	Evaporite mention			Brennan, Sean T and Lowenstein, Tim K	The major-ion composition of silurian seawater	Geochimica et Cosmochimica Acta	66	2002	Elsevier	10.1016/S0016-7037(02)00870-0
55b3641de138231cbdd6d189	3249	Pierre Shale	65.5	145.5	U.S. Geological Survey	Geological Survey research 1963; Short papers in geology and hydrology, Articles 122-172	Professional Paper		1964	United States Geological Survey	10.3133/pp475D
5509217ee138238460c4f689	203	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5a0493edcf58f1b96402aae7	174	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
5713034ccf58f175a32a0111	77	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57c1a08dcf58f16cbd62157f	210	Tiberias mention			MÖLLER, P. et al.	Relationship of brines in the Kinnarot Basin, Jordan-Dead Sea Rift Valley	Geofluids	12	2012	Wiley	10.1111/j.1468-8123.2011.00353.x
558bbed5e13823109f3ed4f8	134	Paradox Member	299	318.1	Hite, R. J.	Subsurface geology of a potential waste emplacement site, Salt Valley Anticline, Grand County, Utah	Open-File Report		1977	United States Geological Survey	
54eba4f0e138237cc9151b1e	80	Boulby mention			Talbot, C.J. et al.	The structural geology of boulby (potash) mine, Cleveland, United Kingdom	Tectonophysics	3-4	1982	Elsevier	10.1016/0040-1951(82)90102-0
5a0493edcf58f1b96402aae7	164	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
54b43250e138239d8684b46c	50	Mengyejing Formation	65.5	99.6	Wang, Licheng et al.	First SHRIMP U–Pb zircon ages of the potash-bearing Mengyejing Formation, Simao Basin, southwestern Yunnan, China	Cretaceous Research	52	2015	Elsevier	10.1016/j.cretres.2014.09.008
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016
575d04f6cf58f198893b8def	153	Prairie Evaporite mention	385.3	397.5	Cheng, Huai De et al.	Implications for the origin of secondary sylvite from a simulation of carnallite dissolution	Journal of Geochemical Exploration		2016	Elsevier	10.1016/j.gexplo.2016.03.016

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5c1c9dec1faed65548896fba	29	Syenite Sandstone			Geilfus, Christoph-Martin	Chloride in soil: From nutrient to soil pollutant	Environmental and Experimental Botany	157	2019	Elsevier	10.1016/j.envexpbot.2018.10.035
5a958099cf58f113f376dc05	206	Apatite Halite/sylvite NaCl/KCl Dolomite			Abersteiner, Adam et al.	Significance of halogens (F, Cl) in kimberlite melts: Insights from mineralogy and melt inclusions in the Roger pipe (Ekati, Canada)	Chemical Geology	478	2018	Elsevier	10.1016/j.chemgeo.2017.06.008
54c060fbe1382389c54c3757	216	Sylvite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
54bffee9e1382389c54c3458	4	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
57c91310cf58f17b7ba8638b	85	Clean Chamber mention			Noguchi, T. et al.	Sylvite and halite on particles recovered from 25143 Itokawa: A preliminary report	Meteoritics & Planetary Science	49	2014	Wiley	10.1111/maps.12333
55c48dc6cf58f1a8110b94db	98	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
54c060fbe1382389c54c3757	325	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
55c2ce13cf58f1a8110b8b48	354	Brine mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5a0493edcf58f1b96402aae7	325	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
56de7f80cf58f18eca0d2b65	229	End-Member Librarya Group			Baldridge, Alice M.	Mars remote-sensing analog studies in the Badwater Basin, Death Valley, California	Journal of Geophysical Research	109	2004	Wiley-Blackwell	10.1029/2004JE002315
59ed3115cf58f190e355e980	46	Direct Formation				All in One - Complete Issue: ChemInform 6/2016	ChemInform	47	2016	Wiley-Blackwell	10.1002/chin.201690601
577c41d6cf58f188cebdd1fb	1	Prairie Evaporite Formation	385.3	397.5	WARDLAW, NORMAN C.	Carnallite-Sylvite Relationships in the Middle Devonian Prairie Evaporite Formation, Saskatchewan	Geol Soc America Bull	79	1968	Geological Society of America	10.1130/0016-7606(1968)79[1273:critmd]2.0.co;2
54bffee9e1382389c54c3458	6	Sedom mention	5.332	23.03	García-Veigas, Javier et al.	Evidence of potash salt formation in the Pliocene Sedom Lagoon (Dead Sea Rift, Israel)	Chemical Geology	265	2009	Elsevier	10.1016/j.chemgeo.2009.05.013
5626ca66cf58f15b6993aaaa	108	Shales Sandstone			Winid, Bogumiła	Bromine and water quality – Selected aspects and future perspectives	Applied Geochemistry		2015	Elsevier	10.1016/j.apgeochem.2015.10.004
5713034ccf58f175a32a0111	89	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5732032ecf58f19cbcbc550f	224	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
5c6237091faed65548958f65	35	Soligorsk Formation	359.2	385.3	Plax, Dmitry P. et al.	A new genus of eurypterid (Chelicerata, Eurypterida) from the Upper Devonian salt deposits of Belarus	Journal of Paleontology	92	2018	Cambridge University Press (CUP)	10.1017/jpa.2018.11
56c1d9bbcf58f15c72c9075f	80	Halite Member	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5a0493edcf58f1b96402aae7	372	Halite mention	251	299	Pueyo, Juan José et al.	Lithium saltworks of the Salar de Atacama: A model for MgSO4-free ancient potash deposits	Chemical Geology	466	2017	Elsevier	10.1016/j.chemgeo.2017.06.005
55c13e85cf58f1a8110b7ec2	208	Ore Formation				Goldschmidt Abstracts 2009 – K	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.05.009
54be90c7e13823299564b137	43	Prarie Formation			Wittrup, M.B. and Kyser, T.K.	The petrogenesis of brines in Devonian potash deposits of western Canada	Chemical Geology		1990	Elsevier	10.1016/0009-2541(90)90077-K
55b7c5a4e13823bd29ba8382	324	Salado Formation	251	260.4	Harrington, James Foster et al.	Sources of fertilizer minerals in South America; a preliminary study	Bulletin		1966	United States Geological Survey	10.3133/b1240
57e65deecf58f186b6da86bd	93	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
56c1d9bbcf58f15c72c9075f	80	Halite mention	251	299	Tabakh, Mohamed El et al.	Diagenetic origin of Basal Anhydrite in the Cretaceous Maha Sarakham salt: Khorat Plateau, NE Thailand	Sedimentology	45	1998	Wiley-Blackwell	10.1046/j.1365-3091.1998.00162.x
5713034ccf58f175a32a0111	181	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
559d4d6ee138230816dad784	30	Salado Formation	251	260.4	John, Charles B. et al.	Potash ore reserves in the proposed Waste Isolation Pilot Plant area, Eddy County, southeastern New Mexico	Open-File Report		1978	United States Geological Survey	
5713034ccf58f175a32a0111	235	Sylvite mention			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
5713034ccf58f175a32a0111	339	Sylvite Member			Cendon, D. I. et al.	The origin of barren bodies in the Subiza potash deposit, Navarra, Spain; implications for sylvite formation	Journal of Sedimentary Research	68	1998	Society for Sedimentary Geology	10.2110/jsr.68.43
57e65deecf58f186b6da86bd	198	Qinghai Salt Lake Group			Wang, Xuming et al.	Potash flotation practice for carnallite resources in the Qinghai Province, PRC	Minerals Engineering		2014	Elsevier	10.1016/j.mineng.2014.04.012
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5703039bcf58f1ab94954a91	139	Complex Formation			Steinhauser, Stefan et al.	Complex Formation of 2, 6-Bis-(2?-hydroxyphenyl)pyridine with AlIII, FeIII and CuII	Zeitschrift f�r anorganische und allgemeine Chemie	630	2004	Wiley-Blackwell	10.1002/zaac.200400235

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
54c060fbe1382389c54c3757	335	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
5598d566e1382390cc640f84	121	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
55b78281e13823bd29ba8218	1941	Salado mention	256.0278	262.2168	Edited by Bartsch-Winkler, Susan B. and Donatich, Alessandro J.	Mineral and Energy Resources of the Roswell Resource Area, East-Central New Mexico	Bulletin		1995	United States Geological Survey	
55c2e5c8cf58f1a8110b8c08	140	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55c0d9d1cf58f16e99a378ec	62	Nesquehonite mention			Velbel, Michael A. et al.	Terrestrial weathering of Antarctic stone meteorites: Formation of Mg-carbonates on ordinary chondrites	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90400-Y
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
54be1b30e138233c8bc4f9d7	71	Saliferous Formation	359.2	374.5	Makhnach, A. et al.	Comparative analysis of sulfur isotope behavior in the basins with evaporites of chloride and sulfate types	Sedimentary Geology	134	2000	Elsevier	10.1016/S0037-0738(00)00057-9
55ae0df7e13823763a830928	1354	Salado Formation	251	260.4	edited by Bartsch-Winkler, S. B.	Mineral and energy resources of the BLM Roswell Resource Area, east-central New Mexico	Open-File Report		1992	United States Geological Survey	
56a038b2cf58f1079fd4ba21	98	Edwards Group	99.6	145.5	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
5598d566e1382390cc640f84	139	Mengye mention			Li, Minghui et al.	The origins of the Mengye potash deposit in the Lanping–Simao Basin, Yunnan Province, Western China	Ore Geology Reviews		2015	Elsevier	10.1016/j.oregeorev.2015.02.003
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
56a40027cf58f1944252b060	129	ILD mention			Fueten, F. et al.	Stratigraphy and structure of interior layered deposits in west Candor Chasma, Mars, from High Resolution Stereo Camera (HRSC) stereo imagery and derived elevations	Journal of Geophysical Research	113	2008	Wiley-Blackwell	10.1029/2007JE003053
54d25bffe138235369fe011c	93	Aragonite Bloedite Calcite Dolomite			Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
57c86f1bcf58f141c6f7b1f8	247	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54e52d30e138237cc9150011	99	Dakota Sandstone	65.5	145.5	Szynkiewicz, Anna et al.	Efflorescence as a source of hydrated sulfate minerals in valley settings on Mars	Earth and Planetary Science Letters		2014	Elsevier	10.1016/j.epsl.2014.02.035
55a7bdc9e13823757cc7020e	960	Colorado mention	90.825	95.55	Collins, Donley S. et al.	Bibliography for update and revision of U.S.G.S. Bulletin 1114, Minerals of Colorado -- a 100 year record, by Edwin B. Eckel, Part A - Paper copy --Bibliography data file disks	Open-File Report		1989	United States Geological Survey	10.3133/ofr89206A
55bfc14ecf58f16e99a3703b	365	Haynesville Formation	150.8	155.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
57c86f1bcf58f141c6f7b1f8	247	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
57934985cf58f16f329e7c23	290	Halite Calcite Dolomite			Kauffman, Shelley J. et al.	Lithological and hydrological influences on ground-water composition in a heterogeneous carbonate-clay aquifer system	Geological Society of America Bulletin	110	1998	GSA	10.1130/0016-7606(1998)110<1163:lahiog>2.3.co;2
55099f05e138238460c4f9b0	155	Calcite Dolomite			Cravotta, Charles A.	Dissolved metals and associated constituents in abandoned coal-mine discharges, Pennsylvania, USA. Part 2: Geochemical controls on constituent concentrations	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.10.003
579d2a77cf58f138a3ffc19d	91	Kieserite Dolomite			Kamahara, Hirotsugu et al.	Improvement potential for net energy balance of biodiesel derived from palm oil: A case study from Indonesian practice	Biomass and Bioenergy	34	2010	Elsevier	10.1016/j.biombioe.2010.07.014
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
58c1de9acf58f1094097ba52	87	Beacon Sandstone	65.5	251	Gibson, G. W.	Geological Investigations in Southern Victoria Land, Antarctica	New Zealand Journal of Geology and Geophysics	5	1962	Taylor and Francis	10.1080/00288306.1962.10420093
577959b6cf58f16b6b61b62a	230	California mention			INGERSON, EARL	NONRADIOGENIC ISOTOPES IN GEOLOGY: A REVIEW	Geol Soc America Bull	64	1953	Geological Society of America	10.1130/0016-7606(1953)64[301:niigar]2.0.co;2
57c87f71cf58f147df6ab61d	98	TES Dataa Mineral Group			Glotch, Timothy D. and Rogers, A. Deanne	Evidence for magma-carbonate interaction beneath Syrtis Major, Mars	Journal of Geophysical Research: Planets	118	2013	Wiley	10.1029/2012JE004230
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55092590e138238460c4f6a7	283	Source Halite Dolomite			Yechieli, Y. et al.	Evolution of brackish groundater in a typical arid region: Northern Arava Rift Valley, southern Israel	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90026-Y
557c4c36e138239225f867b7	197	Mancos mention	72.1	100.5	Stephens, D.W. et al.	Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the middle Green River basin, Utah, 1986-87	Water-Resources Investigations Report		1988	United States Geological Survey	10.3133/wri884011
590188eecf58f19f6f786330	181	Bay Dolomite	513	542		World News on Mineral Occurrences	Rocks & Minerals	30	1955	Taylor and Francis	10.1080/00357529.1955.11767819
598c0bc9cf58f14465ea778f	53	Tropico Group	1.806	65.5	Abbey, William J. et al.	Deep UV Raman spectroscopy for planetary exploration: The search for in situ organics	Icarus	290	2017	Elsevier	10.1016/j.icarus.2017.01.039
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5732032ecf58f19cbcbc550f	352	Vaca Triste mention			C. L. Stein et al.	Silicate Diagenesis in the Salado Formation, Southeastern New Mexico	SEPM Journal of Sedimentary Research	Vol. 61	1991	Society for Sedimentary Geology	10.1306/d42676c2-2b26-11d7-8648000102c1865d
56a1ac99cf58f19442528389	1984	Aragonite Monohydrocalcite Dolomite			Gibson, Everett K. et al.	Chemical weathering and diagenesis of a cold desert soil from Wright Valley, Antarctica: An analog of Martian weathering processes	Journal of Geophysical Research	88	1983	Wiley-Blackwell	10.1029/JB088iS02p0A912
57c86f1bcf58f141c6f7b1f8	520	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
558df7d7e13823109f3ee082	2344	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55541d92e138239301770a0e	226	Burns mention	23.03	33.9	West, Michael D. et al.	The geology of Australian Mars analogue sites	Planetary and Space Science	58	2010	Elsevier	10.1016/j.pss.2009.06.012
57c19a96cf58f16ab04df2f3	196	Athabasca mention	538.8	1600	Richard, A. et al.	Synchrotron XRF and XANES investigation of uranium speciation and element distribution in fluid inclusions from unconformity-related uranium deposits	Geofluids	13	2013	Wiley	10.1111/gfl.12009
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
54b4327de138239d868530d9	128	Navarra mention	0	36	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024
55c0d379cf58f16e99a378b9	250	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
58cded3ccf58f12a356abeab	230	Mineral mention	307	315.2	Delgado, Gabriel et al.	Carbonate and Phosphate Precipitation by Saline Soil Bacteria in a Monitored Culture Medium	Geomicrobiology Journal	30	2013	Taylor and Francis	10.1080/01490451.2012.665148
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5694747ccf58f1377d598c19	212	Space Group			Tosca, Nicholas J. et al.	Fe oxidation processes at Meridiani Planum and implications for secondary Fe mineralogy on Mars	Journal of Geophysical Research	113	2008	Wiley-Blackwell	10.1029/2007JE003019
551775abe1382394b500d785	41	Calatayud Gypsum Formation			Gutiérrez, Francisco	Gypsum karstification induced subsidence: effects on alluvial systems and derived geohazards (Calatayud Graben, Iberian Range, Spain)	Geomorphology	16	1996	Elsevier	10.1016/0169-555X(96)00004-9
577b3daccf58f13110d8e98f	233	Fe mention			OMORI, KEIICHI and KERR, PAUL F.	Infrared Studies of Saline Sulfate Minerals	Geol Soc America Bull	74	1963	Geological Society of America	10.1130/0016-7606(1963)74[709:isossm]2.0.co;2
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55099f05e138238460c4f9b0	155	Calcite Dolomite			Cravotta, Charles A.	Dissolved metals and associated constituents in abandoned coal-mine discharges, Pennsylvania, USA. Part 2: Geochemical controls on constituent concentrations	Applied Geochemistry	23	2008	Elsevier	10.1016/j.apgeochem.2007.10.003
5907be14cf58f1b18607fd22	59	XS Dolomite			Geyne, A. R. et al.	The Pachuca-Real Del Monte Mining District	Rocks & Minerals	45	1970	Taylor and Francis	10.1080/00357529.1970.11763776
5954f9facf58f17e38362d4e	42	Superphosphate Dolomite			Hogg, D. E. and Karlovsky, J.	The relative effectiveness of various magnesium fertilisers on a magnesium-deficient pasture	New Zealand Journal of Agricultural Research	11	2012	Taylor and Francis	10.1080/00288233.1968.10431644
55c2ce13cf58f1a8110b8b48	335	Brine Formation			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
578cff68cf58f101e2dda387	171	Atherton Formation	0.6538	5.1164	Bain, Roger J.	Diagenetic, nonevaporative origin for gypsum	Geol	18	1990	GSA	10.1130/0091-7613(1990)018<0447:dnofg>2.3.co;2
57437547cf58f1350bacb6cd	18	Brine Formation			CUI, Xiangmei et al.	Simulated Dynamic Evaporation of Yiliping Salt Lake Brine	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12279_6
5503421ae1382326932d7e6d	559	Salt mention	251	260.4	Warren, John K.	Evaporites through time: Tectonic, climatic and eustatic controls in marine and nonmarine deposits	Earth-Science Reviews	3-4	2010	Elsevier	10.1016/j.earscirev.2009.11.004
55088ec0e138237a6f73918a	157	Carnallite mention			Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
57f3fc5ccf58f1bee1bbd2ba	31	Discussion Phase Formation			Dinnebier, Robert E. et al.	3Mg(OH) 2 ·MgSO 4 ·8H 2 O: A Metastable Phase in the System Mg(OH) 2 -MgSO 4 -H 2 O	Zeitschrift für anorganische und allgemeine Chemie	639	2013	Wiley	10.1002/zaac.201300128
57c86f1bcf58f141c6f7b1f8	338	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
57c1a06bcf58f16cbd621551	162	Saqiye Group	1.806	65.5	Möller, P. et al.	The hydrogeochemistry of subsurface brines in and west of the Jordan-Dead Sea Transform fault	Geofluids	14	2014	Wiley	10.1111/gfl.12077
54b4324ce138239d8684a8a0	145	Chlorite Kaolinite Goethite Dolomite			Forchielli, Angela et al.	Taphonomic traits of clay-hosted early Cambrian Burgess Shale-type fossil Lagerstätten in South China	Palaeogeography, Palaeoclimatology, Palaeoecology		2014	Elsevier	10.1016/j.palaeo.2013.08.001
5abaaa3ecf58f13ea8ecedc1	132	Li Dolomite	23.03	33.9	Poitras, J.T. et al.	Mars analog minerals' spectral reflectance characteristics under Martian surface conditions	Icarus	306	2018	Elsevier	10.1016/j.icarus.2018.01.023
57c86f1bcf58f141c6f7b1f8	441	Burns Formation	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55088ec0e138237a6f73918a	313	Carnallite mention			Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
57f3fc5ccf58f1bee1bbd2ba	31	Discussion Phase Formation			Dinnebier, Robert E. et al.	3Mg(OH) 2 ·MgSO 4 ·8H 2 O: A Metastable Phase in the System Mg(OH) 2 -MgSO 4 -H 2 O	Zeitschrift für anorganische und allgemeine Chemie	639	2013	Wiley	10.1002/zaac.201300128
55a43da1e13823757cc6f19a	156	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
57c86f1bcf58f141c6f7b1f8	388	Burns Formation	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
56e042b0cf58f169bff4b18e	113	Sulfate mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
54d25bffe138235369fe011c	93	Aragonite Bloedite Calcite Dolomite			Donovan, Joseph J and Rose, Arthur W	Geochemical evolution of lacustrine brines from variable-scale groundwater circulation	Journal of Hydrology	154	1994	Elsevier	10.1016/0022-1694(94)90211-9
5b6d936dcf58f1a92c2d33b5	129	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
57c3d54ccf58f146d5b258bd	57	Zechstein Group	251	260.4	Drijkoningen, Guy et al.	Seismic time-lapse effects of solution salt mining - a feasibility study	Geophysical Prospecting	60	2012	Wiley	10.1111/j.1365-2478.2011.00979.x
56e042b0cf58f169bff4b18e	300	Hematite mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
54d31be5e138235369fe047d	298	Calcite Dolomite			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
54ff667de13823a766aa7497	111	Dawsonite Diaspore Diopside Dolomite			Gherbi, Cherif et al.	An experimental study of lake water-sediment interaction rates	Comptes Rendus Geoscience	342	2010	Elsevier	10.1016/j.crte.2009.11.002
54b43246e138239d86849872	104	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
54ff667de13823a766aa7497	111	Dawsonite Diaspore Diopside Dolomite			Gherbi, Cherif et al.	An experimental study of lake water-sediment interaction rates	Comptes Rendus Geoscience	342	2010	Elsevier	10.1016/j.crte.2009.11.002
59069dcecf58f1491d1b327d	141	New Albany Shale	359.2	416	Coskren, Dennis	Minerals of Kentucky	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767295
55c48dc6cf58f1a8110b94db	330	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
558c6b00e13823109f3ed87c	1893	Creek mention			Brobst, Donald Albert and Tucker, Jerry D.	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
54b4328ce138239d86855aad	453	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
57c86f1bcf58f141c6f7b1f8	307	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
57ca1161cf58f10278760d05	249	Mineral Group	65.5	251	Rogers, A. Deanne and Hamilton, Victoria E.	Compositional provinces of Mars from statistical analyses of TES, GRS, OMEGA and CRISM data	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004690
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55bbaa3fe1382373b63b8e28	336	Anglesite Gypsum Calcite Dolomite			Al, T.A. et al.	Aqueous geochemistry and analysis of pyrite surfaces in sulfide-rich mine tailings	Geochimica et Cosmochimica Acta	61	1997	Elsevier	10.1016/S0016-7037(97)00113-0
54b4327ee138239d86853337	25	Khorat mention	33.9	237	Zhang, Xiying et al.	Origin of the late Cretaceous potash-bearing evaporites in the Vientiane Basin of Laos: δ11B evidence from borates	Journal of Asian Earth Sciences		2013	Elsevier	10.1016/j.jseaes.2012.11.036
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
56a30a94cf58f19442529de6	78	Carbonate Group	251	260.4	Rogers, A. D. and Aharonson, O.	Mineralogical composition of sands in Meridiani Planum determined from Mars Exploration Rover data and comparison to orbital measurements	Journal of Geophysical Research	113	2008	Wiley-Blackwell	10.1029/2007JE002995
58783bc2cf58f19d73f2af15	244	Directive mention			Arvanitoyannis, Ioannis S. et al.	Presentation and comments on EU legislation related to food industries-environment interactions: organic contaminants (chemicals, pesticides, dioxins, furans, biocides and their waste management)	International Journal of Food Science & Technology	41	2006	Wiley	10.1111/j.1365-2621.2006.01253.x
58cded3ccf58f12a356abeab	230	Mineral mention	307	315.2	Delgado, Gabriel et al.	Carbonate and Phosphate Precipitation by Saline Soil Bacteria in a Monitored Culture Medium	Geomicrobiology Journal	30	2013	Taylor and Francis	10.1080/01490451.2012.665148
557f61d1e13823bc80ba26ae	3179	Entrada Formation	145.5	199.6	Lovering, T.S. et al.	Ore deposits of the Gilman District, Eagle County, Colorado	Professional Paper		1978	United States Geological Survey	10.3133/pp1017
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
56e042b0cf58f169bff4b18e	133	Sulfate mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
54b4328ce138239d86855aad	453	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
54b43246e138239d86849872	313	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
590188eecf58f19f6f786330	179	Bay Dolomite	513	542		World News on Mineral Occurrences	Rocks & Minerals	30	1955	Taylor and Francis	10.1080/00357529.1955.11767819
57c86f1bcf58f141c6f7b1f8	496	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55087dc1e138237a6f73910e	145	Moreno Formation	65.5	99.6	Presser, Theresa S. and Swain, Walter C.	Geochemical evidence for Se mobilization by the weathering of pyritic shale, San Joaquin Valley, California, U.S.A.	Applied Geochemistry	5	1990	Elsevier	10.1016/0883-2927(90)90066-E
55c48dc6cf58f1a8110b94db	330	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
550895c3e138237a6f7391ae	160	Prairie Formation	359.2	416	Spencer, Ronald J.	Origin of CaCl brines in Devonian formations, western Canada sedimentary basin	Applied Geochemistry	2	1987	Elsevier	10.1016/0883-2927(87)90022-9
55c2e5c8cf58f1a8110b8c08	140	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
5509217ee138238460c4f689	132	Salado Formation	251	260.4	Lambert, Steven J.	Geochemistry of the waste isolation pilot plant (WIPP) site, southestern New Mexico, U.S.A.	Applied Geochemistry	7	1992	Elsevier	10.1016/0883-2927(92)90068-E
5cfd8fb70b45c76caf8df585	2	Francis Group	305.425	305.7125	Mahadevan, C. K. and Saravanan, R. S. S.	Nucleation Parameters of Pure and Impurity Added MgSO 4 ·7H 2 O Single Crystals	Materials and Manufacturing Processes	22	2007	Informa UK Limited	10.1080/10426910701190782
54c060fbe1382389c54c3757	335	Carnallite mention			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
5ab91987cf58f16020dc43c8	164	Average Group			Guseva, N.V. et al.	Formation of the chemical composition of brackish and brine groundwater in the Tuva depression and surrounding areas	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.01.011
54b43246e138239d86849872	289	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
54b43246e138239d86849872	104	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
5a2f1524cf58f1a44cb985a4	120	Nontronite Talc Calcite Dolomite			Salvatore, M.R. et al.	Bulk mineralogy of the NE Syrtis and Jezero crater regions of Mars derived through thermal infrared spectral analyses	Icarus	301	2018	Elsevier	10.1016/j.icarus.2017.09.019

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a43da1e13823757cc6f19a	149	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
57c8716acf58f1429a428969	148	Mineral Group	65.5	251	Thorpe, Michael T. et al.	Quantitative compositional analysis of sedimentary materials using thermal emission spectroscopy: 1. Application to sedimentary rocks	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2015JE004863
54b43246e138239d86849834	158	Calcite Monohydrocalcite Dolomite			Teller, James T. and Last, Williams M.	Paleohydrological indicators in playas and salt lakes, with examples from Canada, Australia, and Africa	Palaeogeography, Palaeoclimatology, Palaeoecology	76	1990	Elsevier	10.1016/0031-0182(90)90114-M
57c86f1bcf58f141c6f7b1f8	496	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
578b8ab6cf58f1645f54f0c6	53	Salado mention	256.0278	262.2168	LOWENSTEIN, TIM K.	Origin of depositional cycles in a Permian "saline giant": The Salado (McNutt zone) evaporites of New Mexico and Texas	Geological Society of America Bulletin	100	1988	GSA	10.1130/0016-7606(1988)100<0592:oodcia>2.3.co;2
55c44c3ecf58f1a8110b93c8	120	Tochilinite Breunnerite Dolomite			Court, Richard W. and Sephton, Mark A.	New estimates of the production of volatile gases from ablating carbonaceous micrometeoroids at Earth and Mars during an E-belt-type Late Heavy Bombardment	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.09.010
54b4328be138239d86855631	294	Hlrka Formation			İnci, Uğur	Miocene alluvial fan-alkaline playa lignite-trona bearing deposits from an inverted basin in Anatolia: sedimentology and tectonic controls on deposition	Sedimentary Geology	71	1991	Elsevier	10.1016/0037-0738(91)90008-2
56e042b0cf58f169bff4b18e	113	Sulfate mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
558c6b00e13823109f3ed87c	1893	Creek mention			Brobst, Donald Albert and Tucker, Jerry D.	X-ray mineralogy of the Parachute Creek Member, Green River Formation, in the northern Piceance Creek basin, Colorado	Professional Paper		1973	United States Geological Survey	10.3133/pp803
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
577b3daccf58f13110d8e98f	233	Fe mention			OMORI, KEIICHI and KERR, PAUL F.	Infrared Studies of Saline Sulfate Minerals	Geol Soc America Bull	74	1963	Geological Society of America	10.1130/0016-7606(1963)74[709:isossm]2.0.co;2
57c86f1bcf58f141c6f7b1f8	445	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54efdad4e138237cc9152cb8	386	Corral Amarillo Formation	-5.5012E-05	0.01143	Maza, Santiago N. et al.	Holocene ochreous lacustrine sediments within the Famatina Belt, NW Argentina: A natural case for fossil damming of an acid drainage system	Journal of South American Earth Sciences		2014	Elsevier	10.1016/j.jsames.2014.02.010
55ad3126e13823763a8303a0	163	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
57501d73cf58f16a9feeb329	251	Sainte-Foy mention	531.85	586.9	Bérubé, Marc-André et al.	Black shale heaving at Sainte-Foy, Quebec, Canada	Canadian Journal of Earth Sciences	23	1986	Canadian Science Publishing	10.1139/e86-163
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
5cfd8fb70b45c76caf8df585	2	Francis Group	305.425	305.7125	Mahadevan, C. K. and Saravanan, R. S. S.	Nucleation Parameters of Pure and Impurity Added MgSO 4 ·7H 2 O Single Crystals	Materials and Manufacturing Processes	22	2007	Informa UK Limited	10.1080/10426910701190782
56a22755cf58f19442528cce	26	Meridiani mention			Moore, Jeffrey M. et al.	Laboratory simulations of Mars evaporite geochemistry	Journal of Geophysical Research	115	2010	Wiley-Blackwell	10.1029/2008JE003208
57c86f1bcf58f141c6f7b1f8	338	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
5c3d9a5c1faed655488cc5a0	2	Francis Group	305.425	305.7125	da Costa Mello, Simone et al.	Response of tomato to polyhalite as a multi-nutrient fertilizer in southeast Brazil	Journal of Plant Nutrition	41	2018	Informa UK Limited	10.1080/01904167.2018.1497178
55c2a9cacf58f1a8110b8a1e	60	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
55c48dc6cf58f1a8110b94db	330	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57f3fc5ccf58f1bee1bbd2ba	94	Experimental Section Phase Formation			Dinnebier, Robert E. et al.	3Mg(OH) 2 ·MgSO 4 ·8H 2 O: A Metastable Phase in the System Mg(OH) 2 -MgSO 4 -H 2 O	Zeitschrift für anorganische und allgemeine Chemie	639	2013	Wiley	10.1002/zaac.201300128
557cd3cfe138239225f869e5	1323	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
54b43246e138239d86849872	104	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55c0d379cf58f16e99a378b9	250	Salado mention	256.0278	262.2168	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
550915e7e138238460c4f632	396	Salina mention	419.675	429.4	Wilson, T.P. and Long, D.T.	Geochemistry and isotope chemistry of CaNaCl brines in Silurian strata, Michigan Basin, U.S.A.	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90079-V
54b4328ae138239d868555665	87	Basque mention			Renaut, Robin W. and Long, Peter R.	Sedimentology of the saline lakes of the Cariboo Plateau, Interior British Columbia, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90051-1
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c44c3ecf58f1a8110b93c8	120	Tochilinite Breunnerite Dolomite			Court, Richard W. and Sephton, Mark A.	New estimates of the production of volatile gases from ablating carbonaceous micrometeoroids at Earth and Mars during an E-belt-type Late Heavy Bombardment	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.09.010
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
579d2a77cf58f138a3ffc19d	92	Kieserite Dolomite			Kamahara, Hirotsugu et al.	Improvement potential for net energy balance of biodiesel derived from palm oil: A case study from Indonesian practice	Biomass and Bioenergy	34	2010	Elsevier	10.1016/j.biombioe.2010.07.014
5907f64bcf58f1089d126201	23	Lock Port Dolostone				Index to Volume 60 (1985)	Rocks & Minerals	61	1986	Taylor and Francis	10.1080/00357529.1986.11768431
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
57c86f1bcf58f141c6f7b1f8	441	Burns Formation	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54b43246e138239d86849872	104	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55087dc1e138237a6f73910e	145	Moreno Formation	65.5	99.6	Presser, Theresa S. and Swain, Walter C.	Geochemical evidence for Se mobilization by the weathering of pyritic shale, San Joaquin Valley, California, U.S.A.	Applied Geochemistry	5	1990	Elsevier	10.1016/0883-2927(90)90066-E
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
5cd2be170b45c76caf88002e	21	Francis Group	305.425	305.7125	Ciceri, Davide et al.	Fertilizing Properties of Potassium Feldspar Altered Hydrothermally	Communications in Soil Science and Plant Analysis	50	2019	Informa UK Limited	10.1080/00103624.2019.1566922
55bfc14ecf58f16e99a3703b	365	Haynesville Formation	150.8	155.7	Land, Lynton S. et al.	Reactivity of evaporites during burial: An example from the Jurassic of Alabama	Geochimica et Cosmochimica Acta	59	1995	Elsevier	10.1016/0016-7037(95)00262-X
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
59069dcecf58f1491d1b327e	79	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
57c86f1bcf58f141c6f7b1f8	9	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54b4324be138239d8684a5e1	152	Mirabilite mention			Sinha, R. et al.	Late Quaternary palaeoclimatic reconstruction from the lacustrine sediments of the Sambhar playa core, Thar Desert margin, India	Palaeogeography, Palaeoclimatology, Palaeoecology	233	2006	Elsevier	10.1016/j.palaeo.2005.09.012
58b6558bcf58f1b09c25b181	157	Marizal Formation	99.6	145.5	Varejão, Filipe Giovanini et al.	Upper Aptian mixed carbonate-siliciclastic sequences from Tucano Basin, Northeastern Brazil: Implications for paleogeographic reconstructions following Gondwana break-up	Cretaceous Research		2016	Elsevier	10.1016/j.cretres.2016.06.014
5b6d936dcf58f1a92c2d33b5	23	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
58eb49b4cf58f19675055fb7	52	Treatment Dolomite			Cummings, G.A. et al.	The influence of mineral nutrition and time of year upon the elemental concentration of muscadine grapes (vitis rotundifolia)	Communications in Soil Science and Plant Analysis	4	1973	Taylor and Francis	10.1080/00103627309366439
59069dcecf58f1491d1b327e	79	Cave mention	5.333	11.63	Currens, James C.	Kentucky Caves: Natures Mineral Museums	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.11767292
54b4328ce138239d86855aad	453	Maha Sarakham Formation	65.5	145.5	El Tabakh, Mohamed et al.	Sedimentology of the Cretaceous Maha Sarakham evaporites in the Khorat Plateau of northeastern Thailand	Sedimentary Geology	123	1999	Elsevier	10.1016/S0037-0738(98)00083-9
56e2c03acf58f11c57ad6fd2	122	Calcite Dolomite			McDowell, Meryl L. and Hamilton, Victoria E.	Seeking phyllosilicates in thermal infrared data: A laboratory and Martian data case study	Journal of Geophysical Research	114	2009	Wiley-Blackwell	10.1029/2008JE003317
55b300e5e138231cbdd6cf7b	6215	Ag Millerite Dolomite			Heyl, Allen V. et al.	The Geology of the Upper Mississippi Valley Zinc-Lead District	Professional Paper		1959	United States Geological Survey	10.3133/pp309
56f1aa2ccf58f112c25e8d54	13	Bunter Sandstone	245	251	Holmes, M. R. J.	The magnesium requirements of arable crops	Journal of the Science of Food and Agriculture	13	1962	Wiley-Blackwell	10.1002/jsfa.2740131101
57c86f1bcf58f141c6f7b1f8	461	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55ada53de13823763a830664	272	WIRIBb ABS REF mention			Livo, K. Eric et al.	SPVIEW; spectral plot program for accessing the USGS Digital Spectral Library database with MS-DOS personal computers, version 1.00	Open-File Report		1993	United States Geological Survey	
55ad3126e13823763a8303a0	118	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
56e042b0cf58f169bff4b18e	300	Hematite mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
56a1ac99cf58f19442528389	1984	Aragonite Monohydrocalcite Dolomite			Gibson, Everett K. et al.	Chemical weathering and diagenesis of a cold desert soil from Wright Valley, Antarctica: An analog of Martian weathering processes	Journal of Geophysical Research	88	1983	Wiley-Blackwell	10.1029/JB088iS02p0A912

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c319eacf58f1a8110b8db1	185	Sedom Fm	5.332	23.03	Klein-BenDavid, Ofra et al.	The evolution of marine evaporitic brines in inland basins: The Jordan-Dead Sea Rift valley	Geochimica et Cosmochimica Acta	68	2004	Elsevier	10.1016/j.gca.2003.08.002
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
577b3daccf58f13110d8e98f	233	Fe mention			OMORI, KEIICHI and KERR, PAUL F.	Infrared Studies of Saline Sulfate Minerals	Geol Soc America Bull	74	1963	Geological Society of America	10.1130/0016-7606(1963)74[709:isossm]2.0.co;2
58b6558bcf58f1b09c25b181	157	Marizal Formation	99.6	145.5	Varejão, Filipe Giovanini et al.	Upper Aptian mixed carbonate-siliciclastic sequences from Tucano Basin, Northeastern Brazil: Implications for paleogeographic reconstructions following Gondwana break-up	Cretaceous Research		2016	Elsevier	10.1016/j.cretres.2016.06.014
54d31be5e138235369fe047d	298	Calcite mention			Kohfahl, Claus et al.	Characterising flow regime and interrelation between surface-water and ground-water in the Fuente de Piedra salt lake basin by means of stable isotopes, hydrogeochemical and hydraulic data	Journal of Hydrology	351	2008	Elsevier	10.1016/j.jhydrol.2007.12.008
56a038b2cf58f1079fd4ba21	199	Edwards Group	99.6	145.5	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
57c86f1bcf58f141c6f7b1f8	9	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
55c11fc9cf58f1a8110b7dca	163	Numerical Algorithms Group			Grevel, Klaus-Dieter and Majzlan, Juraj	Internally consistent thermodynamic data for magnesium sulfate hydrates	Geochimica et Cosmochimica Acta	73	2009	Elsevier	10.1016/j.gca.2009.08.005
54b4328de138239d86855c5f	314	Green River Formation	33.9	55.8	Wells, Neil A. et al.	Quantitative evaluation of color measurements II. Analysis of Munsell color values from the Colton and Green River Formations (Eocene, central Utah)	Sedimentary Geology	151	2002	Elsevier	10.1016/S0037-0738(01)00205-6
54b43246e138239d86849872	289	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
55c0d379cf58f16e99a378b9	242	Salado Formation	251	260.4	Horita, Juske et al.	The composition of Permian seawater	Geochimica et Cosmochimica Acta	55	1991	Elsevier	10.1016/0016-7037(91)90001-L
56f4d2d4cf58f1755f9cbc3b	101	Medusae Fossae Formation			Grindrod, Peter M. and Balme, Matthew R.	Groundwater processes in Hebes Chasma, Mars	Geophysical Research Letters	37	2010	Wiley-Blackwell	10.1029/2010GL044122
57437547cf58f1350bacb6cd	18	Brine Formation			CUI, Xiangmei et al.	Simulated Dynamic Evaporation of Yiliping Salt Lake Brine	Acta Geologica Sinica - English Edition	88	2014	Wiley-Blackwell	10.1111/1755-6724.12279_6
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
56a038b2cf58f1079fd4ba21	98	Edwards Group	99.6	145.5	LOWENSTEIN, T. K. and TIMOFEEFF, M. N.	Secular variations in seawater chemistry as a control on the chemistry of basinal brines: test of the hypothesis	Geofluids	8	2008	Wiley-Blackwell	10.1111/j.1468-8123.2007.00206.x
5cfb16ec0b45c76caf8db6de	18	Francis Group	305.425	305.7125	Park, Jong-Won et al.	Morphology control of magnesium oxide nanoparticles from seawater bittern using a wet decarboxylation/precipitation method	Molecular Crystals and Liquid Crystals	654	2017	Informa UK Limited	10.1080/15421406.2017.1355710
56e042b0cf58f169bff4b18e	113	Sulfate mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
54b4328ae138239d868555565	410	Basque mention			Renaut, Robin W. and Long, Peter R.	Sedimentology of the saline lakes of the Cariboo Plateau, Interior British Columbia, Canada	Sedimentary Geology	64	1989	Elsevier	10.1016/0037-0738(89)90051-1
557cd3cfe138239225f869e5	1240	Salado Formation	251	260.4	McKee, Edwin Dinwiddie and Oriel, Steven S.	Paleotectonic investigations of the Permian system in United States	Professional Paper		1967	United States Geological Survey	10.3133/pp515
580c3373cf58f17ccc88e4aa	255	Carbonates Dolomite			Pozo-Antonio, J.S. et al.	Comparative study of deterioration forms on nearby granitic bridges from an urban setting in the NW Iberian Peninsula	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.09.009
5b6d936dcf58f1a92c2d33b5	41	Magnesian Limestone	251	299	Stewart, F. H.	The mineralogy of the British Permian evaporites	Mineralogical Magazine and Journal of the Mineralogical Society	34	1965	Mineralogical Society	10.1180/minmag.1965.034.268.40
57c86f1bcf58f141c6f7b1f8	247	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54c060fbe1382389c54c3757	343	Carnallite Member			Cendón, D.I et al.	The geochemical evolution of the Catalan potash subbasin, South Pyrenean foreland basin (Spain)	Chemical Geology	200	2003	Elsevier	10.1016/S0009-2541(03)00195-5
57c19a96cf58f16ab04df2f3	145	Athabasca mention	538.8	1600	Richard, A. et al.	Synchrotron XRF and XANES investigation of uranium speciation and element distribution in fluid inclusions from unconformity-related uranium deposits	Geofluids	13	2013	Wiley	10.1111/gfl.12009
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5abaaa3ecf58f13ea8ecedc1	132	Li Dolomite	23.03	33.9	Poitras, J.T. et al.	Mars analog minerals' spectral reflectance characteristics under Martian surface conditions	Icarus	306	2018	Elsevier	10.1016/j.icarus.2018.01.023
55c2e5c8cf58f1a8110b8c08	140	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
57c86f1bcf58f141c6f7b1f8	258	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
57c86f1bcf58f141c6f7b1f8	307	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55a43da1e13823757cc6f19a	159	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
57c86f1bcf58f141c6f7b1f8	496	Burns mention	23.03	33.9	Arvidson, R. E. et al.	Mars Reconnaissance Orbiter and Opportunity observations of the Burns formation: Crater hopping at Meridiani Planum	Journal of Geophysical Research: Planets	120	2015	Wiley	10.1002/2014JE004686
54e66657e138237cc915052a	20	Cathedral Limestone	382.7	407.6	Yonge, C.J. and Krouse, H. Roy	The origin of sulphates in Castleguard Cave, Columbia Icefields, Canada	Chemical Geology: Isotope Geoscience section	65	1987	Elsevier	10.1016/0168-9622(87)90018-2
550915e7e138238460c4f632	396	Salina mention	419.675	429.4	Wilson, T.P. and Long, D.T.	Geochemistry and isotope chemistry of CaNaCl brines in Silurian strata, Michigan Basin, U.S.A.	Applied Geochemistry	8	1993	Elsevier	10.1016/0883-2927(93)90079-V
558df7d7e13823109f3ee082	2344	Salado mention	256.0278	262.2168	Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
55b2dd5ce138231cbdd6cec2	1868	Name Djerfisherite Dolomite			Mason, B.	Cosmochemistry; Part 1, Meteorites	Professional Paper		1979	United States Geological Survey	10.3133/pp440B1
58d2816dcf58f121bb50088d	2	Francis Group	305.425	305.7125	Lockley, Martin G. and Rodríguez-de la Rosa, Rubén A.	Preservation of Human Tracks in Arid Environments	Ichnos	16	2009	Taylor and Francis	10.1080/10420940802470920
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
55a43da1e13823757cc6f19a	314	Paradox Member	299	318.1	Hite, R. J.	Preliminary mineralogical and geochemical data from the D.O.E. Gibson Dome corehole No. 1, San Juan County, Utah	Open-File Report		1985	United States Geological Survey	
55088ec0e138237a6f73918a	313	Carnallite mention			Nishri, A. et al.	The geochemistry of brines and minerals from the Asse Salt Mine, Germany	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90109-6
55c2a9cacf58f1a8110b8a1e	305	Halite mention	251	299	Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
56e03f27cf58f1688d55b242	135	Calcite Dolomite			Koeppen, William C. and Hamilton, Victoria E.	Global distribution, composition, and abundance of olivine on the surface of Mars from thermal infrared data	Journal of Geophysical Research	113	2008	Wiley-Blackwell	10.1029/2007JE002984
54bf3328e13823023e43dbcf	17	Caspe Formation			Birnbaum, Stuart J. and Coleman, Max	Source of sulphur in the Ebro Basin (northern Spain) Tertiary nonmarine evaporite deposits as evidenced by sulphur isotopes	Chemical Geology	25	1979	Elsevier	10.1016/0009-2541(79)90091-3
598c0bc9cf58f14465ea778f	53	Tropico Group	1.806	65.5	Abbey, William J. et al.	Deep UV Raman spectroscopy for planetary exploration: The search for in situ organics	Icarus	290	2017	Elsevier	10.1016/j.icarus.2017.01.039
5508c83fe138238460c4f3ef	251	Sedom Formation	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
56946510cf58f1377d598b28	166	Hematite mention			Glotch, Timothy D.	Geologic and mineralogic mapping of Aram Chaos: Evidence for a water-rich history	Journal of Geophysical Research	110	2005	Wiley-Blackwell	10.1029/2004JE002389
56e042b0cf58f169bff4b18e	133	Sulfate mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
5abaaa3ecf58f13ea8ecedc1	132	Li Dolomite	23.03	33.9	Poitras, J.T. et al.	Mars analog minerals' spectral reflectance characteristics under Martian surface conditions	Icarus	306	2018	Elsevier	10.1016/j.icarus.2018.01.023
5508c83fe138238460c4f3ef	251	Sedom Formation	5.332	23.03	Bergelson, Gregory et al.	Salinization and dilution history of ground water discharging into the Sea of Galilee, the Dead Sea Transform, Israel	Applied Geochemistry	14	1999	Elsevier	10.1016/S0883-2927(98)00039-0
54b43246e138239d86849872	289	Bulldog Shale	65.5	145.5	Chivas, A.R. et al.	Isotopic constraints on the origin of salts in Australian playas. 1. Sulphur	Palaeogeography, Palaeoclimatology, Palaeoecology	84	1991	Elsevier	10.1016/0031-0182(91)90051-R
57c19a96cf58f16ab04df2f3	145	Athabasca mention	538.8	1600	Richard, A. et al.	Synchrotron XRF and XANES investigation of uranium speciation and element distribution in fluid inclusions from unconformity-related uranium deposits	Geofluids	13	2013	Wiley	10.1111/gfl.12009
550889f7e138237a6f739166	142	Alum Shale	488.3	501		Contents of Volume 3, 1988	Applied Geochemistry	3	1988	Elsevier	10.1016/0883-2927(88)90100-X
54ed48f5e138237cc91521fa	77	Solnhofen Limestone	145.5	199.6		Subject index Tectonophysics volumes 211–220	Tectonophysics	1-4	1993	Elsevier	10.1016/0040-1951(93)90239-G
56e042b0cf58f169bff4b18e	133	Sulfate mention			Weitz, Catherine M. et al.	Geologic relationships between gray hematite, sulfates, and clays in Capri Chasma	Journal of Geophysical Research: Planets	117	2012	Wiley-Blackwell	10.1029/2012JE004092
58d05105cf58f13f39efd424	57	Carnallite Dolomite			Warren, J. K.	Evaporites, brines and base metals: What is an evaporite? Defining the rock matrix	Australian Journal of Earth Sciences	43	1996	Taylor and Francis	10.1080/08120099608728241
58eac417cf58f168a628d92f	3	Francis Group	305.425	305.7125	Laxminarayana, K. et al.	Long-Term Effect of Lime, Mycorrhiza, and Inorganic and Organic Sources on Soil Fertility, Yield, and Proximate Composition of Sweet Potato in Alfisols of Eastern India	Communications in Soil Science and Plant Analysis	46	2015	Taylor and Francis	10.1080/00103624.2014.1003647
5ab91987cf58f16020dc43c8	164	Average Group			Guseva, N.V. et al.	Formation of the chemical composition of brackish and brine groundwater in the Tuva depression and surrounding areas	Russian Geology and Geophysics	59	2018	Elsevier	10.1016/j.rgg.2018.01.011
55ba8334e1382373b63b8963	213	Anglesite Gypsum Calcite Dolomite			Al, Tom A et al.	Carbonate-mineral/water interactions in sulfide-rich mine tailings	Geochimica et Cosmochimica Acta	64	2000	Elsevier	10.1016/S0016-7037(00)00483-X
57c19a96cf58f16ab04df2f3	196	Athabasca mention	538.8	1600	Richard, A. et al.	Synchrotron XRF and XANES investigation of uranium speciation and element distribution in fluid inclusions from unconformity-related uranium deposits	Geofluids	13	2013	Wiley	10.1111/gfl.12009
5cfd8fb70b45c76caf8df585	2	Francis Group	305.425	305.7125	Mahadevan, C. K. and Saravanan, R. S. S.	Nucleation Parameters of Pure and Impurity Added MgSO 4 ·7H 2 O Single Crystals	Materials and Manufacturing Processes	22	2007	Informa UK Limited	10.1080/10426910701190782
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
580c3373cf58f17ccc88e4aa	255	Carbonates Dolomite			Pozo-Antonio, J.S. et al.	Comparative study of deterioration forms on nearby granitic bridges from an urban setting in the NW Iberian Peninsula	Geomorphology		2016	Elsevier	10.1016/j.geomorph.2016.09.009
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
55c48dc6cf58f1a8110b94db	338	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
55ad3126e13823763a8303a0	124	Salado mention	256.0278	262.2168	Jones, C. L. et al.	Salt deposits in Los Medanos area, Eddy and Lea counties, New Mexico	Open-File Report		1973	United States Geological Survey	10.3133/ofr73135
54b43279e138239d8685255d	203	Chemical Mineralogy Formation			Talbot, C.J.	Hydrothermal salt—but how much?	Marine and Petroleum Geology	25	2008	Elsevier	10.1016/j.marpetgeo.2007.05.005
598c0bc9cf58f14465ea778f	53	Tropico Group	1.806	65.5	Abbey, William J. et al.	Deep UV Raman spectroscopy for planetary exploration: The search for in situ organics	Icarus	290	2017	Elsevier	10.1016/j.icarus.2017.01.039
550ab33ee138238460c4fe4c	302	Oseberg mention	161.2	175.6	Ziegler, Karen et al.	Palaeohydrodynamics of fluids in the Brent Group (Oseberg Field, Norwegian North Sea) from chemical and isotopic compositions of formation waters	Applied Geochemistry	16	2001	Elsevier	10.1016/S0883-2927(00)00057-3
55c2a9cacf58f1a8110b8a1e	60	Ibura Member			Timofeeff, Michael N. et al.	Secular variation in the major-ion chemistry of seawater: Evidence from fluid inclusions in Cretaceous halites	Geochimica et Cosmochimica Acta	70	2006	Elsevier	10.1016/j.gca.2006.01.020
578aea2bcf58f13920dc7baa	97	San Andres Formation	251	299	DUTTON, ALAN R.	Origin of brine in the San Andres Formation, evaporite confining system, Texas Panhandle and eastern New Mexico	Geol Soc America Bull	99	1987	GSA	10.1130/0016-7606(1987)99<103:oobits>2.0.co;2
55c2ce13cf58f1a8110b8b48	120	Ca mention			Krupp, Ralf E.	Formation and chemical evolution of magnesium chloride brines by evaporite dissolution processes—Implications for evaporite geochemistry	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.11.018
5cfd8fb70b45c76caf8df585	2	Francis Group	305.425	305.7125	Mahadevan, C. K. and Saravanan, R. S. S.	Nucleation Parameters of Pure and Impurity Added MgSO 4 ·7H 2 O Single Crystals	Materials and Manufacturing Processes	22	2007	Informa UK Limited	10.1080/10426910701190782
57f3fc5ccf58f1bee1bbd2ba	94	Experimental Section Phase Formation			Dinnebier, Robert E. et al.	3Mg(OH) 2 ·MgSO 4 ·8H 2 O: A Metastable Phase in the System Mg(OH) 2 -MgSO 4 -H 2 O	Zeitschrift für anorganische und allgemeine Chemie	639	2013	Wiley	10.1002/zaac.201300128
558df7d7e13823109f3ee082	2384	Anhydrite mention			Stewart, F. H.	Marine evaporites	Professional Paper		1963	United States Geological Survey	
590188eecf58f19f6f786330	179	Bay Dolomite	513	542		World News on Mineral Occurrences	Rocks & Minerals	30	1955	Taylor and Francis	10.1080/00357529.1955.11767819
5a048abfcf58f1b964029d46	185	Space Group			Rubin, Alan E. and Ma, Chi	Meteoritic minerals and their origins	Chemie der Erde - Geochemistry	77	2017	Elsevier	10.1016/j.chemer.2017.01.005
579d2a77cf58f138a3ffc19d	76	Kieserite mention			Kamahara, Hirotsugu et al.	Improvement potential for net energy balance of biodiesel derived from palm oil: A case study from Indonesian practice	Biomass and Bioenergy	34	2010	Elsevier	10.1016/j.biombioe.2010.07.014

Appendix 1
GeoDeepDive Results

GDD DocID	Sentence ID	Stratigraphic Name	Top Age	Bottom Age	Author	Title	Journal	Volume	Publication Year	Publisher	DOI
55c48dc6cf58f1a8110b94db	104	Windsor Group	318.1	359.2	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
57c3d54ccf58f146d5b258bd	57	Zechstein Group	251	260.4	Drijkoningen, Guy et al.	Seismic time-lapse effects of solution salt mining - a feasibility study	Geophysical Prospecting	60	2012	Wiley	10.1111/j.1365-2478.2011.00979.x
55c2e5c8cf58f1a8110b8c08	140	Salado Formation	251	260.4	Lowenstein, Tim K. et al.	The major-ion composition of Permian seawater	Geochimica et Cosmochimica Acta	69	2005	Elsevier	10.1016/j.gca.2004.09.015
54c0c25fe1382389c54c390a	259	Burano Fm	237	251	Bicocchi, Gabriele et al.	The high pCO2 Caprese Reservoir (Northern Apennines, Italy): Relationships between present- and paleo-fluid geochemistry and structural setting	Chemical Geology		2013	Elsevier	10.1016/j.chemgeo.2013.05.001
59069dcecf58f1491d1b327d	141	New Albany Shale	359.2	416	Coskren, Dennis	Minerals of Kentucky	Rocks & Minerals	56	1981	Taylor and Francis	10.1080/00357529.1981.1176729
55c48dc6cf58f1a8110b94db	330	Paradox Formation	299	318.1	Holt, Nora M. et al.	The major-ion composition of Carboniferous seawater	Geochimica et Cosmochimica Acta		2014	Elsevier	10.1016/j.gca.2014.03.009
56f1aa2ccf58f112c25e8d54	13	Bunter Sandstone	237	251	Holmes, M. R. J.	The magnesium requirements of arable crops	Journal of the Science of Food and Agriculture	13	1962	Wiley-Blackwell	10.1002/jsfa.2740131101
5b6eb3c5cf58f13c68e2d5dc	42	Magnesian Limestone	251	299	Armstrong, G. et al.	The paragenesis of sylvine, carnallite, polyhalite, and kieserite in eskdale borings nos. 3, 4, and 6, north-east yorkshire	Mineralogical Magazine and Journal of the Mineralogical Society	29	1951	Mineralogical Society	10.1180/minmag.1951.029.214.02
54b4327de138239d868530d9	128	Navarra mention	0	36	Meng, Fan-Wei et al.	The major composition of a middle–late Eocene salt lake in the Yunying depression of Jianghan Basin of Middle China based on analyses of fluid inclusions in halite	Journal of Asian Earth Sciences		2014	Elsevier	10.1016/j.jseaes.2014.01.024