Long-Term Use of Fish and Shellfish Resources Revealed through Vibracore Sampling at EjTa-13, Hecate Island, Central Coast, BC

by

Seonaid Eileen Shute Duffield
Bachelor of Arts, University of Victoria, 2012

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

MASTER OF ARTS

in the Department of Anthropology

Supervisory Committee

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Abstract

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This Master's research program was undertaken as part of the Hakai Ancient Landscapes Archaeology Project in Heiltsuk and Wuikinuxv Territories on the Central Pacific Coast of British Columbia (BC), Canada. The project tested the utility of applying vibracore technology to sample a shell midden site on Hecate Island on the BC Central Coast. This revealed that the earliest archaeological occupation began approximately 6,000 years ago, continuing into the 16th Century AD. Analysis using 21 radiocarbon dates from six core samples shows the site was repeatedly occupied and accumulated consistently throughout the tested area and extended to a depth of 544 cm depth below surface. Sampled sediments were utilized to evaluate evidence of fisheries resource management through time with reference to the nearby, intensively-studied archaeological site Namu (ElSx-1). Zooarchaeological results show the herring (*Clupea pallasii*), salmon (*Oncorhynchus spp.*), rockfish (*Sebastes spp.*) and greenling (*Hexagrammos spp.*) were fished persistently and in similar abundances through the occupation of the site. Overall results for vertebrate fauna reveal the total number of specimens is 19,173 and the total number of identified specimens is 6,566. Results also show a consistent harvest of certain shellfish taxa (e.g., mussel and barnacle), however shellfish weight per litre increases through time. When comparing the relative abundance of herring and salmon through time at Namu and EjTa-13, results show that salmon at Namu was more abundant than at EjTa-13. This is likely due to the productivity of salmon in the Namu River adjacent to the site. Alternatively, herring remains were represented similarly between sites indicating the resource was equally desirable at EjTa-13 and Namu. Surprisingly, a large number of very small artifacts of various materials were also recovered (an estimated 550 artifacts per cubic metre of cultural sediments), which indicates that the field and laboratory methods used are especially conducive to the

recovery of small items. These results show a persistent and sustainable local fishery through six millennia until the contact period.

Table of Contents

List of Tables

List of Figures

Acknowledgments

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Dedication

This thesis is dedicated to memory of Dr. Wallace Shute and Mrs. Elaine Duffield.

Chapter 1: Introduction

This thesis project focuses on examining long-term patterns of resource use at an ancient Indigenous settlement occupied for 6,000 years on the Central Pacific Coast of Canada (Figure 1). The project introduces the vibracore method of sampling shell midden archaeology on the Northwest Coast. I analyzed core samples using radiocarbon dates from charcoal and zooarchaeological techniques to interpret fish and shellfish resource use at the site over the last 6,000 years.

1.1 Description of Study Location

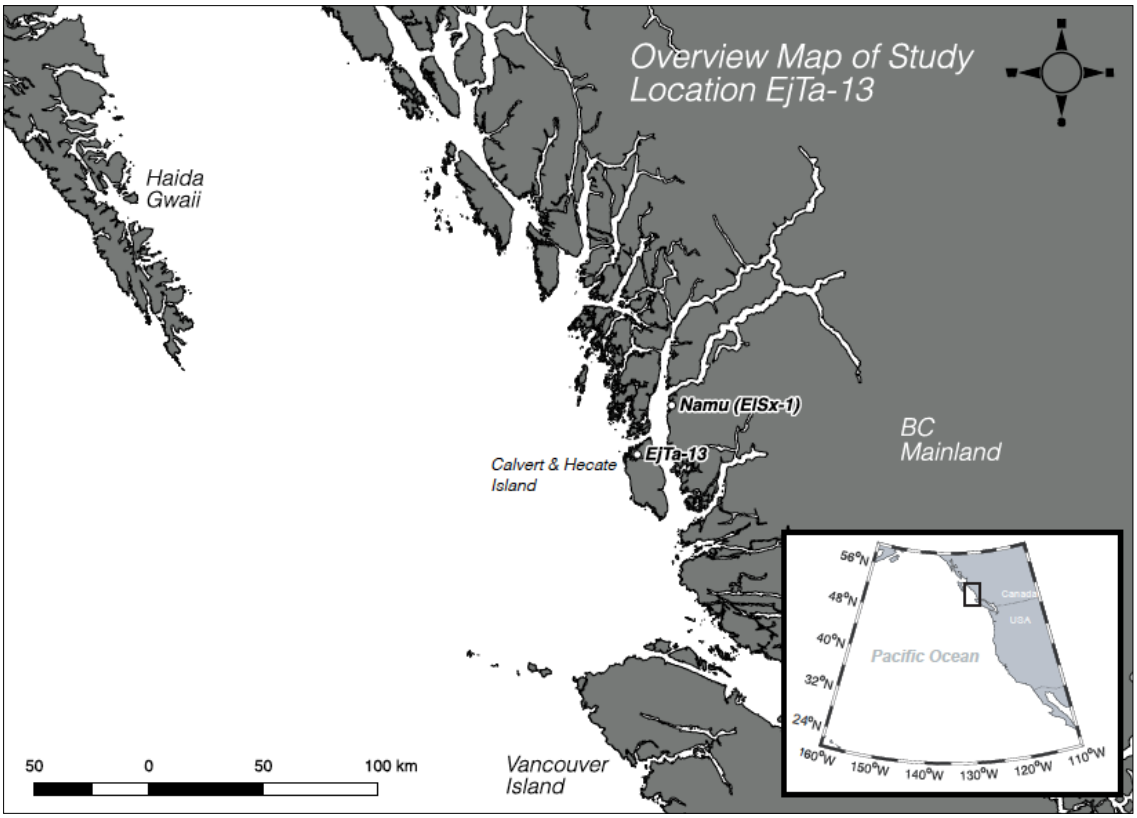
EjTa-13 is the Borden number for the shell midden site where my Master's research was conducted. Provincial records show that it was initially recorded by archaeologists working with Philip Hobler in 1988 and was revisited by Gitla (Elroy White) again in 2006 (BC Archaeology Branch Detailed Site Form, 2015). Since then, the site has been investigated further under Duncan McLaren's provincial research permit (2011-171) as part of the Hakai Ancient Landscapes Archaeology Project (HALAP). Initial testing at EjTa-13 found that the shell midden is over 4 m deep in places and was hypothesized to be a good location to examine long-term patterns of resource use. Preliminary testing suggested that the occupation spanned at least 4,000 years (Porter and McLaren 2014).

EjTa-13 is located in Heiltsuk and Wuikinuxv Territories. Members from both First Nations communities participated in various field phases of the project, including archaeological coring, transportation, mapping and survey. Portions of Calvert Island are protected under a provincial marine conservancy, the Hakai *Luxvbalis* Conservancy.

Our team accessed the site by boat from the Hakai Institute's Calvert Ecological

Observatory, entering the quiet bay from Meay Channel. The primary aspect of the site faces west towards another large habitation site known as EjTa-4 on the other side of the channel. At times, the voices of teams working at EjTa-4 (1 km distance) could be heard from EjTa-13. The two ancient sites share contemporaneous dates of occupation during the mid to late Holocene (McLaren et al. 2015; Rahemtulla 2014). Additionally, recent investigations at EjTa-4 uncovered human footprints, associated with radiocarbon dates of approximately 13,000 years (McLaren et al. 2017).

Figure 1. Overview map of study location, EjTa-13.



EjTa-13 provides a setting to observe archaeological evidence, from a place that has been continuously occupied over the past six millennia until the mid 1500s (AD), according to current radiocarbon dating results. The site is fronted by a silt beach making landing a small boat quite manageable and it was likely used as an extensive shellfish

harvesting area at lower tides. Inspection of the upper intertidal regions to the north and south of the site reveals numerous circular and oval petroform features. Two petroforms create walls around ‘root gardens’(cf. Deur 2005) that are filled with both silverweed cinquefoil (*Argentina anserine)* and northern rice root *(Fritillaria camschatcensis)* respectively. These two plants are commonly reported ethnographically as being cultivated in most coastal areas and are thus not unexpected near a large shell midden site like EjTa-13 (Turner 2006). Small unnamed freshwater creeks, streams and seasonal drainages flow quietly out of the tall, culturally-modified forest stand, carving through the soft sediments in the intertidal zone. In previous times, these streams could have been areas where chum salmon spawned.

Numerous culturally modified redcedar trees (*Thuja plicata)* with plank scars, tapered bark strips and rectangular bark strips, some with multiple components including historical modifications (i.e., axe chopped) are present across the site. These features tangibly connect past inhabitants and visitors to our survey crew through the readily visible medium of these monumentally large trees, which also extend the site boundary back from the shoreline. The upper intertidal is scattered with chipped, ground and pecked lithic artifacts signifying cultural phases dating back to earlier millennia, most of which have likely come out of the actively eroding bank exposures and extensive shell midden deposits that in some areas of the site, reach over 4 metres in depth. The ancient habitation of this area could be considered a network of “taskscapes” demarcated by such things as previously cultivated plant communities, harvested shellfish, arranged boulders, discarded or lost artifacts and intentionally or unintentionally discarded remains of food production, simultaneously representing cyclical temporality and dynamic cultural space

(cf. Ingold 1993). Ethnographic records indicate that *Luxvbalis*, a nearby habitation and shell midden site (possibly EjTa-1), was abandoned during a smallpox epidemic (Olson 1955:320), which is a solemn reminder of the impacts endured by these communities during the period of entanglement upon arrival of Europeans explorers and merchants. However, metal tool mark evidence from culturally modified trees shows people were visiting the landscape later than the radiocarbon dating record implies.

1.2 Research Questions

The ultimate objective of this study is to investigate the use of vibracore technology to determine dietary preferences and patterns of resource use throughout the Middle to Late Holocene at EjTa-13, and place it in comparison to the intensively dated and investigated site of Namu. In order to accomplish this, I developed three broad questions that guide the progression of the study. The primary research question tests:

1. *How can vibracore technology be a useful addition for sampling shell midden archaeological deposits on the BC Coast?*
2. *Can zooarchaeological data from vibracore samples evaluate changes in fisheries resource use through time?*
3. *How do vibracoring results fit into the broader discussion of the regional narrative on the Central Coast?*

In the context of this project, an historical ecological framework forms the theoretical structure that ties in to the guiding research questions, background, results and discussion in the chapters that follow.

1.3 Theoretical Framing

1.3.1 "Shell Midden" Archaeology

Shell midden archaeology is a central theme that underpins this thesis project, and a quintessential Northwest Coast site type. McLay et al. (2008) describes shell middens as one of the most complex archaeological sites in the world. Shell rich matrices found predominantly adjacent to coastal access, create an alkaline environment conducive to bone preservation. To many members of the public, the term "shell midden" is often perceived simply as "refuse."[1] As such, Indigenous and non-indigenous scholars and community members alike have questioned the appropriateness of the term "shell midden" to describe the coastal and inland archaeological site type (McLay et al. 2008). However, "shell midden" is used in this thesis as an established and known archaeological site type despite the limitations intrinsic to the term.

Alternative to the root meaning, McLay et al. (2008) proposes that Northwest Coast shell midden sites are monumental structures. Approaching shell middens as monuments imbues them with alternative forms of meaning as well as interpreting people's ongoing interactions with these features on the landscape. Culturally created structures associated with subsistence patterns are often not regarded as monument structures. For instance, Pollard (2013: 177) describes monuments as "united by the considerable energy and resources absorbed by their creation, and the lack of immediate connections to subsistence activities." I argue regardless of normally only being

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[1] Hardy et al. (2016:19) trace the etymology of "shell middens" (found in Senegal) to the Danish term "kitchen midden" (*Køkkenmødding*) which is used to define archaeological sites that consist of at least 50 percent marine shell and over 10 m^2 in size.

associated with “subsistence activities” by archaeologists, shell middens produce impressive structures that have the potential to be viewed as dynamic monuments due in part to the historical practices of storing memory. This sentiment was reflected by Indigenous community members of a study conducted in collaboration with the Hul’qumi’num Treaty Group in Coast Salish traditional territory where participants “openly commemorate their ancient heritage sites as the monuments of their ancestors,” sites often containing human internments and lost or purposefully discarded artifacts and viewed as sacred (McLay et al. 2008:157). As such, McLay et al. (2008:157) note that Hul’qumi’num elders “perceive little distinction between their archaeological heritage sites and their historical cemeteries.”

The construction of the shell midden is one of the bases of my research as I am interested in chronology building and changes over time. Shell middens are arguably monuments, built over thousands of years through the complex relationships of communities of peoples linked through ancestry, selecting resources through cultural preference resulting in a material record of resource use.

Memory work is an archaeological concept that is used generally to refer to the social practices that create memory (Mills and Walker 2008:4) such as in the *making of memories* embedded in the process of constructing a shell midden site. Archaeological projects engaging with memory work study not only the “active construction that material traces left behind” but also “the interaction of humans and materials within a set of social relationships” (Mills and Walker 2008:4). Considering memory work, in association with shell middens as monuments, can align with Indigenous origin stories, and link directly to locations within oral narratives and act as “archives” of ecological and cultural material.

Like monuments, shell middens are visited and revisited, are admired for their intrinsic aesthetics, and are the subject of speculation and scientific research as a result of the preserved stratification and temporality of cultural material therein. Currently archaeologists and non-indigenous settlers (like myself) contemplate the temporality of shell middens from the present-day at sites like EjTa-13.

1.3.2 Historical Ecological Framework

Elements of historical ecology are useful as a theoretical orientation for interpreting an anthropogenic, "maritime cultural landscape". A maritime cultural landscape encompasses both marine and terrestrial human-mediated environments unlike the term "landscape" (Westerdahl 1992). Although shell middens are terrestrially-based, the majority of remains found in shell middens on the Northwest Coast often consist predominantly of shellfish and finfish. This also infers that marine contexts (or the contents therein) are human-mediated by sustainable fishing practices over millennia similar to cultivated landscapes such as clam and root gardens in the region. Central Coast communities were and still are heavily reliant on marine resources (such as herring-roe-on-kelp harvesting, clam digging and salmon fishing) and therefore it is significant to distinguish a term such as maritime cultural landscape that encompasses this particular cultural preference.

In archaeology and anthropology, a historical ecological orientation is a simple and dynamic theoretical approach concerned with the "dialectical" relationship between people and their surrounding environment using three frameworks of time and the study of resultant mosaic-like contemporary maritime cultural landscape as a product of complex relationships which can result in an increase in biodiversity

(Armstrong et al. 2017, Balée 2006, Beller et al. 2017). Historical ecology uses a tripartite selection of concepts relating to temporality (borrowed from the French *Annales* school of history): "1) *événement* (event) as a short-term, episodic phenomenon; 2) *conjoncture* (cycle), involving repetitive statistical patterns over a decade, quarter-century, or half-century or so; and 3) *longue durée*, empirical patterns of history and prehistory occurring over centuries (Balée 2006:80)." Examples of regional, empirical patterns in the *longue durée* reveal evidence of repeated human occupation of EjTa-4 as seen through layers of stratigraphy and human-mediated fire regimes on Calvert and Hecate Islands, both spanning 13 millennia (Hoffman et al. 2016; McLaren et al. 2017). In addition to the three previously mentioned brackets of time, Braje and Rick (2013) use the concept of "deep history" to acknowledge that the history of these landscapes extends across decadal, centennial and millennial temporal intervals before the period of entanglement with European settlers. All three historical ecological terms (*événement*, *conjoncture* and *longue durée*) are useful for conceptualizing site formation processes through time. For example, shell midden sites are more likely created through numerous *événement* or the product of short-term events over the *longue durée*; an estimated 240 generations of site occupation (1 familial generation equals ~25 years) in the case study of EjTa-13. However, *longue durée* is the primary temporal scale that is of interest with reference to the results of this project as short-term temporal scales require refinement beyond the boundaries of this Master's thesis project. Together with deep history, *longue durée* allows room to consider patterns of human behaviour and the subsequent effects on the landscape that can be challenging to conceptualize temporally without a structured interpretive

framework in place (Ames 1991). For example, data may show patterns or connections depending on the temporal and spatial scale, where at other scales a pattern is *not* detectable (Ames 1991). Although this research framework can lead to "reductionist narratives of the past" (Armstrong et al. 2017:14), used cautiously historical ecology can provide a usable model for evaluating fisheries management through millennia.

In addition to differing temporal scales, a historical ecological framework encompasses geographical scales. Understanding the spatial and temporal extent of historical developments, Ames (1991:935) notes that this requires knowing "what happened at their edges and at their centre, why they developed and why they passed away and how they changed during their span." Collectively, Ames (1991:935) suggests that to engage with unknown scales "we must continually play different temporal and geographical scales off against each other" to understand what is the most relevant (Ames 1991 [Braudel 1980]).

Marine-focused historical ecology is a relevant lens to apply to this project. Marine historical ecology is an extension of the ecological record of environments and has relevance for the present-day, as many fisheries have shifted from their former abundance and can result in, for example, the "ratcheting down of expectations of ecosystem quality over time" (Thurstan et al. 2015:31). Present-day fisheries data are subject to shifting baselines without a solid historical reference, the consequences of which impact contemporary management strategies for the species in question.

Historical ecology is a multidisciplinary field in which archaeology is considered an important contributing area of study (Beller et al. 2017). For example, McKechnie et

al. (2014) calculated herring abundances from 171 archaeological sites from coastal Alaska, British Columbia and Oregon throughout the Holocene. The data shows a persistent use of herring despite present-day baseline data that illustrates that herring populations are erratic and have undergone periods of catastrophic decline (McKechnie et al. 2014).

Furthermore, the concept "cumulative palimpsest " meaning successive episodes of deposition marking the passage of time that "remain superimposed one upon the other without loss of evidence, but are so reworked and mixed together that it is difficult or impossible to separate them out into their original constituents" (Bailey 2007:204), is a useful reminder of the complexity of interpreting depositional events over the *longue durée* and to temper interpretive results accordingly. Although clear stratigraphic breaks are often regularly interpreted within shell midden archaeology and radiometric chronology verifies stratigraphic consistency, some mixing is inevitable.

This project is concerned with analyzing faunal remains from inhabitants at multi-millennial time scales (*longue durée*) and site-specific (EjTa-13) to regional (Namu) spatial scales. Historical ecology helps to illuminate patterns of persistent social practices over 6 millennia and shows obvious connections of faunal use between sites (i.e., EjTa-13 and Namu). Additionally, this approach is useful for interpreting a solid historical baseline of marine focused taxa from within the maritime cultural landscape surrounding the site.

1.4 Thesis Structure

Following this chapter, Chapter 2 situates the study region by providing background research in terms of the biological and physical environment, describes the

ethnographic context with emphasis on marine resource use, reviews previous archaeology in the region, and archaeological and zooarchaeological sampling strategies.

In Chapter 3, I present field and laboratory methodologies employing vibracore technology and detail processing these core samples for the recovery of fauna and artifacts from fine screen mesh (2mm) within a controlled laboratory setting. Vertebrate faunal identification occurred under the supervision and guidance of faunal identification specialist Rebecca Wigen, using the comparative collection in the Zooarchaeological Laboratory at the University of Victoria.

Chapter 4 examines the results of core sampling, highlighting information in support of answering the three broad research questions outlined here in the introduction. The vertebrate faunal identification resulted in a total of 19,173 faunal elements (1 and 2 mm) and 55 artifacts within approximately 100 litres of cultural sediments (artifact density of 550 per m3). The overwhelming majority of identified specimens included herring and salmon, followed by rockfish and greenling, a common suite of taxa found in the Central Coast region of British Columbia. In total, 6,550 specimens were identified to family, genus or species (1 and 2 mm).

The final chapter discusses taphonomy, seasonality, and intra-site temporal patterning of herring and salmon remains. Theoretical integration ties in historical ecological theory as a means of understanding the long-term relationship of people and fisheries management. The four dominant fish taxa show considerable continuity of resources use in terms of relative abundance over six millennia. In comparison to Namu, the relative abundance of salmon at EjTa-13 is noticeably less, presumably due to the absence of a salmon-bearing stream in close proximity to the site. Alternatively, the

relative abundances of herring were fairly consistent between sites in the later periods (4,000-380 cal BP) inferring an enduring and reliable stewardship of herring populations over millennia.

Chapter 2: Background Research

This chapter contextualizes the study location within the larger framework of the Northwest Coast. I begin with a description of the biological and physical environment, provide an ethnographic overview with reference to marine resources, and describe cultural uses of fish taxa from EjTa-13. I briefly summarize the history of archaeological research in the region. Finally, I review challenges to zooarchaeological sampling to further define the scope of the project.

2.1 Regional Overview of Biological and Physical Environment

Previous archaeological researchers have used physiographic zones to help characterize site types found within the surrounding region (Pomeroy 1980; Maxwell et al. 1997). Three physiographic zones include the Inner Channel and Fjord Zone (characterized by high relief topography), Inner Waterway Zone (low relief, such as the "inside passage") and the Outer Coast (or Outer Island) Zone (exposed outer coast and island archipelagos) (Maxwell et al. 1997:8). EjTa-13 falls within the Inner Waterway Zone, located in a small, protected bay towards the southwest corner of Hecate Island, facing Meay Channel.

The study area is in the Coastal Western Hemlock zone (CWHvh2) (Thompson et al. 2016); having cool summer temperatures (14°C ± 2° C) and mild winters (4° C ± 2° C) and is one of the rainiest zones in BC (Meidinger and Pojar 1991:96) averaging approximately 3,500 mm annually (Thompson et al. 2016:36). Thompson et al. (2016:36) note "high precipitation, abundant fog, and low evapotranspiration result in an abundance of wet soils, wetland ecosystems, and relatively unproductive forests." The typical flora found in the CWHvh2 biogeoclimatic zone is predominantly western hemlock *(Tsuga*

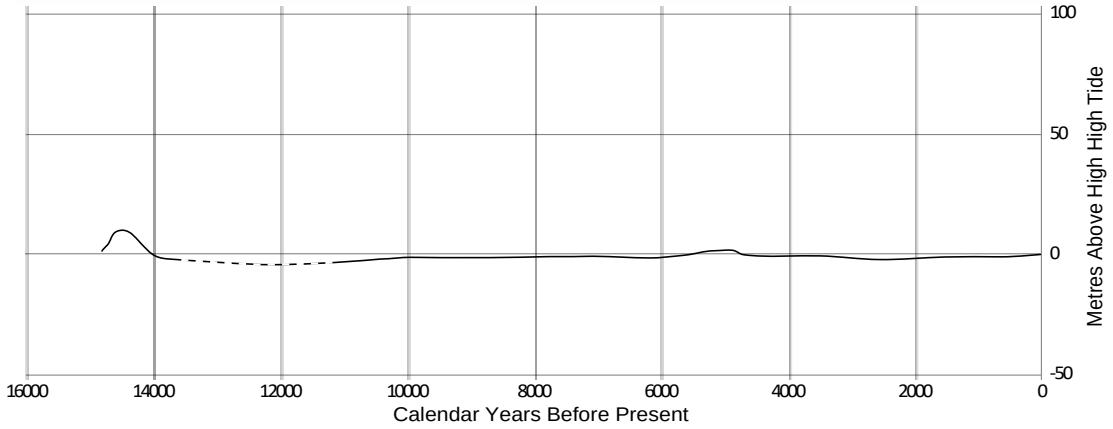
heterophylla), with a scrubby herb layer and numerous mosses (Meidinger and Pojar 1991:96). Other than western hemlock, observed vegetation at EjTa-13 during the spring and early summer site visits included a forest cover of western red cedar (*Thuja plicata*), western yew (*Taxus brevifolia*), and a understory and ground cover of salal (*Gaultheria shallon*) sword fern (*Polystichum munitum*), deer fern (*Blechnum spicant*), false azalea (*Menziesia ferruginea*), red huckleberry (*Vaccinium parvifolium*), bunch berry (*Cornus canadensis*), false lily-of-the- valley (*Maianthemum dilatatum*), and *Sphagnum sp*.

2.2 Previous Central Coast Archaeological Overview

The central coast region has been the focus of a number of archaeological research programs and surveys since the late 1930's revealing a range of coastal sites that reflect access to marine resources from approximately 11,000 years before present (BP) at the region's most studied archaeological site, Namu (ElSx-1) (Cannon 1991, 1995; Hester and Nelson 1978; Pomeroy 1980). The site of Namu includes temporal components spanning the Holocene including the early Holocene (11480 - 5760 cal BP), Middle Holocene (6840 - 3200 cal BP) and Late Holocene (after 3200 cal BP).

As part of the Hakai Ancient Landscapes Archaeology Project (HALAP), extensive radiocarbon dating obtained from a combination of pond basin coring, diatom analysis, archaeological site testing, and sedimentary exposure sampling in the region has led to a refined sea level curve showing that sea levels in the study area (Hakai West, Figure 2) have been relatively stable for approximately 14,000 cal BP allowing for continued shoreline access and enabling large deposits of cultural layers, rich in shell to accumulate (McLaren et al. 2014).

Figure 2. Localized sea level curve for Hakai West (modified from McLaren et al. 2014:165).



2.2.1 Regional Archaeological Investigations

Archaeologists and First Nations heritage managers have recorded 249 sites[2] in a 30 km radius of EjTa-13: a distance Ames (2002) predicts a party by boat could roughly travel in one day. Through intensive survey of Heiltsuk territory, Maxwell et al. (1997) report recording between 0.5 and 1.2 sites per km of shoreline, however the density of sites has likely increased as a result of large research projects such as HALAP. A sample of known Central Coast archaeological site types includes shell middens, surface and subsurface lithic scatters, culturally modified trees (CMTs), canoe skids and other stone petroforms (or rock alignments), rock shelters, fish traps, clam and root gardens, fish weirs, pictographs, petroglyphs, human burials, trackways and wet sites.

Archaeologists have conducted surveys and subsurface testing of sites in the region since the first half of the 20th century. Drucker and Beardsley (1938), based out of the University of California, surveyed and tested areas between Prince Rupert Harbour

[2] April 5, 2017, Remote Access to Archaeological Data (RAAD), BC Archaeology Branch

and Rivers Inlet. With the help of informants, Drucker (1943) recorded 15 new archaeological sites, visited six and tested three. The three tested sites included FbSx-6 (Roscoe Inlet 1 and 1A subsequently combined) and Bella Bella Reserve number II[3] (Pomeroy 1980:14).

A number of surveys occurred in or adjacent to Heiltsuk and Wuikinuxv territories, including assessments by Mitchell and Simonsen (1968 to 1970) and Hobler (1970). Researchers through both the University of Colorado and Simon Fraser University (SFU) undertook extensive archaeological investigations on the Central Coast between the late 1960's and mid 1990's (Carlson 1996; Cannon 1991; Hester and Nelson 1978; Pomeroy 1980). Excavations were carried out between 1968 and 1974 at Namu (ElSx-1), Kisameet Bay (ElSx-3), Roscoe Inlet, FaSx-61 (Conover 1972; Hester and Nelson 1978; Luebbers 1971) and McNaughton Island (ElTb-10) (Carlson 1976; Pomeroy 1972). In four field seasons between 1970 and 1977, Pomeroy (1980) partnered with the Heiltsuk, University of Colorado, and SFU to recorded 443 sites in Heiltsuk territory with the assistance of Willie Gladstone, Frank Wilson, Fred Reid and Hoffman Harris. Carlson conducted further excavations at Namu in 1977, 1978 and 1994, expanding on Hester's work.

In the late 1990's, Cannon (1997, 1998, 2000a) undertook a core and augering program to understand the broader regional context of history of subsistence and settlement at Namu. Due to the success of the methodology and emerging results, the program was expanded to include the regional history of settlement and differences in

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[3] A Borden number was not included in the description.

activities at 28 sites in proximity to Namu in both Heiltsuk and Wuikinuxv territories (Cannon 2013:23).

In 1995, Millennia Research Ltd. conducted an Archaeological Overview Assessment of known and potential archaeological resources within Heiltsuk Territory. In collaboration with the Heiltsuk Tribal Council the survey resulted in 817 digitally mapped sites, 76 of which were previously unrecorded (Maxwell et al. 1997).

More recently, Heiltsuk archaeologist Gitla (Elroy White) undertook a Master's thesis (2006, 2011) representing an "Internalist archaeological investigation," including interviews with Heiltsuk oral historians on the topic of stone fish traps. White has also conducted numerous cultural resource management projects with the Heiltsuk Integrated Resource Management Department (HIRMD) within Heiltsuk territory. A number of other cultural resource management projects have been carried out in the region since the late 1980s.

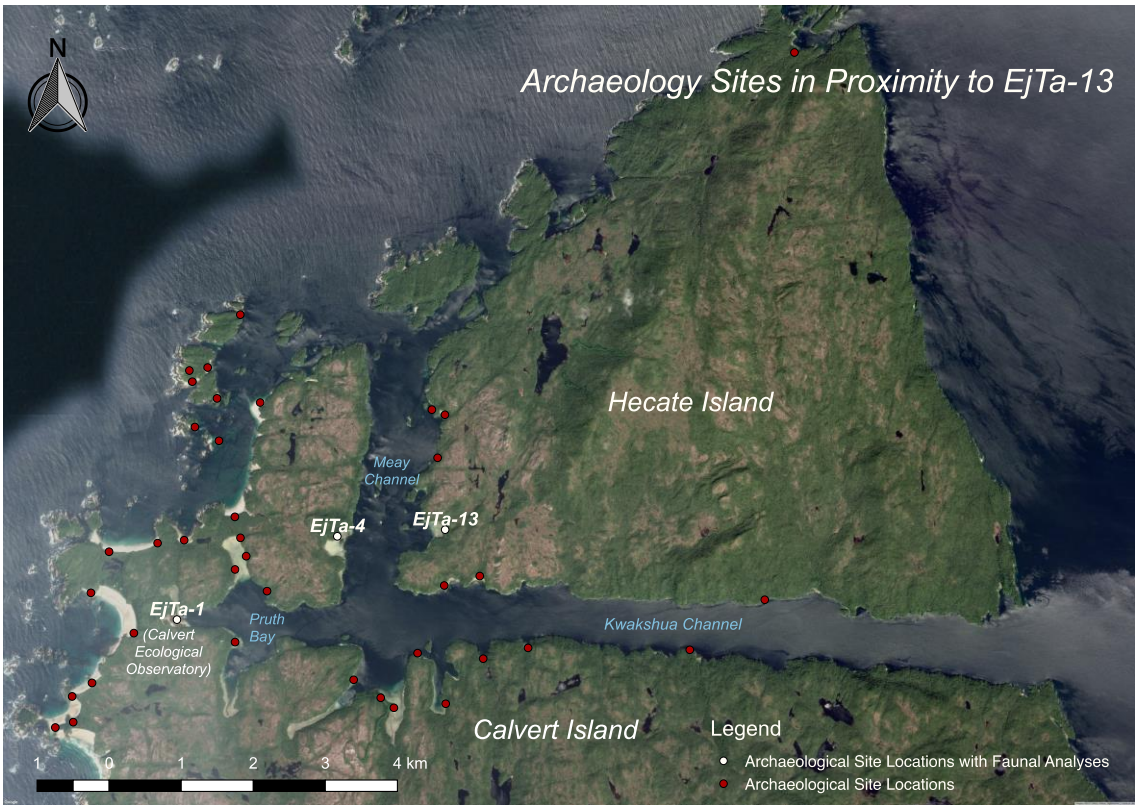
2.2.2 Sites in the Vicinity of EjTa-13 with Zooarchaeological Data

EjTa-1 (possibly *Luxvbalis* and currently the location for the Hakai Institute's Calvert Ecological Observatory) and EjTa-4 are archaeological sites in proximity to the study location (Figure 3), which include extensive shell midden deposits (>3 m deep) and have had thorough faunal identification and analyses conducted (Crockford and Frederick 2013; Stafford and Christensen 2014; Wigen 2011).

Site forms accessed from the Archaeology Branch of British Columbia note that EjTa-1 was originally recorded in the late 1970s and was revisited in the early 1990's and again in 2010. The most recent work at EjTa-1 resulted in 4,964 examined vertebrate faunal elements removed from evaluative units, surface exposures and auger tests (Wigen

2011). Fish taxa made up the majority of the number of identified specimens present (NISP): the most abundant fish taxa were halibut, salmon, herring and rockfish respectively (Wigen 2011). Radiocarbon dates from charcoal removed from the tested areas of the site dated to within the last 900 cal BP.

Figure 3. Map showing recorded archaeology sites in proximity to the study location. Subsurface testing shows EjTa-1 and EjTa-4 also have deep shell midden deposits and have undergone well-executed faunal analyses.



EjTa-4 was first recorded and revisited in the 1970's by Phillip Hobler with the University of Colorado and Anthony Pomeroy in association with Simon Fraser University. The site has recently been subject to successive years of excavations through the University of Northern British Columbia's (UNBC) archaeological fieldschool program resulting in a sizable faunal assemblage (NSP=20,487). However, due to the overwhelming amount of data collected, only a sub-sample of the total faunal assemblage

could be analyzed. Salmon, flatfish and rockfish respectively dominated the assemblage (Crockford and Frederick 2013). Herring is conspicuously less abundant, however this was due to large screen size (6.35 mm) which does not readily aid in the recovery of small fish bones, including herring (Crockford and Frederick 2013) and likely greenling as well. Radiocarbon dates submitted from the UBC fieldschool excavations at EjTa-4 date to approximately 7,500 cal years (Rahemtulla 2016).

Namu (ElSx-1) is known as the region's flagship archaeological site as a result of the extensive cultural record and investigations undertaken at this location and the temporal duration represented by a rigorous radiocarbon dating program. The large faunal record was used to highlight changing patterns of resource use over the past 7,000 cal BP (Cannon 1991, 2001a). Using Namu as an example, the most abundant taxa found at the village site during the excavations undertaken by SFU comprise salmon, herring, rockfish, and greenling. Less abundant terrestrial and marine mammals and bird taxa found at the site include deer (*Odocoileus hemionus*), harbour seal (*Phoca vitulina*) domestic dog (*Canis familiaris),* Mustelidae (mink, martens etc.), Gavidae (loons) and Anatidae (geese, ducks and merganzers) (Cannon 2001a).

2.3 Northwest Coast Ethnographic Overview with a Marine Focus

Heiltsuk and Wuikinuxv are politically and culturally separate Indigenous Nations whose territories overlap in some regions of the Hakai study area, including EjTa-13. Currently, the Heiltsuk Nation is made up of five sub-tribal groups (Maxwell et al. 1997; Olson 1955; White 2006) while Wuikinuxv identify as one community (Olson 1954). Heiltsuk and Wuikinuxv speak two different dialects of the Wakashan language family base (Hilton 1990). Hilton (1990) suggests the dialects are similar enough to almost be

understood between both Nations. The principle present-day Heiltsuk settlement is Bella Bella (*Waglisla*), and Oweekeno Village is the Wuikinuxv settlement.

The first European ship to visit the Central Coast was Captain Charles Duncan and crew on board the *Princess Royal*, recorded in 1788 (Galois 2004). This ship ventured around Calvert Island. Other early visits to the region included Captain James Colnett, aboard the *Prince of Wales*, in 1788 (Galois 2004), anchoring in the vicinity of Nulu (Núlú, Kildidt Sound). Along the Northwest Coast, the century following the contact period (post 1774) was marked by population devastation due to widespread epidemics (late 1770's, 1801-02, 1836-38 and mid 1800's) (Boyd 1994:7). Among the worst of the diseases was smallpox, where mortality rates in the late 1700s were estimated to be over 30 percent in areas along the Northwest Coast (Boyd 1994).

From the late 1800s to the middle of the twentieth century, anthropologists and ethnographers (Boas 1928, 1932; Bouchard and Kennedy 2002 [Boas 1895]; Drucker 1940; Olson 1954, 1955) visited Heiltsuk and Wuikinuxv territories to record ethnographies and oral histories. This data highlights the importance of fish for subsistence, social relations, and ceremonial life. Olson provides a general description of fishing events from his visit with Wuikinuxv at Rivers Inlet and Owikeno Lake area (1954:213):

> activities begin about March when the eulachon run comes in. About a month or even two is involved in catching the fish (by conical traps and the long eulachon nets) and rendering the oil. At this same time some few persons may gather herring eggs in the area around the mouth of the inlet. The first salmon are taken in May. These are eaten fresh as they are too fat for drying.

The focus of the following is on shellfish and fish remains as these taxa are much more abundant than those of mammal and bird in the vibracore samples, which is a common

outcome elsewhere within a Central Coast context and highlights the importance of these marine resources.

2.3.1 Shellfish Collection and Use

Researchers studying the Northwest Coast have historically undervalued the economic and dietary importance of marine invertebrate fauna (Moss 1993). There are a number of reasons why shellfish have been largely overlooked, including an association to deadly toxicity, gendered divisions of labour (e.g., perceived as a female-dominated activity and therefore undervalued), and social taboos surrounding the consumption of shellfish (Moss 1993). In a Tlingit case study Moss (1993) finds that ethnographic data and the community themselves undervalue the economic role of shellfish. Although Moss (1993) cautions against using this case study more broadly on the Northwest Coast, her results explain why shellfish in general are conspicuously sparse in ethnographic and ethnohistoric accounts. Nonetheless, some information about shellfish use is borrowed from elsewhere along the Northwest Coast in the following overview.

Ethnographic information suggests that butter clam (*Saxidomus gigantea*), littleneck, cockle, and mussels are the most commonly harvested and valued edible bivalves on the Northwest Coast (Lepofsky et al. 2015:241) and were likely collected by hand or with a digging stick (Moss 1993). Research efforts aimed at estimating the season of harvest of archaeological specimens of *S. gigantea* from a small selection of site types on the Central Coast show year-round harvest with an emphasis on spring and autumn (Burchell et al. 2014). Other Northwest Coast sources suggest that the season of harvest varied between taxa and community preferences (Moss 1993). These species all range in similar regions, from Alaska to Central or Southern California (Harbo 2007). Butter

clams live in a wide variety of sediment types, burrowing to a depth of 30 cm. This species inhabits the mid and lower intertidal zone to a depth of 40 m (Harbo 2007:164).

Pacific littleneck clams (*Protothaca staminea*) inhabit the mid intertidal zone in mixed substrates of gravel, sand and mud. In gravel, littleneck clams burrow 10 cm and in sand to muddy bottoms (Harbo 2007:166).

Basket (or Nuttall's) Cockle (*Clinocardium nuttallii*) prefers sand to gravel sediments, inhabiting the intertidal and shallow subtidal of protected shorelines (Harbo 2007:150).

California mussel (*Mytilus californianus*) is an edible mollusc that populates surf-exposed rocks and seamounts in the intertidal to 100 m (Harbo 2007:136). Pacific blue mussel (*Mytilus edulis*) is a smaller, edible mussel preferring quiet, sheltered habitats in the intertial zone (Harbo 2007:16). In Nuu-chah-nulth territories, other than providing food, California mussel shells in particular, were modified to make knives which were also used to cut fish (Stewart 1982:155) and mammals (Ellis and Swan 1981) and were shaped into harpoon points (McMillan 1999). Mussel shell knives are found in archaeological sites in numerous regions on the Northwest Coast (Stewart 1982).

Most barnacle (*Cirripedia*) species inhabit rocky substrates within the intertidal. Barnacles are also associated with clam garden rock walls or alignments, contributing significantly to the contents of shell hash captured on the landward side of these features and enhancing clam habitat (Lepofsky et al. 2015:245).

There are two species of horse clam (*T. nuttallii* and *T. capax*), which are difficult to differentiate and share similar ranges (Alaska to California). Horse clams prefer sand, and mud substrates and are normally buried 30 cm to 40 cm. These taxa have large

siphons that do not fit inside the shell, creating an open “gap” in the shell. They are found in the lower intertidal zone.

Urchins inhabit rocky intertidal shorelines with considerable wave action but are also sometimes found in the subtidal zone (Kozloff 1987:460). Urchins are easy prey for sea otters and are noted as a species of preference due to the ease of capture and energy return. In areas such as the Central Coast where sea otter populations are on the rise, urchin populations may be impacted (Ford 2014).

Presence of marine snails and limpets may also be found in shell middens, ranging between coastal Alaska and California. These marine snails and other smaller univalves were collected from the intertidal and considered edible elsewhere on the Northwest Coast (Ellis and Swan 1981). The opercula of selected marine snails (e.g., dogwinkle and red turban) are used as decorative inlays or insets on such items as masks and bentwood boxes (Harbo 2007; Moss 1993). These taxa were likely collected by hand or with a pry (Moss 1993).

2.3.2 Fish and Fishing Technologies

Fishing technologies of the Northwest Coast are described as both complex and productive, showing a profound knowledge of the resources and illustrate that Northwest Coast peoples were true marine specialists. Watercrafts were ubiquitous on the Northwest coast, with ethnographic accounts confirming that even children had their own boats (Ames 2002:32). Archaeological evidence shows that fish were taken from the intertidal zone, as well as lured from epipelagic (0-200 m) ocean depths. The following briefly summarizes fishing technologies relating to intertidal, near-shore and off-shore marine environments of Northwest Coast communities.

1. Pacific Salmon

Salmon are prominent figures in Central Coast oral narratives and historic accounts and also played an extensive role in the construction of early Northwest Coast settlement patterns interpreted through the abundance of salmon remains found in archaeological sites (e.g., Ames 2005a; Cannon 2001b; Cannon and Yang 2006; Pomeroy 1980). Salmon bones are the second most ubiquitous and abundant fish taxa found in coastal archaeological sites from Oregon to Alaska spanning the Holocene (McKechnie and Moss 2016). The five major species of salmon variously provide a protein and fat-rich[4] dietary staple and can also be dried and smoked, making certain species particularly valuable for winter storage when other resources become less accessible (Matson 1992; Moss 2011; Schalk 1977). Wuikinuxv were described as owning and performing the Salmon Spirit Dance in the Shamans' Series (Drucker 1940), and many communities along the Northwest Coast practice the first salmon ceremony that essentially honours the first returning salmon of the season, both of which acknowledge the fish within the ceremonial context (Gunther 1926). Additionally, salmon explicitly were said to respond to, or have ownership over human twins (Boas 1928, 1932; Bouchard and Kennedy 2002; Olson 1954) and are featured in a number of narratives displaying them as supernatural and non-human persons. Among other important resources such as cedar, salmon are integral to the formation of "classical Northwest Coast cultures" however it is important not to overemphasize such contributions (Donald 2003:332).

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[4] The amount of fat varies between Pacific anadromous species and depends on where in the migratory cycle the species are.

Although there are a total of seven species of Pacific salmon (dolly varden and steelhead are included in this genus), the five anadromous salmon species are the most relevant to the study area. There are five ocean-going Pacific salmon species (*Oncorhynchus spp.)* found on the Northwest Coast including, chinook[5] (*O. tshawytscha) (also known as spring or king salmon),* chum (*O. keta*) (*dog salmon*), coho (*O. kisutch*), pink (*O. gorbuscha*) (humpback) and sockeye salmon (*O. nerka).* As mentioned, salmon are anadromous, meaning they hatch in freshwater systems, migrate to the ocean for a large part of their lifespan and then return to freshwater to spawn. This primary characteristic is thought to associate salmon to life and regeneration in Central Coast ethnographic accounts (Harkin 1990:103). Among these multiple species, there is an average between five to 13 percent oil content in their muscle tissue, whereas flatfish often have only one percent fat content contained in their livers (Cannon 2001b). This unique characteristic makes some salmon species a very desirable resource. However, more lean species were preferred for winter storage when other sources of food are scarce (Cannon 2001b). Each salmon species has different migration patterns, habitat and spawning preferences and is used to meet different dietary and storage needs. Chinook are the largest of the eastern Pacific salmon species, and have widely varying breeding intervals, spawning between late summer to early fall in large streams and rivers[6] (Love 2011). In contrast, sockeye salmon spawn in lake-fed systems, such as Rivers Inlet, in late summer to fall. Chinook and sockeye salmon are higher in fat content, making them less desirable for storage and so these species were often eaten fresh (Moss et al. 2014).

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[5] Chinook no longer spawn in Heiltsuk watersheds (White 2011 [Pomeroy 1980]).
[6] Northern Chinook spawn earlier than more southern species (Love 2011).

Pink salmon are small, have short lifespans (2 years), and migrate between September and October to spawn in small rivers and streams (Hart 1973). Chum salmon are also abundant with northern populations spawning in autumn in medium sized rivers and streams (Love 2011). Along with pink salmon, chum are the most desirable to smoke or dry due to their lower oil content, which mean they are less likely to spoil (Moss et al 2014). Finally, coho salmon return to spawn in variously sized lake and river systems in early fall (Hart 1973), at two to three year intervals.

On the Central Coast and depending on the preferences of the species, salmon were taken using a variety of mass capture devices, such as semi-circular stone fish traps and weirs during the spawn event (Pomeroy 1976, Stewart 1982; White 2011). Fishers also speared salmon as they aggregated at the river and stream mouths, and trolled using hook and line or caught with nets where runs were inaccessible (Stewart 1982). Figure 4 shows *known* salmon spawning creeks and rivers within a 30 km radius of EjTa-13 based on historical yearly escapement data (1942-1974) provided by Fisheries and Oceans Canada (Pomeroy 1980:177-178) and a locally known spawning stream located at Big Spring Creek. [7]

There is no doubt that salmon was a meaningful marine resource, however it is important not to overemphasize the significance of this fish as the term "salmonopia" ("the inability to see all the food resources because of salmon" [Monks 1987:119]) reminds us.

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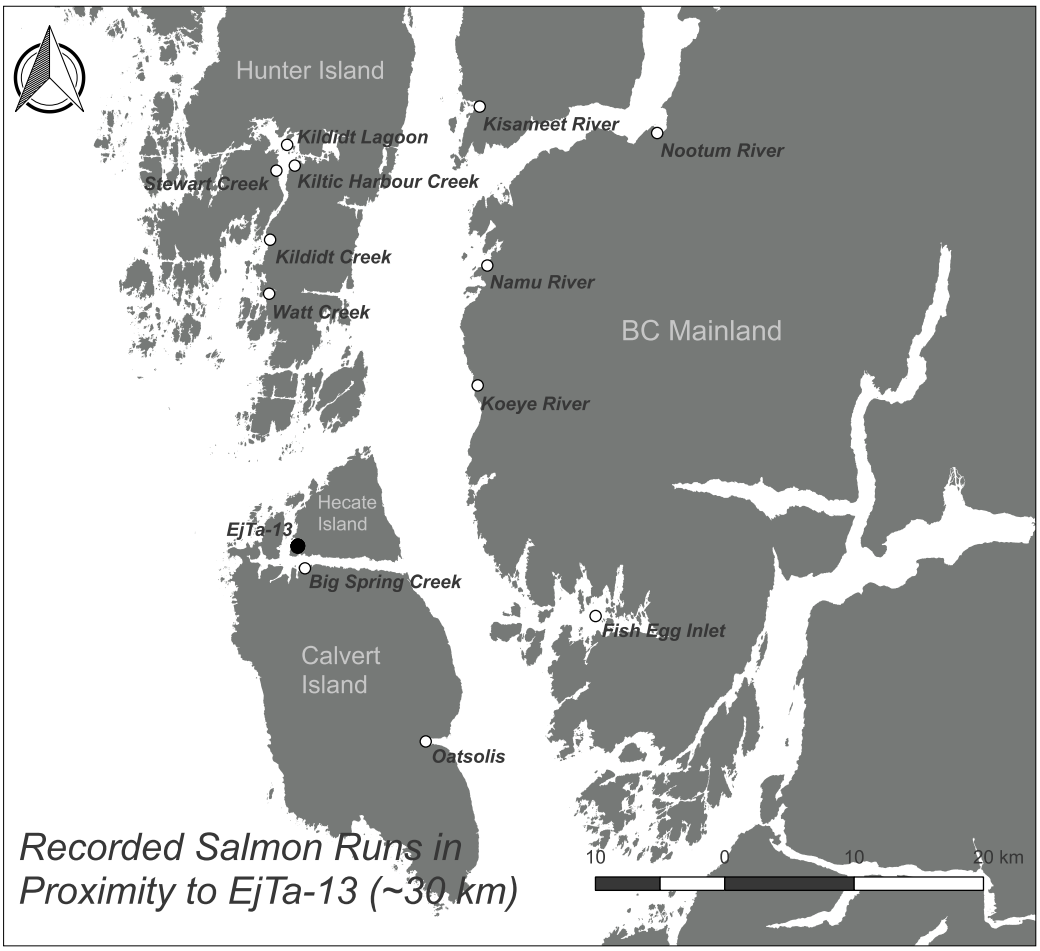
[7] EjTa-28 is associated with a fishtrap feature at the mouth of Big Spring Creek in Kwakshua Channel and likely supported a small salmon fishery however no ethnographic information is available for this location. EjTa-6 also has a fishtrap but is not associated with a salmon-bearing stream. Both sites are located within 2.5 km of EjTa-13.

Figure 4. Map showing historical and locally known salmon spawning locations within an approximate 30 km radius of EjTa-13 (Pomeroy 1980[Fisheries and Oceans Canada]).



2. *Schooling Smelt: Pacific Herring, Eulachon, Northern Anchovy and Pacific Sardine*

a. Pacific Herring

Pacific herring (*Clupea pallasii*) remains are the most ubiquitous and relatively abundant fish at the majority of coastal archaeological sites on the Northwest Coast (McKechnie and Moss 2016; McKechnie et al. 2014). Turner and Garibaldi (2004) introduce the concept of "cultural keystone species" which is used elsewhere to describe herring (i.e., McKechnie et al. 2014; Thornton and Hebert 2014) as having an integral

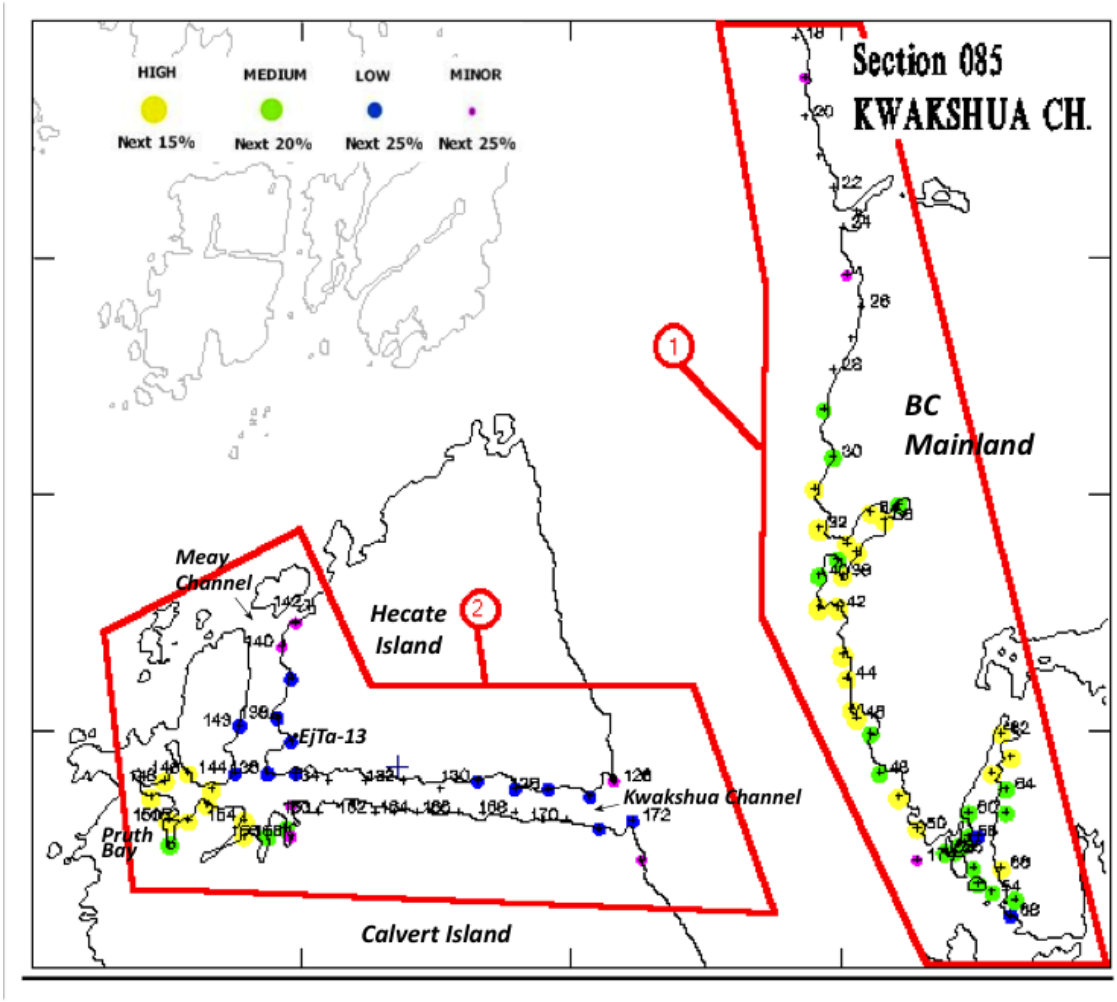
role within coastal Indigenous communities. Moss (2015:650) notes that herring meat, roe and oil are rich in calories, protein and Omega-3 fatty acids and have "higher concentrations of calories than do salmon, beaver, seal, deer, and other foods." In Central Coast cosmology, Olson (1954:213) notes, "It is believed that the herring meet the eulachon at the mouth of the inlet and say to them, "You may give your grease to them now. We have given them our eggs." Olson's observation at once provides a connection between the spawn events of the herring and eulachon as well as inferring a sense of the cultural significance of the two fish as offering a gift to the communities. Additionally, "Raven Obtains the Herring" (described in Boas 1932: 6) is a Central Coast narrative in which Raven brings herring to the Heiltsuk community by supernatural means.

Herring gather in large schools reaching up to several kilometres in length. Other smelts are sometimes found schooling with herring in relatively deep waters (Hart 1973). The spawning event allows easy access to herring; annual spawning events occur in shallow (~0-11 m), protected bays along coastlines, where roe are deposited on eelgrasses, kelps, rockweed, other seaweeds and sometimes rocks, and pilings in thick layers of small eggs (1.2 to 1.5 mm) (Hart 1973:97), providing other marine species with an abundance of food as they forage on both the herring roe and the spawning fish (Love 2011). In BC specifically, herring spawn in late winter concentrating in March, with some spawning in February, April and as late as early June or July (Hart 1973: 97). Herring spawn annually in the same general locations, and unlike salmon do not die after they spawn. Thus, if managed sustainably, herring can provide a reliable food source (Fox et al. 2014; Love 2011). As the herring roe wash ashore with the tides and wave action, bird, marine mammals and terrestrial species in turn, are afforded access to roe

(Fox et al. 2014). Larvae and juveniles spend the summer in shallow waters and within two to three years join the schools of adult herring (Love 2011). The spawning event allows for significant social relationships for Indigenous communities, such as harvesting herring roe-on-kelp or spruce and fir boughs secured in spawn locations. Harvesting herring roe does not leave a lasting archaeological record however the enduring social practices specifically outlined in the Heiltsuk court case, *R. v. Gladstone* [1996] state that the commercial sale of herring spawn on kelp is an Aboriginal right as it was (and still is) a significant and defining feature of the Heiltsuk culture prior to contact (Harris 2000). Poor fisheries management of herring stocks at the midst of industrial fishing by the US and Canadian governments in the late 1960s caused a crash in herring populations from Alaska to California, a crash from which the stocks have not fully recovered (Gauvreau et al. 2017; Powell 2012). In contrast, Central Coast communities, such as the Heiltsuk Nation have sustained herring harvests within their traditional territory for millennia (Cannon 2000a; McKechnie et al. 2014). Figure 5 shows a map of historical spawning locations (cumulative spawn shown at 1 km positions [1928-2001]) within Kwakshua and Meay (2) Channels (near EjTa-13) and the adjacent BC mainland including a portion of Fish Egg Inlet (1) (Fisheries and Oceans Canada 2016).

Ethnographically, herring were fished in large numbers with specialized fishing equipment including fishnets and herring rakes. The prepared rake shafts were approximately 4 m long with small, sharpened bone points inset in a single row along the opposite end of the tool from the handle and set with pitch or nailed in from the back of the shaft snuggly into place (Stewart 1982). Jewitt (1816 [1803]:126-127) witnessed

Figure 5. Section 085 Kwakshua Channel: cumulative spawn shown at one-kilometer positions between 1928-2001 (Fisheries and Oceans Canada 2016).



Nuu-chah-nulth fishers sweeping rakes through waters filled with spawning herring, impaling up to ten to twelve fish on the sharpened bone points per sweep. The fisher deposited the herring into a canoe by tapping the rake shaft against the gunwales to remove fish from the bone teeth while another person steered the canoe. Jewitt (1816 [1803]) also observed Nuu-chah-nulth peoples using rakes for taking other smelt and eulachon in addition to herring. Other documented mass capture devices used during the spawn include herring dip nets (Stewart 1982). Herring and roe-on-kelp were dried for preservation or consumed fresh.

b. Eulachon

Eulachon are a small, short-lived, anadromous, schooling fish that spend little time as juveniles in freshwater before migrating to the ocean, inhabiting the offshore shelf marine environment in epipelagic waters (Love 2011). Once mature, eulachon populations return to freshwater sources to spawn, peaking in mid to late March on the central coast of BC but also caught in late April and May (Moody and Pitcher 2010:20). Eulachon were a culturally significant resource because of the rich oil content and were rendered down to produce a coastal delicacy called "eulachon grease" in addition to being smoked and dried (Moody and Pitcher 2010). Eulachon grease is highly valued on the coast and in the interior of BC and was traded extensively via boxes of rendered grease through intricate trail systems called "grease trails." Eulachon were taken during their spawning period, often occurring in large mainland rivers (Hart 1973). In addition to rakes, eulachon were caught using a combination of technologies including hand, bag, conical, weirs/traps and dip nets (Moss 2012; Stewart 1982).

c. Northern Anchovy

The life history of the Northern anchovy is poorly understood in BC, due to their sporadic occurrence, likely as a result of the preference for warmer ocean temperatures for spawning and hence historically limited presence in the area (Fisheries and Oceans 2013; Hart 1973). Archaeologically, anchovy is ubiquitous over time (~ 5,000 years) and is ranked the third most ubiquitous species (out of 24 sites) within the Central Coast region (McKechnie and Moss 2016:480).

d. Pacific Sardine

Pacific Sardine (*Sardinops sagax caerulea)* is a pelagic, schooling smelt that may act as a predictor of warming trends, similar to Northern anchovy (Love 2011). Specifically, Love (2011:105) reports that sardines are sensitive to ocean temperatures and move northward during warmer water trends, particularity the larger fish within the population. In the early summer, the largest, oldest fish migrate the furthest north, reaching the west coast of Vancouver Island and then returning south in autumn (Hart 1973:102). Due to the lack of ethnographic information, irregularity of occurrence in northern waters and the scarcity of the species within BC archaeological contexts, little is known about this fish on a local level. However, it is likely it was taken in a similar manner to the smelts mentioned above.

3. Deep Water Taxa: Pacific Halibut, and Sablefish

a. Pacific Halibut

Pacific halibut (*Hippoglossus stenolepis*) is only one of many flatfish found in coastal archaeological sites, including EjTa-13. However, halibut is the largest flatfish and is distinguished ethnographically from other flatfish taxa and requires specialized fishing technologies. As such, the species is highlighted separately from other flatfish taxa.

Halibut is a prominent supernatural figure recorded in Central Coast oral histories (Boas 1932). In the narrative “Raven and Halibut Fisherman” Raven is taught how to fish for halibut by a supernatural human figure using kelp fishing line (Boas 1932:23). It is undetermined as to whether halibut should be considered supernatural themselves. Halibut generally inhabit deep water, and occasionally travel to the ocean surface to feed

(Love 2011). For example, halibut are observed ascending towards the surface to feed on herring during the annual spawning event. Northwest Coast communities used specialized equipment to fish for large halibut. This involved long kelp fishing line and specialized halibut hooks: the construction of which varied regionally (Stewart 1982). The northern style (i.e., Haida and Tlingit) of halibut hooks are described as wooden hooks generally made from two pieces of carved wood that make a "V-shape"(Stewart 1982). Elsewhere along the Northwest coast halibut hooks are constructed in the bentwood fashion. With the "V-shape" style, one wooden arm is sometimes carved to resemble an anthropomorphic or zoomorphic figure such as a woman, or octopus which faces toward the halibut as it approaches the hook (Stewart 1982). The other wooden arm has a sharp bone barb secured into place with wrapped split spruce root (Stewart 1982). The composite hook is weighted with a stone sinker and the baited end floats towards the surface. With both styles, the opening between the bone barb and the hook allowed enough space for the mouth of the halibut to take the hook, however the barb would pierce the side of the fish's jaw as it tried to pull away. Ethnographic accounts suggest that halibut tended to be butchered on the shore before transporting the meat to the house, leaving the remaining carcass and bones on the beach (Orchard and Wigen 2016). However, Swan (1870) notes that the Makah processed the gutted halibut once it is brought to the houses:

> The heads, the back bones, to which some flesh adheres, and the tails, are all dried and packed away separately from the body pieces…The heads, tails, and back bones are boiled. The dried strips from the body are eaten without further cooking, being simply broken into small pieces, dipped in whale oil, and so chewed and swallowed (Swan 1870:23).

Differential butchering techniques, depositing halibut remains on the beach and

overemphasis of halibut within the ethnographic record are explanations used to rationalize the absence of halibut bones from the archaeological record. However, the true cause of the absence of remains in archaeological contexts is still unknown (Orchard and Wigen 2016).

b. Sablefish

Sablefish (*Anoplopoma fimbria*; also referred to as "Black Cod") develop as juveniles in shallower, nearshore environments (Love 2011), maturing to inhabit ocean depths of 200-1000 m making them particularly inaccessible as prey when fully grown. As such, it is likely that sablefish were caught in the juvenile phase of development (Nims 2016).

Although sablefish are found commonly, in inconsistently small numbers in archaeological sites on the Northwest Coast, there is some confusion concerning this species in the ethnographic and archaeological record on the Northwest Coast (Nims 2016). In a Central Coast narrative, Raven makes a hook to catch black cod (Boas 1932:17), inferring there was specialized equipment for fishing sablefish. Additionally, Stewart (1982:40) illustrates bentwood hooks used mainly for "black cod", but sablefish are conspicuously absent from Stewart's (1982) illustrated text, instead featuring Black Rockfish (*Sebastes melanops*) that was often also called "black rock cod."[8] Hobler (1978) reports on as many as 69 "black cod" bent-wood, "snap-shut" single piece hooks in a rock shelter site within Tasu Sound on the west coast of Moresby Island in Haida territory. Like the halibut hooks, some are carved to resemble a zoomorphic figure at the

[8] Rockfish species are often called "cod" or "rock cod"

barbed tip. Furthermore, Croes (1988) notes that “black cod” hooks may have been used to catch Pacific cod (Gadidae). The confusing ethnographic records of sablefish are compounded by the worrisome deficiency of remains noted in the archaeological record. In his Master’s thesis, Nims (2016) concludes that the result of finding little evidence of sablefish in the archaeological record was *not* a matter of misidentification, inadequate screen size, small sediment sampling size or post-depositional processes. However, Nims (2016) adds that more research is necessary to determine why there is seemingly low amounts of sablefish recorded in areas where ethnographic evidence suggests that sablefish were highly valued, such as in Haida Gwaii.

4. The Taken-for-Granted: Flatfish, Sculpin, Rockfish, Greenling, and Dogfish

Apart from the three most abundant and ubiquitous taxa (e.g., herring, salmon, anchovy), greenling, rockfish, sculpin, smelts, and dogfish respectively are ranked the next most ubiquitous taxa represented in archaeological sites on the Northwest Coast (McKechnie and Moss 2016). In short, these taxa (not including aforementioned smelts) inhabit a variety of marine environments but were likely taken in nearshore or in epipelagic waters and are not often described as requiring specialized fishing equipment other than previously mentioned technologies such as hook and line, fish or basket traps and weirs.

a. Greenling and Rockfish

The genera representing rockfish (*Sebastes*) and greenling (*Hexagrammos*) are generally identified in Central Coast archaeological sites (McKechnie and Moss 2016:479). Both taxa of fish are generally found year-round in shallow to deep coastal

waters (Hart 1973) and were likely caught with hook and line as well as in basket traps (McKechnie 2007).

b. Sculpin, Dogfish, Flatfish, and Ratfish

Dogfish (*Squalidae*), sculpin (*Cottidae*), flatfish (*Pleuronectiformes*: starry flounder and various soles) and other fish taxa which are ubiquitous in small numbers in archaeological sites dating to the mid to late Holocene (McKechnie and Moss 2016), are often found year-round and are also accessible with the previously mentioned Northwest Coast fishing technologies. Dogfish sharks are cartilaginous fish (~100 vertebra, two dorsal spines and numerous teeth) containing a liver rich in oil and vitamin A (Crockford and Frederick 2013). Ratfish (*Hydrolagus colliei)* is also a cartilaginous, oil-rich fish: ratfish teeth (n=6) and a single spine are found sporadically but consistently in the archaeological record and are likely underrepresented (in addition to dogfish sharks) due to lack of bone preservation (Cannon 2000c; Crockford and Frederick 2013). Interestingly, Cannon (2000c) finds a clear inverse relationship between abundances of the ratfish and dogfish and salmon and sea mammal at Namu.

2.4 Issues Relating to Zooarchaeology on the Northwest Coast

2.4.1 Early and Late Intensification Models

Researchers use faunal remains found in archaeological contexts to structure evidence in support of various subsistence and settlement (*how* people acquired food) strategies as well as overall dietary preferences (*what* people ate) for the Northwest Coast (Driver 1993) since these early investigations began.

Two highly contested models for the emergence of a storage-based, salmon-

fishing economy have been tested using evidence from Northwest Coast prehistory. One theory suggests that the intensification of salmon production and storage occurred much later (ca. 4000 cal BP) and was entwined with markers of complex social organization such as population growth, resource ownership, investment of labour and social differentiation (See Coupland 1998; Croes and Hackenberger 1988; Matson 1992). In this context, intensification is defined by Ames (2005a:70) as "the processes by which one or more elements of production (e.g., labour, land, technology, skill, knowledge, organization) are increased relative to other elements in order to maintain or increase food production (or the production of some other commodity)." Archaeological evidence from a small number of Northwest Coast sites (e.g., Crescent Beach and Hoko River) was used to support the late intensification model and to put forth evidence for broader regional trends. Evidence included the technological complexity inherent in facilitating salmon procurement and storage, the nutritional viability of alternative food sources and patterns of skeleton representation of salmon from a few selected sites (Cannon 2001b:180). Cannon (2001b:181) proposes three main weaknesses in the late intensification model. Primarily, specialized technologies and skills are not required to capture and store an abundance of salmon and archaeological sites with earlier components, such as (early) Namu, show strong evidence of intensive salmon fishing and storage. Secondly, as mentioned previously, other comparable resources (such as, shellfish, deer or flatfish) have sufficient calories and protein but lack the relatively high fat content found in salmon meaning these resources were not solely adequate dietary resources for early period inhabitants, especially over the winter months (Cannon 2001b:181). Finally, evidence showing fewer salmon cranial bones than vertebral

elements in the later period is subject to too many external influences to be considered as adequate evidence to aid in supporting the late intensification model. Instead, Cannon (2001b) presents evidence (primarily from Namu but accompanied by two other sites) that contributes to the early model of intensification, stating that concentrated salmon fishing occurred much earlier and was separate from social and cultural development (Cannon 2001b: 178). That is, complex social organization did not play a role in the shift to a storage-based subsistence economy. Cannon (2001b) argues that the early intensification model is illustrated confidently using Namu and two nearby archaeology sites (i.e., Kisameet and EkSx-12 [Koeye River]) as a well-documented case study of early intensification of salmon procurement and storage. Cannon (2001b) states "[s]pecialized technologies and skills are not required to process and store large quantities of salmon, and conclusive early evidence of the capacity to mass-harvest this seasonally restricted resource indicates a capacity for storage from an equally early date." Using Namu as an example, he states that archaeological sites show a unique signature of faunal representation depending on local and regional availability of resources and fluctuations in environmental conditions. To this effect, Cannon shows a modest decline in salmon at 4,000 cal BP and subsequent increase in what he describes as more marginal subsistence resources (Cannon 1995, 2000c), such as ratfish and deer, illustrating that these local fluctuations are present and cautions modeling regional trends of resource exploitation using a limited number of sites with loosely articulated evidence. However, Cannon clearly shows that salmon dominated the local subsistence economy at Namu from ca. 7,000 years to contact. It is also important to note that Namu is situated on a large multi species salmon-bearing river whereas other sites in the area are not. Cannon

(2001b:183) also touches briefly on the abundance of herring recovered in bulk matrix samples and auger samples using 2 mm screen size stating that the “early spring herring fishery was as important as the autumn salmon fishery in terms of the subsistence economy” at Namu.

2.5 Archaeological Sampling Problems on the Northwest Coast: Archaeology and Zooarchaeology

2.5.1 Archaeological Interpretation Strategies

A number of recent studies have explored broad to regional scale faunal use on the Northwest Coast (Cannon 2013; Butler and Campbell 2004; McKechnie and Moss 2016; McKechnie 2014; Orchard and Clark 2005, 2014). For example, McKechnie and Moss (2016) undertook a broad scale study using meta-analysis methodology and GIS-based spatial visualizations of fine-screened faunal analyses from 222 coastal archaeology sites dating to the late Holocene, spanning the Pacific coast from southeast Alaska to Oregon. In an earlier example of a regional scale study, Orchard and Clark (2005, 2014) discuss the use of multidimensional scaling (MDS) of data from 13 well-dated faunal assemblages from archaeological sites in the Kunghit region of southern Haida Gwaii. Orchard and Clark (2005:89) succinctly describe multidimensional scaling as “a series of statistical procedures that compress complex data sets into what is essentially a map of variation.” These studies use data that are composed of previously collected faunal assemblages and are subject to varying levels of quality and control and as such, set clear parameters pertaining to the use of the data included. Both studies also successfully interpret overarching trends from the data. For example, Orchard and Clark (2005) isolate a trend that illustrates a shift in resource use from rockfish to salmon at

approximately ca. 700 cal BP, with the transition beginning earlier in the Kunghit region of southern Haida Gwaii. The transition from rockfish to salmon as the dominant resource happened relatively late in the region, a trend that occurred much earlier on other parts of the coast (Orchard and Clark 2005).

Building on the 2005 study using MDS, Orchard and Clark (2014:199) expand their initial regionally-based analysis to encompass 63 faunal assemblages from 39 shell midden sites spanning a broad temporal (mid-late Holocene) and spatial range along the Northwest Coast. Important with regards to this project, the study concludes by stating 1) attempts to homogenize "economic strategies" across the Northwest Coast are not attainable 2) salmon intensification is regionally diverse (at least within the last 1,500 years to present). Orchard and Clark (2014:212) omit small fish from the study due to differential recovery methods, however the authors note that the "removal of these taxa did not change the basic results of this analysis, a stability that highlights the robustness of the methodology."

Another regional study by McKechnie and Moss (2016) confirm that herring and salmon respectively make up the most ubiquitous fish taxa found within the sites represented in the 2005 study by Orchard and Clark analysis. McKechnie and Moss (2016) show that southern regions (Central Coast included, Oregon excluded) have a higher rank order abundance of Pacific herring while more northern regions show that salmon is comparatively more abundant. The analysis effectively shows regional trends in resource use spanning Oregon to Alaska.

As previously discussed, Cannon (2013) examined data from 28 central coast shell midden sites through core and auger sampling to determine the activities and

functions through the interpreted archaeological evidence. Cannon's work involved intensive radiocarbon dating and the analysis of fish and shellfish remains, which provide a reflection of the subsistence strategy for each tested location. He finds that the archaeological sites can be categorized based on area and density of fish remains. The study shows the application of core and auger sampling to understand site size and function as a cost-efficient alternative to large-scale excavation to retrieve similar data.

2.5.2 Zooarchaeological Sampling Approaches: Column, Coring and Auger Sampling

It is extremely uncommon for archaeological researchers to excavate an entire shell midden site. Many sites can be large in area, contain a wealth of preserved shell and bone and thus may contain huge volumes of information. As such, sediments from column, core or auger sampling can be efficient and statistically effective strategies for understanding patterns of faunal use through time. Gray's (2008) research focused on exposing the effectiveness of archaeological sampling strategies for capturing a representative reflection of faunal remains within the remnants of longhouse structures of Northwest Coast Indigenous peoples. With relevance to this project, Gray (2008) illustrates the effects of a variety of sampling techniques on the size and adequacy (i.e., taxonomic richness and relative abundance) of recovered faunal assemblages. Among the conclusions from the project, Gray (2008:147) determines that most sampling strategies, regardless of size or method identify the most abundant taxa (but does note elsewhere [p.58] the issues inherent to screen size and small fish); a "systematic" sample of 5% is adequate in reflecting general trends of relative abundance of most taxa; and sampling method over size is more important when determining relative abundance of a taxon.

Gray's (2008) conclusions highlight sampling size and strategy within a specific component of a site (i.e., households) but also holds relevancy for projects like this one, that are interested in trends across an entire shell midden site.

Collecting auger and core samples as a means to build site chronologies, assemble environmental data, and for collecting representative information of the extent of the shell midden sites are not new methods on the Northwest Coast or more specifically, on the Central Coast (Cannon et al. 2011; Cannon 2000a, 2000b, 2013; Martindale et al. 2009; McLaren 2013; Taylor et al. 2011). Environmentalist's Subsoil Probe (ESP) and bucket auger samples provide a quick, efficient and cost-effective method to extract data as an alternative to large scale excavation. ESP devices are used to extract core sections that are stratigraphically consistent, thus ensuring that dating material sampled from the core sediments are accurate (Cannon 2000b). Auger sampling has also been proven as an effective and efficient means for collecting fauna, including small fish bones from deep deposit shell middens on the Central Coast, as well as providing stratigraphically intact radiocarbon dates from the sediments (Cannon 2000a). However, a drawback of using auger sampling is that it causes the churning of sediments, limits the amount of sediments removed per sample (~20 cm per bucket), and can result in contamination. A major limitation to ESP coring is that the cored sediments are compacted through the process. However, calculating the "degree of compaction" has been successfully estimated and used in studies in coastal shell middens to compensate for this sampling issue (Cannon 2000b:70; Martindale et al. 2009). ESP (and ESP plus) cores are not used for collecting a representative faunal sample due in part, to the small volume of sediments collected whereas successful studies have used fauna recovered from auger samples.

Although collected in association with excavation units, column samples can be comparable in volume to an auger core sample test. Column samples are fixed volumes of archaeological matrix removed from one wall of an excavation unit to provide an opportunity to study the contents of the sediments (e.g., micro fauna) in a controlled environment (Casteel 1976). Column sampling (as well as auger sampling) is an established method for delivering an accurate reflection of the surrounding cultural sediments in terms of fish taxa (Casteel 1976; Conover 1978; McKechnie 2005) but is not suitable for recovering sufficient quantities of larger faunal elements such as sea mammal bones.

2.5.3 Methodological Challenges to Sampling Faunal Assemblages in Coastal Settings

There are a number of critical reviews of sampling strategies directed towards the challenges of sampling faunal assemblages on the Northwest Coast (Casteel 1976; Driver 1992, 1993; Grayson 1984). For example, Grayson (1984:2) highlights issues concerning the quantification of vertebrate fauna as it relates to archaeological sites. Grayson critiques a number of important considerations when using number of identified specimens (NISP) to calculate the abundance of taxa in an assemblage, including the density of bone as it relates to bone preservation (Grayson 1984:20-21). Taphonomic and differential bone preservation are also highlighted as major issues concerning halibut bones specifically, as halibut remains have been documented as disintegrating during the excavation process while other fish bones, such as salmon are surprisingly durable (Orchard and Wigen 2016). These considerations underscore the fact that there are inherent issues with faunal analysis, which are difficult to account for and will always

cause complications when looking at even the most basic method of quantification, such as NISP.

A significant observation of faunal identification results is that they often lack detailed descriptions of the analysis process and are not standardized (Driver 1992; Nims and Butler 2017). Driver (1992:38) suggests creating groups based on diet, locomotion, and size in addition to classifying based on the Linnaean system of taxonomic categorization (i.e., family, genus, species). Organizing fish into categories based on size, for instance might also be extended to include grouping by way of fishing strategies, preferred fish habitat or behaviour. Driver (1992) also criticizes the use of categories which cross-cut major taxonomic classifications. For example, due to the difficulty of identifying the differences between fragments of small mammal and bird bones, faunal identification experts may choose to create a category which includes "small unidentified mammal or bird bone", which this study does. Assumptions can create unchecked bias in the process of faunal identification. In another example, Driver (1992:39) notes,

> What zooarchaeologists really mean when they identify a bone fragment is that, given our knowledge of what animal species are likely to have been found in an area during a particular time period, one can identify a fragment based on a combination of size and morphological characteristics.

Turning to British Columbia, zooarchaeological studies of faunal assemblages are undertaken in most cases to provide insights concerning diet and subsistence strategies and often provide substantial supporting evidence for settlement strategies associated with archaeological sites (Driver 1993). While commenting on the background of faunal identification in BC, Driver (1993:80) makes an important point in reference to

taphonomic studies that have been initiated within the field of palaeontology showing that:

> ...sites are unlikely to provide a simple reflection of the animal communities which lived around the sites. The processes which move bones to a site, bury bones, and preserve bones do not result in the ultimate recovery of a representative collection of the local animal population.

Although quite obvious when considering the intricacy of taphonomic processes, this insight adds yet another layer of complexity when considering a community's cultural preference for certain species or the technology available to access certain fish taxa as reflected within archaeological contexts and the differential preservation of some taxa over others. This simple observation is often overlooked in an attempt to reconstruct past environments through faunal remains. Driver (1993:94) also addresses archaeological researchers' incorrect use of faunal bones to predict site seasonality when we know inhabitants practiced extensive food storage techniques. This means that the deposited fauna is not necessarily representative of the season in which it was harvested but instead may reflect food preservation. Lastly, in reference to Monks (1987) work, Driver (1993:96) asks us to consider the possibility that marine-based communities were exploiting not just species, but whole food webs such as the predators that aggregate during herring spawning season. This seems plausible when considering the opportunity presented as, for example, a broad assemblage of species gathering to feed on the herring spawn available to avifauna, terrestrial and marine coastal species.

Finally, an important detail that is continuously emerging from the studies that examine small fish bones, is the importance of fine screen recovery and the need for a re-evaluation of the contribution of these taxa to the subsistence strategy and diet of the

coastal communities who targeted them. For example, McKechnie (2005) examines vertebrate fauna recovered using fine-screens (2-3.2 mm) from five column samples and compares the data to fauna recovered from excavation units within the same site complex. Broadly, the most profound difference was that more fish remains are collected using smaller screen size (e.g., ≤ 3mm) than in ¼ inch (6 mm) screen size, resulting in a more representative sample of the most commonly occurring vertebrates. The overall number of identified fish taxa found in both the column and excavation units plateaued at a similar value, inferring that a degree of sampling redundancy was reached using the two screen-sizes and therefore enabling a basis for comparing the resultant abundance values. However, small screen size provides a *much* more accurate measure of the relative abundance (NISP percentage) of taxa in the site, and especially as it relates to the number of small fish bone recovered, (e.g., small rockfish and greenling) which may otherwise pass through a ¼ inch screen. Additionally, conclusions from this study illustrate the proportional abundance of larger fauna recovered from using the ¼ inch screens are overrepresented in comparison to smaller taxa that fall through the screens. Therefore, for more accurate recovery and analysis of fish bones it is recommended to use fine-screens (e.g., ≤ 3mm): a conclusion also determined by Casteel (1976).

In summary, this section outlined a number of considerations and challenges to studying fauna with a focus on zooarchaeological and archaeological studies in BC. This information will help inform the results and interpretations presented in the case study that follows.

Chapter 3: Methods

This chapter outlines methodologies used during the fieldwork and laboratory components of this project. In the field, the main goal was testing the application of vibracore technology for sampling terrestrial shell midden deposits on the Central Coast. In the laboratory setting, the primary methods included faunal identification and analysis, logging of the stratigraphic sections, and radiocarbon dating of vibracore samples.

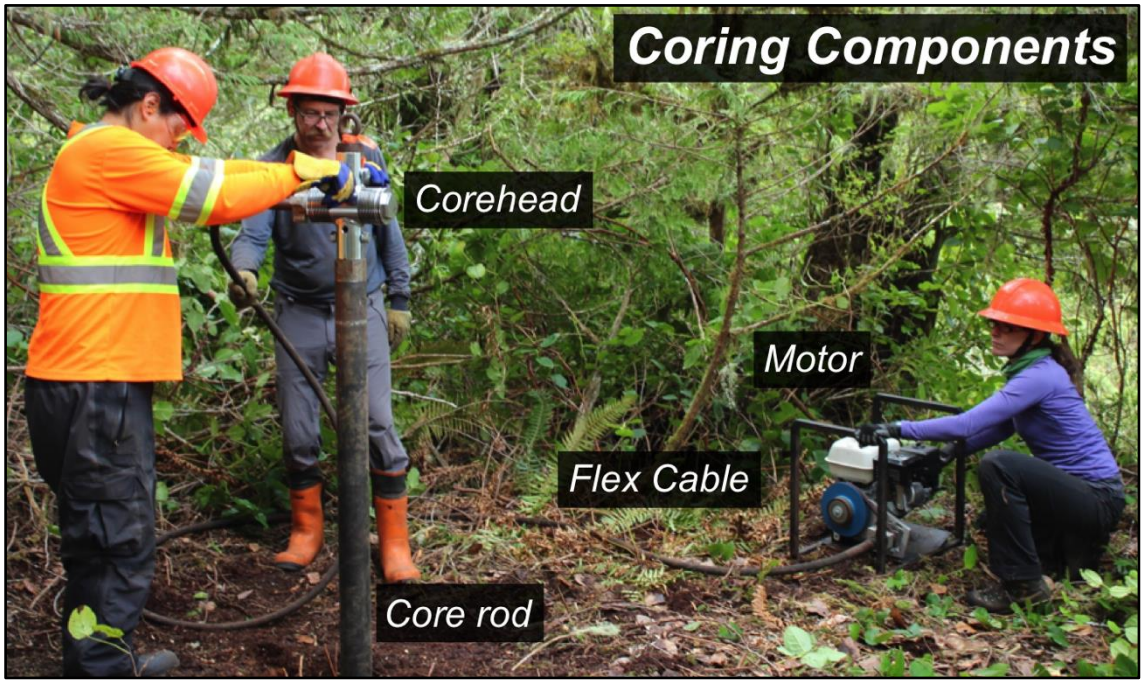
The field crew used vibracore technology as an experimental method for extracting long sections of undisturbed core samples rather than other successfully tested coring technologies, such as using the Environmentalist's sub-soil probe (ESP) or bucket auger samples (e.g., Cannon 2000a, 2000b; Martindale et al. 2009). As touched on in the previous chapter, all three tools provide a means of sampling sediments more efficiently and less destructively than through excavation. However, there are differences in these coring technologies and methods. Whereas hand augers remove approximately 15-20 cm in length of sediment per bucket, vibracore samples can extract an unbroken 152.5 cm by 7.5 cm of sediment in a contained sample tube (the length of a single core rod section) equating to considerably more volume of sediments that are stratigraphically intact. ESP sample tubes can also result in a lengthy unbroken core sample (91.4 cm), however the tube-width is a fraction of the size (2 cm) and not preferable for recovering fauna. A considerable drawback shared between ESP and vibracore sampling methodologies alike are core sampling results that include compression (or compaction). This is discussed in detail within Chapter 4 (Results). Other archaeological researchers are experimenting with "ESP plus" cores, which have wider diameters (3 cm) than the original ESP cores (See Crowell 2017).

Similar vibracore (alternatively named “vibrocore”) technology has been used in different contexts other than terrestrial coring on the Northwest Coast. For example, a “custom-made vibrocore system” was used to establish sea level low stand as part of an archaeological overview assessment within Prince Rupert Harbour, BC (Eldridge and Parker 2007:5). Other such archaeological projects (See Eldridge et al. 2009) used similar technology to core marine contexts for the purposes of locating underwater archaeological resources. However, this is the extent of known vibracore use in archaeological inspections on the Northwest Coast.

The Vancouver BC based business, Wink Vibracore Drill Company manufactures the vibracore used for this project. The Wink Vibracore works on the principles of high frequency ‘ultrasonic’ vibrations: the core head and core rods are attached to a 6.5 horsepower Honda engine, which transmits 7,000 to 12,000 acoustic vibrations per minute (VPM) to the “flex cable” which is attached to the core head (Wink Vibracore 2016). Aided by gravity and high frequency vibrations, the vibracore collects sediments into a 7.5 cm diameter plastic sample tube inserted within the coring rod (each rod is 152.5 cm in length). A retainer nested into the core bit helps to hold sediments in place and the core bit is designed to push cobbles out of the way. A small metal ring is designed to be inserted between rod sections to hold plastic sample tubes in place when two or more rods are threaded together. Figure 6 shows a photo of the field crew core sampling at the location of VC5. Once the proximal rod has been cored to approximately 15 cm above ground surface, the core head is replaced with a hoisting cap and the core string is hoisted out of the surrounding sediment using a winch system (Figure 7) and a

"ball controller"[9]. The crew uses the ball controller in association with the winch system when there are more than one rod involved in the core string. Acting as a brake system, a field crewmember slides the ball controller down the rods as the drill string is pulled out of the ground. The ball controller only moves down the rod, inhibiting the core string from sliding back into the test hole when used in conjunction with the gin pole. More information regarding the operation of the vibracore can be found within the "Service Manual" produced by the manufacturer of Wink Vibracore Drill Co. Ltd. and "The Wink Vibracore Drill: Overview and Instruction Manual" produced by a Simon Fraser University Master's student (See Smith and Maduik 2015).

Figure 6. Photo illustrating the 2016 field crew at VC5 location. Maxwell Johnson directs the corehead attached to the drill rod and bit (not visible), John Maxwell maneuvers the 'flexcable', while I operate the motor (photo credit: Johnny Johnson).



[9] The ball controller is not pictured in Figure 6.

The most appealing characteristics of the technology are that it is relatively non-invasive, and can be used to collect long, stratigraphically intact core sections, while limiting disturbance to the surrounding sediments. This is in comparison to the volume of sediments removed during unit excavations. Complete core sample tubes (Figure 8) were transported to a laboratory setting and investigated in a controlled environment.

Figure 7. Photo illustrating the winch system used to remove core rods and the core catcher and bit. In the photo on the left, Maxwell Johnson holds the pole steady as I use the hand crank to reel in the wire hooked to the hoisting cap screwed onto the top of the coring rod (photo credits: Johnny Johnson).

Figure 8. An example of an extracted core sample tube filled with cultural sediments from the 2016 field season (from left to right: John Maxwell, Maxwell Johnson and myself, Seonaid Duffield) (photo credit: Rob Dyck)

Drawbacks of the technology include, compression or compaction (compression is less than ESP core samples), the upfront expense of the machine and issues surrounding damaged components and cost of repair or maintenance. Another limitation involved in coring techniques, including the vibracore, is called “plugging” or “rodding”: wherein friction builds on the inside of the core rod, and softer sediments can be pushed to the side instead of being collected in the sample tube. To reduce compression, the vibracore team decided to collect one rod section at a time. This also reduced the

likelihood of plugging or rodding. The weight of the vibracore components are also a disadvantage; especially when transporting over steep and uneven terrain, or further weighted with sample sediments (e.g., core rods). We were able to transport all components to sampling locations by hand and on foot. Lighter-weight components are available, however likely have inherent drawbacks, such as reduced sample size due to smaller diameter core rods.

3.1 Fieldwork Component

In the initial field season (April 29 - May 4, 2015), the first successful continuous vibracore sample (VC1) was extracted with a field crew of four people. The test location was chosen due to the level terrain and close proximity to the edge of an actively eroding shell midden terrace that provided exposures of the extensive cultural deposits. Subsequent locations were also chosen where there would be enough level area to assemble and disassemble the corestring without significant obstructions. The crew cleared shrubs and branches in the immediate test location to ensure the area was safe (i.e., clear of tripping and overhead hazards) to proceed with each vibracore test. During the 2016 field season (April 19 to April 26), a team of three people cored an additional six successful samples (VC2-VC7) across two areas of the site where previous auger and ESP testing showed locations of the deepest cultural bearing deposits. The crew removed the organic duff layer, via a shovel test, to within 10 cm of the top of the shell midden to ensure tree roots did not diffuse the vibrations, thus improving efficiency. Due to the compression observed in VC1 (the length of the core sample was 35% of the actual length or depth below surface), the field crew cored an additional test (VC2) 1.5 m inland from the initial test with the hope that the stratigraphic layers would be consistent

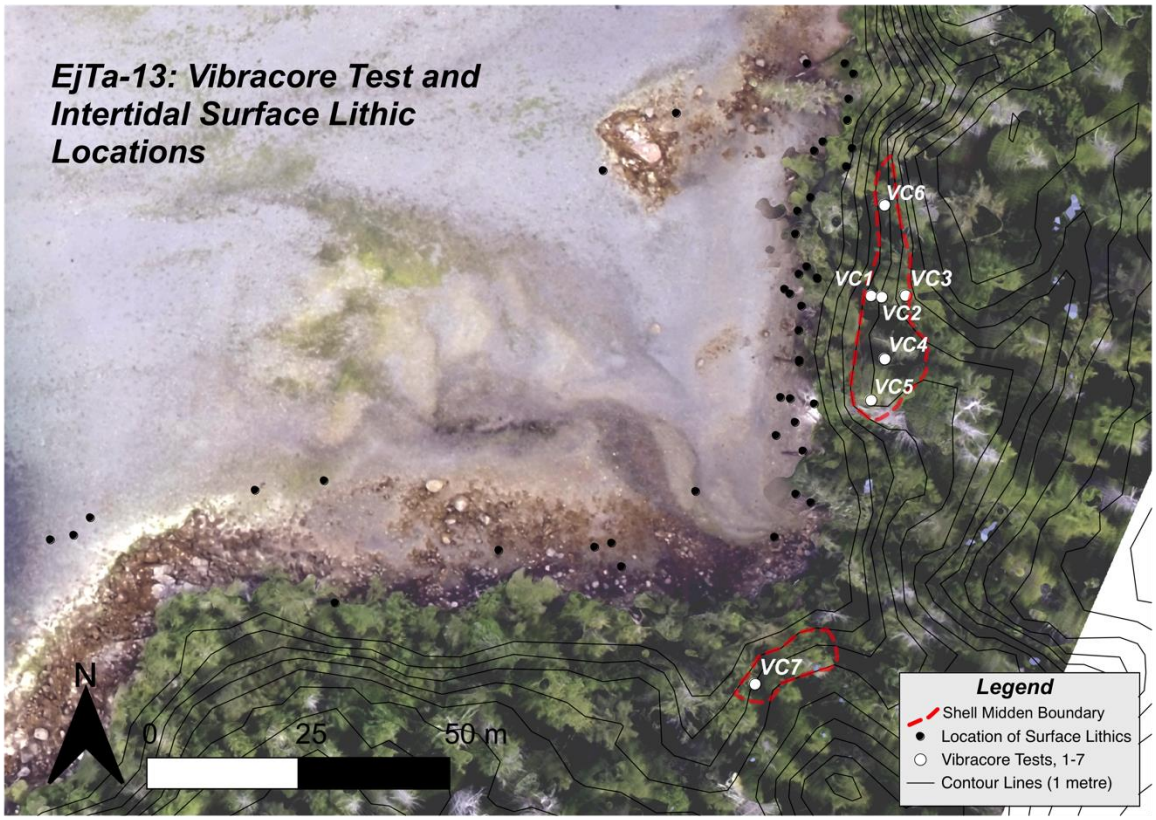
between samples. For the location of VC3, the crew chose a level area at the toe of a steep slope, interpreted to be at the edge of the major shell-bearing midden deposit. VC3 terminated in clay sediments: the clay layer expanded considerably complicating initial measurements of compression. The deepest vibracore sample, VC4, reached a depth below surface (dbs) of 544 cm before terminating at an impassable obstacle (i.e., a large cobble or boulder), requiring 4 rod sections. Auger sampling at the base of VC2 and VC5 ensured that the vibracore had reached the basal sediments of the site. VC6 was the most northerly vibracore test and also appeared to be at the perimeter of the major shell-bearing midden layer towards the later occupation of the site. The team decided to test the location (VC7) since the single ESP test from the 2013 field program had yielded deep deposits (McLaren 2014). Figure 9 shows the vibracore test locations and previously collected surface lithics[10] (as part of the HALAP 2015 field program) that cluster at the densest parts of the site and where active erosion is occurring.

3.2 Laboratory Component

In the laboratory setting, due to issues of compression (see Chapter 4: Results), measurements that were made reflect the length of the resulting core (i.e., lab depth was used instead of field depth). The "core depth" is the arbitrary unit of measurement assigned in the laboratory setting to partition the length of the core into 5 cm core

[10] 2 lithics were also collected in the HALAP 2013 field season however the information concerning the locations was not recorded.

Figure 9. Vibracore test (VC1-7) and surface lithic locations collected in the 2015 field season, at the southern end of EjTa-13 (McLaren 2016). The shell midden boundary was determined through Oakfield probe testing. The site boundary extends further north.



sections,[11] and is mentioned throughout in the identification and analysis phase of the project. For example, the core depth, 0-5 cm is the first section for every core sample, but the depth below surface is actually at or below 40 cm dbs due to removal of a large portion of the non-cultural duff layer. I calculated approximate dbs measurements for the beginning and end of the cultural deposits to determine accumulation rates for core samples (See Chapter 4). Laboratory procedures were slightly different between 2015 and 2016 and are therefore discussed independently.

[11] Core sections deviated from 5 cm measurements when including the sediments trapped in the core catcher and core bit, ranging between 2 cm and 8 cm.

3.2.1 2015 Laboratory Methods

VC1 was the first and only core sample recovered from EjTa-13 during the 2015 field season. To sample the core contents for fauna and radiocarbon dates, I split the vibracore sample tube longitudinally into two sections, and profiled and photographed the working half of the core sample. For VC1 only, one half of the core sample was archived in a refrigerator at the University of Victoria, in case future work requires intact sediments. Sediments from the working half were sectioned into 5 cm levels down the length of the core sample. Charcoal for radiocarbon dates was removed from either side of clear stratigraphic breaks where possible. I wet screened sediments through 2 and 1 mm nested screens. Once dry, materials were screened again through 2 mm screens to remove additional small fraction sediment. Six samples were dry screened through 1 mm as well as 2 mm nesting mesh screens. This method ensured that material captured in 1 mm and 2 mm screened material was kept separate, resulting in two clearly defined samples for six 5 cm core sections in VC1 (1 mm screen mesh screens were nested under 2 mm nesting mesh screens). Screened samples were sorted using a dissecting microscope into five categories (shell, bone, course sand and gravel, charcoal and botanicals), weighed and put into bags. The 1 mm nested screens were not used to sort faunal remains again due to how challenging and time consuming the process became compared to using 2 mm screen size only.

3.2.2 2016 Laboratory Methods

As mentioned, the 2016 field crew collected an additional six vibracore samples (VC2-VC7). Similar methods were used for the 2016 core samples, however a few modifications were made to the procedure to improve efficiency. Each vibracore sample

tube was split longitudinally into two sections, profiled and photographed, and then all the sediments were removed in 5 cm levels. The 2016 core samples were not removed as one continuous core sample in the field, as were the methods in 2015 due to extensive compression, and were therefore removed one rod section at a time. As a result, sediments trapped in the vibracore core bit and core catcher (10-20 cm) would not be captured in the sample tube and were bagged separately in the field. No sediments from the core samples from 2016 were archived for future use and the sediments were wet and dry screened through 2 mm sized nested screens only. I removed charcoal for radiocarbon dating from the most recent cultural-bearing sediments, as well as from the basal cultural sediments from all 2016 core samples. VC2 was not dated due to its proximity (approximately 1.5 m) to the most intensively dated core sample, VC1, in the hope that the stratigraphic profiles would be similar and therefore provide a date bracket for this core sample without actually submitting charcoal for costly radiocarbon dates.

3.2.3 Faunal Identification

I conducted faunal identification in the Zooarchaeology Lab using the extensive faunal comparative collection at the University of Victoria. Faunal identification specialist Rebecca Wigen supervised and vetted the faunal identification process to ensure professional quality through mentorship. I entered the information into the following column headings in an excel spreadsheet format: entry number, date of identification, core depth, number of elements, taxa, identification type (e.g., unidentified [unid.], family, genus, species), element, size, side, confidence level to taxa (percentage), condition (e.g., complete, fragment), burning present (including scorched to calcined), and general comments (See Appendices A and B). Measures of abundance follow

descriptions used by McKechnie (2014:262) and are shown below in Table 1. These are used to analyze the faunal assemblage in the following chapter outlining the results.

Table 1. Measures of abundance (McKechnie 2014:262)

Relative abundance	Relative abundance is the percentage of a particular item relative to all other specimens within the same category. Does not include unidentified specimens, i.e., those that have not been identified to species, genus or family.
Density per litre	Density per litre shows the number of specimens per litre of cored volume. This measure can be calculated by dividing the number of identified specimens by the examined volume of cultural sediment. Accordingly, this measure is not subject to the relative abundance of other taxa.
Ubiquity	Ubiquity refers to the percentage of contexts (in this case 5 cm arbitrary levels) in which a certain taxa is present or absent.
Rank order and rank order abundance	A) Rank order is the numeric rank of identified specimens based on their relative abundance within a given context (i.e., herring would have a highest rank order if it shows the highest relative abundance within a core sample). B) Rank Order Abundance is the calculated average rank order across many examined contexts. Rank order abundance is expressed as an average reflecting how frequently a taxon receives a specific rank order.

Over the course of three days, research assistant Anne Tuominen, conducted a basic presence/absence analysis of shellfish remains from a subsample of the seven cores. I selected at least one out of every five sections per core sample to be identified. However, where shellfish was present I judgementally chose some cores (i.e., VC4) to be identified in their entirety once all cores were represented in the sample. I chose core samples with the most shellfish determined by weight over cores with less shell weight. The reasoning for selecting shell from core samples with higher shell weight was that these samples might show the most taxa diversity and therefore be a better representation of the assemblage. This was an assumption based on the fish results.

3.2.4 Faunal Identification Caveats

This section is also intended to act as a guide for reading the results of the faunal identification in Chapter 4. Some general identification procedures may have shifted slightly over the year in which I started, revisited and finished the identification of the faunal assemblage. Nims and Butler (2017:751) elegantly refer to this as "protocol drift" or "changes in how specimens and human modifications to bone were identified over the course of analysis." However, as previously mentioned, faunal identification specialist, Rebecca Wigen was consulted during the entire faunal identification process of the project. In some cases, the poor quality of bony elements, due to unknown taphonomic processes, hindered faunal identification. As is the general procedure for most faunal identification projects, I did not attempt to identify fish branchial or fin ray elements because of homogeneity across taxa. All other elements were attempted to the most detailed taxonomic categorization. I also did not attempt to classify rockfish beyond the genus *Sebastes* or greenling beyond the genus *Hexagrammos* because, like salmon, the boney elements are similar or nearly identical between species. The same issue was encountered with small (non-halibut) flatfish vertebral elements, which were entered under the conglomerate "miscellaneous flatfish." It is likely that rock sole (*Lepidopsetta bilineata*), English sole (*Parophrys vetulus*) and starry flounder (*Platichthys stellatus*) were present in this category. Rock and English sole, and starry flounder vertebral elements are morphologically similar in shape and have overlapping size ranges, although starry flounder can get larger than the two soles (Hart 1973). It is also possible to distinguish starry flounder because it can be either right-eyed or left eyed while the soles are right-eyed only, however this was not possible for the individuals within this

categorization. As such, this is the rationale for grouping these three flatfish species within the category “miscellaneous flatfish.”

Occasionally, unidentified bones fit into “large land mammal” (e.g., deer, bear), “small land mammal”(e.g., beaver, mink) and “small mammal or bird” (e.g., Anatidae, Mustelidae), likely cross-cutting large taxonomic categories. Elements were classified into these groupings only when it was very clear the bone fragments fit into these categories but could not be identified with greater resolution. The “size” category was entered consistently across taxa for the faunal assemblages from VC5, 6 and 7 only due to time restraints. Hopefully future researchers will find some use in the raw data from approximately 6,000 cal BP of human occupation contained in this faunal assemblage. The following chapter describes the results from seven vibracore samples removed from EjTa-13.

Chapter 4: Results

This chapter describes results from cores taken in the field and the laboratory analysis of materials recovered from these samples, including faunal identification (incorporating fish, mammal, bird and shellfish), radiocarbon dates, stratigraphic profiles, rates of accumulation, and artifact identification. Results show EjTa-13 was repeatedly occupied from the mid-Holocene to the 16th century.[12] Cultural sediments at most core sample locations accumulated at relatively consistent rates across the site. The most abundant taxa (herring, salmon, rockfish and greenling) vary slightly but maintain similar relative proportions through time. Lithic debitage, worked bone artifacts and items of personal adornment were the most abundant categories of small-sized artifacts recovered from 100 litres of cultural-bearing core sediments.

4.1 Radiocarbon Dating

The basis for a number of significant results outlined in this chapter was determined by the age of the cultural-bearing deposits. Dated charcoal indicates the site was inhabited continuously since the late Holocene, from 5,800 to 380 calibrated (cal) years before present (BP). Table 2 shows the results of radiocarbon dates submitted to the laboratory at University of California Irvine Accelerator Mass Spectrometry (UCIAMS) (lab codes, 163718-163727, 179720-179729, 186384). One core (VC1) was dated intensively, focussing on stratigraphic transitions, while another (VC2) was not dated due

[12] CMT coring at EjTa-13 show more recent dates (Hoffman et al. 2016).

to proximity to VC1. All other cores had dated top and bottom cultural deposits using charcoal only.[13]

4.2 Stratigraphy

I interpreted site stratigraphy conservatively, identifying three major layers due to the inherent complexity exhibited in most Northwest Coast shell midden sites (Stein 1992; Stein et al. 2003). The three broad deposits include minerogenic, cultural, and organic layers. However, there are obvious stratigraphic units within the broad layers, some of which are present in more than one core sample and may imply a similar site formation process. From earliest to latest deposits these include: minerogenic (light blue/grey/yellowish silt to light grey brown course sand with 25-50% gravels and cobbles), cultural transitional layer (medium-brown sand with 50%-75% gravels and cobbles), shell midden (light to medium grey with 50%-100% crushed to fragmented shell), shell midden (dark grey sandy-silt, with 50%-100% crushed to fragmented shell), cultural transitional layer (dark brown to black silt trace sand), and non-cultural (dark brown organic layer). Figure 10 illustrates all stratigraphic profiles and photographs of the seven vibracore samples with location of radiocarbon dates, core depths and depth below surface (dbs) measurements, and interpreted stratigraphic layers that are continuous across most of the site. Appendix D shows diagrams for all individual core samples, including core-specific layers and interpreted features.

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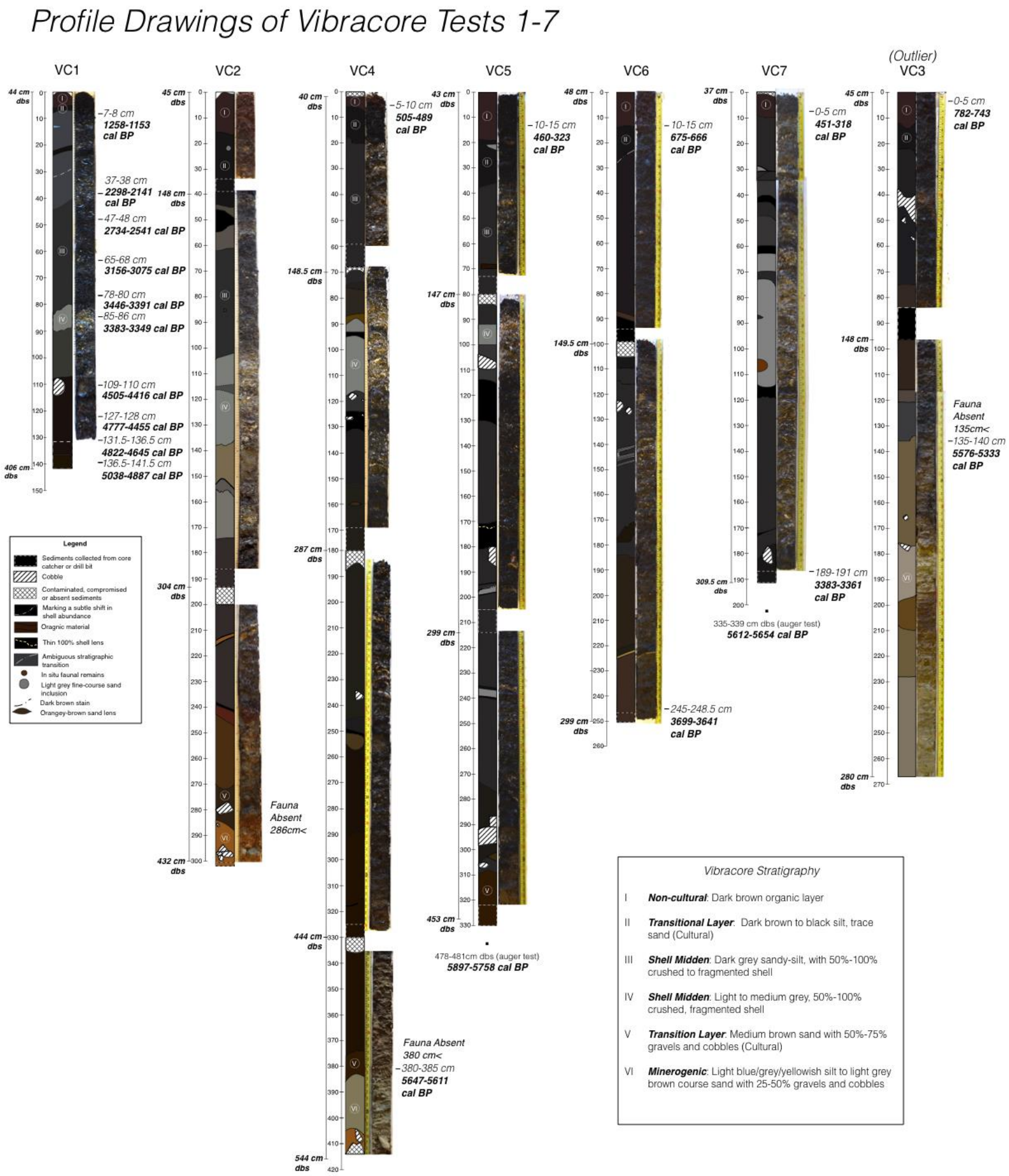
[13] I choose to have the basal sediments of VC7 radiocarbon dated, which we removed using an auger sample after vibracore testing. The basal vibracore sediments were originally dated instead of the sediments removed by the auger test due to an error on my part. As such, charcoal for three dates were submitted in total for VC7.

Table 2. Radiocarbon dates using charcoal from six vibracore samples and two auger tests (basal sediments from VC5 and VC7). Calibrations were calculated using CALIB 7.0.2 and the IntCal13 curve (Reimer et al. 2013).

Borden Number	UCIAMS Lab Code	Core Name	^{14}C Age	+/-	1σ Calibrated Results (cal years BP)	Median Probability Age cal BP	Core Measurement (cm)	Purpose of Radiocarbon Date
EjTa-13	163718	VC1	1240	20	1153-1258	1211	7-8	Top of cultural deposit
EjTa-13	163719	VC1	2170	15	2141-2298	2262	37-38	Clear stratigraphic break
EjTa-13	163720	VC1	2525	15	2541-2734	2626	47-50	Clear stratigraphic break
EjTa-13	163721	VC1	2950	20	3075-3156	3112	65-68	Middle of large layer
EjTa-13	163722	VC1	3135	20	3349-3383	3365	85-86	Clear stratigraphic break
EjTa-13	163723	VC1	3195	20	3391-3446	3417	78-80	Clear stratigraphic break
EjTa-13	163724	VC1	3970	20	4416-4505	4439	109-110	Clear stratigraphic break
EjTa-13	163725	VC1	4070	20	4455-4777	4552	127-128	Clear stratigraphic break
EjTa-13	163726	VC1	4165	25	4645-4822	4712	131.5-136.5	Clear stratigraphic break
EjTa-13	163727	VC1	4405	20	4887-5038	4972	136.5-141.5	Bottom of cultural deposit
EjTa-13	179720	VC3	860	15	743-782	762	0-5	Top of cultural deposit
EjTa-13	179721	VC3	4725	15	5333-5576	5475	135-140	Bottom of cultural deposit
EjTa-13	179722	VC4	415	15	489-505	497	5-10	Top of cultural deposit
EjTa-13	179723	VC4	4915	15	5611-5647	5630	380-385	Bottom of cultural deposit
EjTa-13	179724	VC5	345	15	323-460	381	10-15	Top of cultural deposit
EjTa-13	179725	VC5	5080	20	5758-5897	5809	478-481[14]	Bottom of cultural deposit
EjTa-13	179726	VC6	715	15	666-675	672	10-15	Top of cultural deposit
EjTa-13	179727	VC6	3430	20	3641-3699	3674	245-248.5	Bottom of cultural deposit
EjTa-13	179728	VC7	335	15	318-451	380	0-5	Top of cultural deposit
EjTa-13	179729	VC7	3145	15	3361- 3383	3373	189-191	Bottom of cultural deposit
EjTa-13	186384	VC7	4925	15	5612-5654	5634	335-339[15]	Bottom of cultural deposit

[14] Charcoal removed from auger sample (dbs)
[15] Charcoal removed from auger sample (dbs)

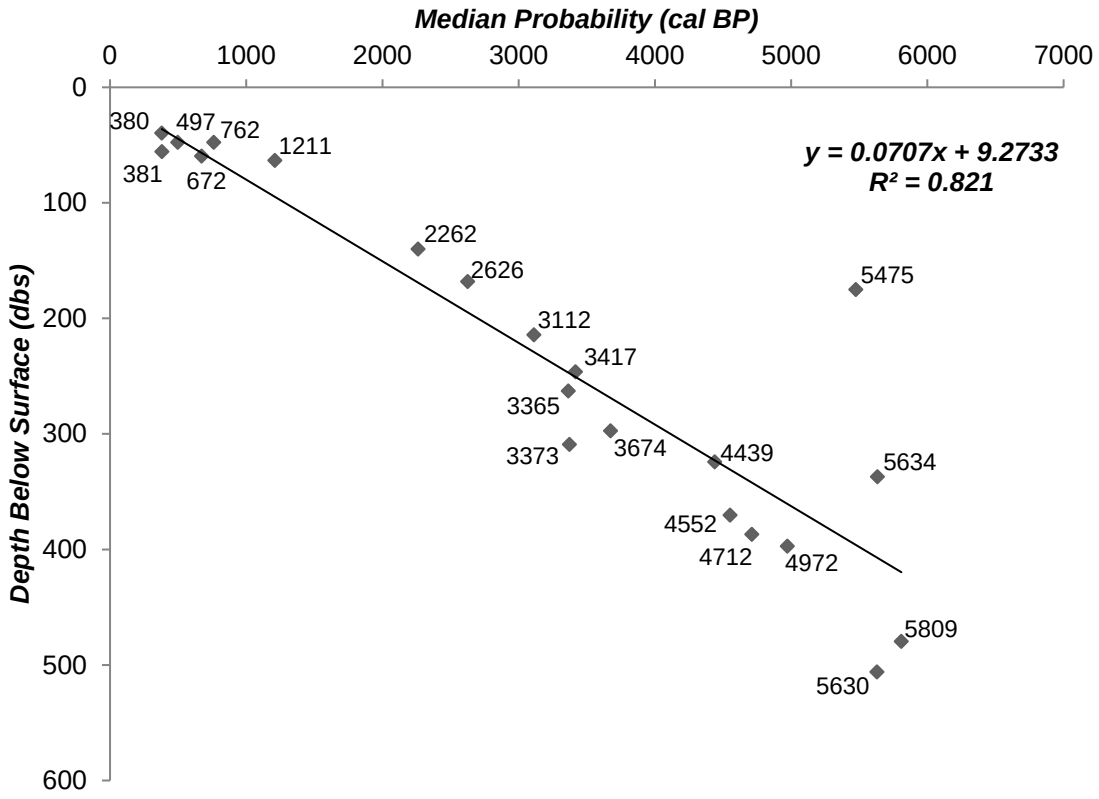
Figure 10. Illustration showing interpreted stratigraphy, photo, and radiocarbon dates of all seven core samples.



Dated core samples indicate a strong linear relationship (R^2=0.821) between age estimates (using median probability, cal BP) and depth below surface for all dated samples. The basal date from VC3 (5475 cal BP) reflects a slower rate of accumulation relative to other test locations. VC3 also contained the lowest amount of shell and fauna suggesting it was likely removed from the perimeter of the site where less material was being deposited. Therefore VC3 is considered an outlier. Another consideration is that the strong linear relationship reflected by the R^2 value is heavily influenced by the first core sample (VC1) which was intensively dated and therefore effects the trend line disproportionately relative to the other samples which contain two dates only. Other than the proximal and distal dbs measurements of VC1, all other depths were estimated using a single compression ratio calculation. However, it is likely that all sediments were not compressed equally. That is, sediments towards the basal deposits may be more compressed than those closer to the surface. Despite these limitations, the model demonstrates that site formation processes were similar between core locations and occurred relatively uniformly and continuously (Figure 11). With this in mind, dates were plotted with individual core measurements on an Age/Depth Model and used to estimate the age at depth to interpret faunal trends over time. I used CALIB 7.0.2 and the IntCal13 curve (Reimer et al. 2013) to calibrate radiocarbon dates. CALIB includes calculated median probability radiocarbon dates from a probability distribution curve. According to CALIB, median probability dates are not meant to be used without the cal BP ranges and may fall within low percentile ranges. However, error bars, which encapsulate 2-sigma date ranges are not effectively illustrated visually due to the extensive temporal range of the site occupation where the error ranges are minimal in comparison. Thus, I determined

that using the median probability value provided by CALIB was the most efficient and elegant solution to visually convey the information. Table 2 provides a complete summary of charcoal-derived radiocarbon ages from dated vibracore tests (VC1, VC3-VC7).

Figure 11. Age/Depth Model shows median probability calibrated radiocarbon dates and depth below surface (dbs) from all dated core samples. Dbs (cm) for core samples were determined by applying a compression ratio.



4.3 Compression and Accumulation Rates

A number of researchers have successfully calculated compression ratios (or "rate of compaction") and applied them to Central Coast shell midden sites to compensate for compression within core sampling (Cannon 2000b; Martindale et al. 2009). Primarily, rates of compression were calculated to determine the dbs for the radiocarbon dated charcoal samples. The method of determining "degree of compaction" (or compression

ratio) follow Cannon (2000b:70), who measured the difference between the dbs and the length of the sediment sample captured in the sample tube. Using VC1 as an example, if the total depth of the test measured 406 cm dbs but only 141.5 cm of sediments were recovered within the sample tube and drill bit, then the ratio of compression would be 141.5/406 or 0.34 meaning a compaction rate of approximately 66% or 1 cm recovered to every 6.6 cm penetrated. The principle limitation of using this calculation is that we assume the core sample is compressed evenly throughout the length of the core. As such, removing one rod section at a time allows more control, as more dbs measurements are taken at every section removal. This means that degree of compaction can be estimated for each rod section removed instead of estimating the degree for the entire length of the sample as with continuous sampling. Figure 12 shows the calculated degree of compaction from each core sample. Note calculations for VC1 and VC7 reflect results of continuous testing. Although the degree of compaction was substantial within the intensively dated core VC1, dated charcoal used to calculate the accumulation rate show consistency other than one minor radiocarbon date reversal.[16]

Accumulation rates across the site averaged a depositional accumulation of 0.8 cm per year (uncompressed sediments), or approximately 8 cm per 100 years (Figure 13). However, VC3 shows a much slower rate of accumulation (0.3 cm/year) suggesting the test was located at or near the perimeter of the site where less cultural material was deposited, which is confirmed by the test location that is situated at the toe of an abrupt natural slope. Methods followed Stein et al. (2003:298) where the “rate of accumulation

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[16] Slight stratigraphic reversal in the core sample,VC1: 85-86 cm 3,349-3,383 cal BP, 78-80 cm 3,391-3,446 cal BP

is calculated by dividing the thickness of the accumulation (in centimetres) by the duration of the accumulation (in years).” Calculating the accumulation rate, therefore required radiocarbon dates and associated dbs measurements (cm) from the earliest and most recent cultural bearing sediments from the core samples. An accumulation rate was not calculated for VC2 due to the absence of radiocarbon dates. Other than VC3, relatively consistent accumulation rates indicate that the site was constructed uniformly throughout the occupation and therefore instills more confidence in applying the Age/Depth Model to estimate faunal trends through time.

Figure 12. Figure showing the factor of compression for individual core samples. Note the ratios of the two continuous samples, VC1 and VC7 and that lower values indicate greater compression.

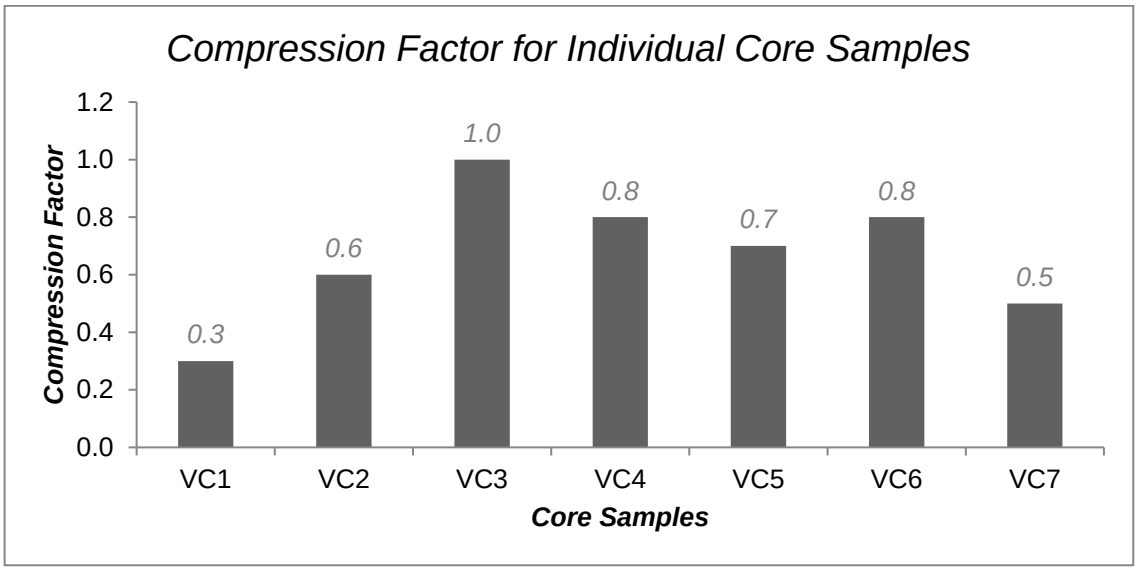
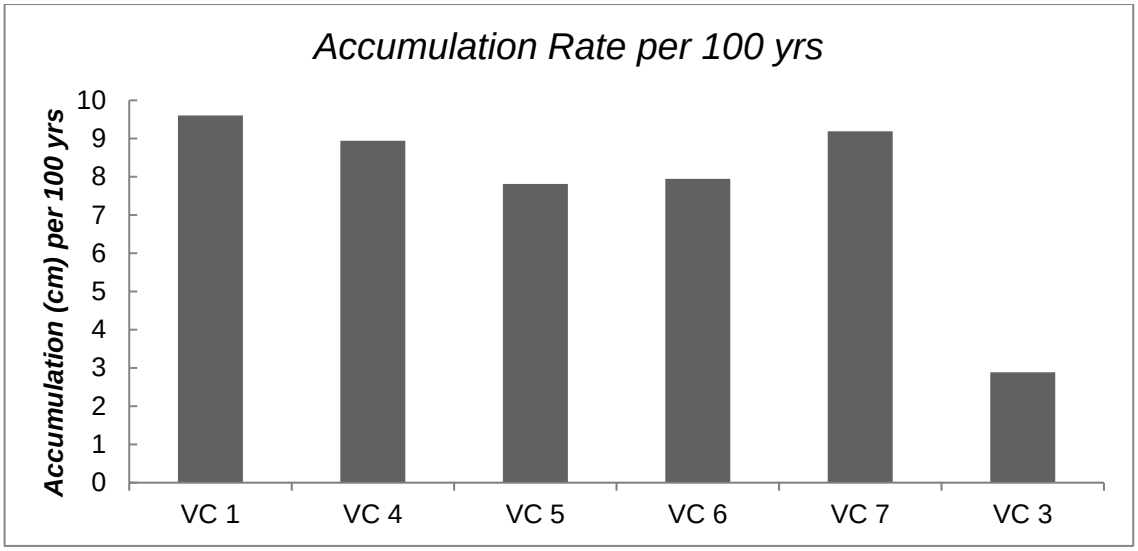


Figure 13. Estimated accumulation rate per 100 years for cores VC1, VC3-7 based on calculations that follow Stein et al (2003). VC3 is situated at the perimeter of the site. Note that VC3 is interpreted as an outlier and VC2 was not dated.



4.4 Summary of Invertebrate Identification and Analysis Results

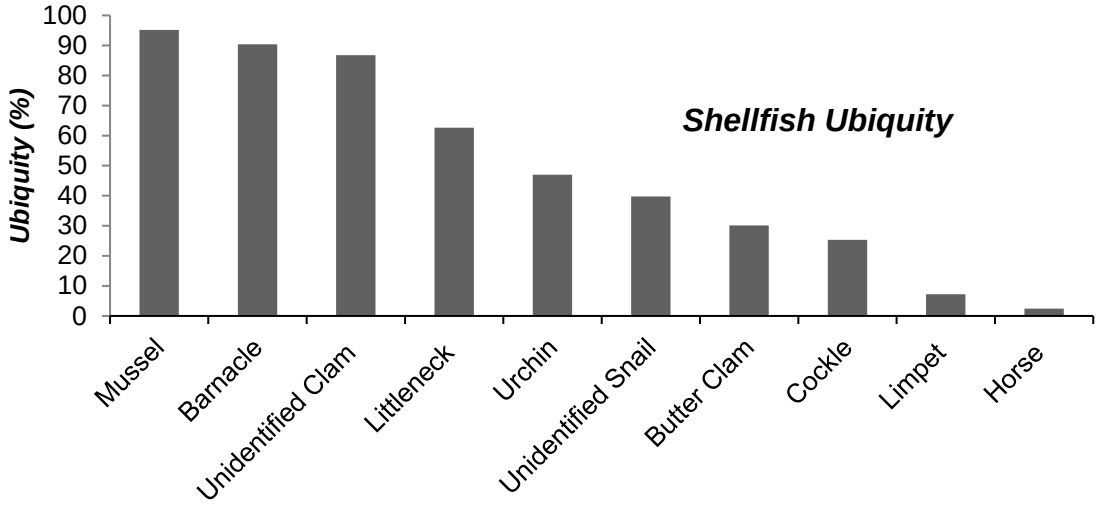
Shellfish are the most abundant class of faunal remains from the core samples from EjTa-13. Due to time restraints, a comprehensive shellfish analysis was not attainable and therefore invertebrate fauna are discussed separately from fish, mammals and birds. However, a simple presence/absence inventory of a subsample (N=90) of shellfish collected from 2 mm nested screen size was undertaken from all seven vibracore samples (Table 3, Figure 14). Mussel (*Mytilus sp.)*, unidentified barnacle, littleneck clams (*P. staminea*) and butter clams (*S. gigantea*) are the most ubiquitous shellfish represented at EjTa-13, most regularly contributing to the bulk of the shell-rich layers across the site and are also some of the most common species represented in clam beds and gardens (Lepofsky et al. 2015). Other shellfish taxa include sea urchin, cockle (*C. nuttallii*), gastropods (snail and limpet) and horse clam (*Tresus sp.).* The prominent tidal flats fronting EjTa-13 and abundance of taxa common in managed clam beds may suggests that this nearby intertidal landscape was enhanced and tended for shellfish by the

inhabitants who occupied the site. The presence of taxa that prefer exposed outer coast habitat (i.e., barnacles and California mussel) indicate that these taxa were possibly harvested from elsewhere and brought back to the site by watercraft.

Table 3. Taxa list of shellfish identified from EjTa-13.

Taxa	Common name
Cirripedia sp.	Unidentified barnacle
Clinocardium nuttallii	Basket cockle
Gastropoda sp.	Marine snails and limpets
Mollusca sp.	Unidentified shellfish
Mytilus sp.	Unidentified mussel (California and blue)
Protothaca staminea	Pacific littleneck clam
Saxidomus gigantea	Butter clam
Strongylocentrotus purpuratus	Purple sea urchin
Tresus sp.	Horse clams

Figure 14. Chart illustrating results of shellfish ubiquity across all seven core samples from EjTa-13.



4.5 Summary of Vertebrate Faunal Identification and Analysis

The total number of specimens in both 1 mm and 2 mm screen size including fish, mammal and bird is 19,173. The total number of identified specimens (NISP) including results from 1 mm and 2 mm screen size is 6,566 specimens (percentage [%] of

identification=34). I identified specimens to the most refined taxonomic categorization possible (i.e., family, genus or species).

Typical of Northwest Coast shell midden sites, fish taxa were the most abundant category of vertebrate fauna found at EjTa-13 and will be the focus of this section. In total, 23 fish, nine mammal, and two bird taxa were identified across all seven core samples. Table 4 shows overarching results from fauna found in the 2 mm screen size. Table 5 shows results from identified faunal remains using 1 mm screen size. Further results of faunal identification from 1 mm screen size are discussed separately within the assemblage from VC1.

Figure 15 illustrates continuity of the four most ubiquitous and relatively abundant fish taxa identified from across the site. All other identified fish taxa represent less than one percent of the overall NISP, totalling 165 elements. Calculations of ubiquity (%) across all core sections containing identified fauna[17] (n=311) indicate that herring (76%) is the single most ubiquitous taxon closely followed by salmon (75%). The ubiquity of the remaining taxa (over one percent by %NISP) is as follows: rockfish (56%), greenling (42%), flatfish (15%), dogfish and sablefish (11%), sculpin (6%), anchovy (4%), ratfish and halibut (3%), cod and pollock (2%), lingcod, eulachon, skate and sardine (1%). Sardine and anchovy are obvious outliers, with higher rank orders relative to ubiquity rating (Table 6). That is, sardine was identified from only two out of a possible 311 core sections, amounting to a very low ubiquity value (i.e., 1%). However, sardine was found to be particularly abundant within those two core sections, adding up

[17] Core sections were only included if they contained identifiable or unidentifiable bone.

to 86 specimens.[18] Therefore, although sardine is ranked low in ubiquity, the taxa has a relatively high rank order overall. In Table 6, less abundant taxa (including *small* flatfish ["miscellaneous flatfish"], sculpin and cod and pollock) were grouped under broader taxonomic categories (e.g., family) to interpret fish taxa results more cohesively.

Figure 16 shows both the accumulative number of different fish taxa identified (i.e., NTAXA or taxonomic richness) and the total number of different fish taxa per core sample. Although there are complications with using NTAXA (See Lepofsky and Lertzman 2005), the "sampling to redundancy" method (Lyman and Ames 2004) can be useful as a rough estimate to determine if more samples will add new information to the total fish assemblage. NTAXA refers to richness in *fish* taxa only in the context of this project.

[18] Sardine represented over 40 percent of the total amount of fish remains identified within the two 5 cm core sections in which it was present.

Table 4. Results from 2 mm sized screened fauna: NISP, NISP percentage, NSP, age range, and estimated volume per core and overall volume.

Taxon	Common name	VC1		VC2		VC3		VC4		VC5		VC6		VC7		Total NISP	% NISP Fish
		NISP	%	NISP	%	NISP	%	NISP	%	NISP	%	NISP	%	NISP	%		
Clupea pallasii	Herring	136	55	433	50	196	57	423	28	591	47	652	45	268	38	**2,701**	**42**
Oncorhynchus spp.	Salmon spp.	79	32	217	25	91	27	658	43	370	29	272	19	246	34	**1,933**	**30**
Sebastes spp.	Rockfish spp.	13	5	116	13	37	11	161	11	166	13	350	24	97	14	**940**	**15**
Hexagrammos spp.	Greenling spp.	11	4	72	8	10	3	100	7	97	8	82	6	29	4	**401**	**6**
Anoplopoma fimbria	Sablefish	0		6	<1	1	<1	40	3	11	<1	34	2	32	5	**124**	**2**
Sardinops sagax	Sardine	0		0		0		84	5	0		0		0		**84**	**1**
Squalus acanthias	Spiny dogfish shark	3	1	4	<1	2	<1	34	2	7	<1	12	<1	7	1	**69**	**1**
Pleuronectiformes	Flatfish spp.	0		3	<1	6	<1	4	<1	14	1	18	1	7	1	**52**	**0.8**
Engraulis mordax	Anchovy	2	<1	1	<1	0		1	<1	3	<1	0		23	3	**30**	**0.5**
Hemilepidotus spp.	Irish lord spp.	1	<1	4	<1	0		5	<1	0		7	<1	0		**17**	**0.3**
Hydrolagus colliei	Spotted ratfish	0		0		0		4	<1	1	<1	9	<1	0		**14**	**0.2**
Hippoglossus	Pacific halibut	3	1	7	<1	0		2	<1	1	<1	0		0		**13**	**0.2**
Gadus	Pollock and Pacific cod	0		1	<1	0		0		3	<1	1	<1	5	<1	**10**	**0.2**
Lepidopsetta bilineata	Rock sole	0		1	<1	0		2	<1	0		3	<1	0		**6**	**0.09**
Cottoidea	Sculpin spp.	1	<1	0		0		1	<1	0		2	<1	0		**4**	**0.06**
Ophiodon elongatus	Lingcod	0		0		0		3	<1	1	<1	0		0		**4**	**0.06**
Parophrys vetulus	English Sole	0		3	<1	0		0		0		0		0		**3**	**0.05**
Pholidae	Gunnel spp.	0		3	<1	0		0		0		0		0		**3**	**0.05**
Thaleichthys pacificus	Eulachon	0		0		0		0		2	<1	0		1	<1	**3**	**0.05**
Rajidae	Skate	0		0		0		2	<1	0		0		0		**2**	**0.03**
Enophrys bison	Buffalo sculpin	0		0		0		1	<1	0		1	<1	0		**2**	**0.03**
Atheresthes stomias	Arrowtooth flounder	0		0		0		1	<1	0		0		0		**1**	**0.02**
Gadus chalcogrammus	Walleye pollock	0		0		0		0		1	<1	0		0		**1**	**0.02**
Neovison vison	Mink	0		3		0		1		0		0		0		**4**	
Odocoileus spp.	Deer spp.	0		0		0		0		2		0		0		**2**	
Canis familiaris	Domestic dog	0		0		0		1		1		0		0		**2**	
Lontra canadensis	North American river otter	0		1		0		0		0		0		0		**1**	
Enhydra lutris	Sea otter	0		0		0		1		0		0		0		**1**	

Taxon	Common name	VC1 NISP %	VC2 NISP %	VC3 NISP %	VC4 NISP %	VC5 NISP %	VC6 NISP %	VC7 NISP %	Total NISP	% NISP Fish
Phoca vitulina	Harbour seal	0	1	0	0	0	0	0	**1**	
Soricidae	Shrew spp.	1	0	0	0	0	0	0	**1**	
Castor canadensis	North American beaver	0	0	0	0	1	0	0	**1**	
Tamiasciurus douglasii	Douglas squirrel	0	0	0	0	0	0	1	**1**	
Mammalia	Sm. unid. land mammal[19]	0	0	1	0	0	0	0	**1**	
Mammalia	Lg. unid. land mammal[20]	0	0	0	1	1	0	0	**2**	
Mammalia	Unidentified mammal	32	105	57	179	197	74	100	**74**	
Mammalia/Aves	Small mammal or bird	0	0	0	1	1	1	0	**3**	
Alcidae	Alcid spp.	0	0	0	1	0	0	0	**1**	
Podicipedidae	Large grebe spp.	0	0	0	0	0	0	1	**1**	
Aves	Unidentified bird	7	6	0	8	1	0	0	**22**	
	Unidentified bone	0	0	0	0	0	34	0	**34**	
	Fish NISP	**249**	**871**	**343**	**1,528**	**1,268**	**1,443**	**715**	**6,417**	
	Fish NSP	**542**	**1,653**	**432**	**2,575**	**1,900**	**2,559**	**1,059**	**10,720**	
	Total	**831**	**2,640**	**833**	**4,296**	**3,372**	**4,111**	**1,876**	**17,959**	
	Age Range (Cal BP)	4,970-1,200	na	5,475-760	5,630-500	5,800-380	3,675-370	3,370-380	**5800-370**	
	Estimated Volume (L)	9 L	18 L	10 L	22 L	18 L	11 L	12 L	**100 L**	
	No. of Sections (5 cm)	25	51	24	70	61	41	39	**311**	
	Fish NSP per Litre	60	92	43	117	106	233	88		
	Fish NISP per Litre	28	48	34	70	70	131	60		
	NTAXA (Fish)	9	14	7	18	14	13	10		

[19] Small unidentified land mammal
[20] Large unidentified land mammal

Table 5. Results from 1 mm sized screened fauna only: NISP, NISP percentage, NSP, age range, and estimated volume (VC1 only). Apart from the first two sections (5-10 cm and 10-15 cm), I chose sections (65-70 cm, 90-95 cm, 110-115 cm, and 131.5-136.5 cm) judgmentally based on abundance of NSP.

		VC1 (1 mm)	
Species	**Common name**	**NISP**	**%**
Oncorhynchus spp.	Salmon spp.	78	**58**
Clupea pallasii	Pacific herring	47	**35**
Thaleichthys pacificus	Eulachon	3	**2**
Squalus acanthias	Spiny dogfish shark	2	**1**
Sebastes spp.	Rockfish spp.	1	**<1**
Hemilepidotus spp.	Irish lord spp.	1	**<1**
Cottidae	Sculpin spp.	1	**<1**
	Fish NISP	**133**	
	Fish NSP	**1081**	
	Total	**1214**	
	Age Range (Cal BP)	4970-1200	
	Estimated Volume (L)	1.3L	
	Number of Sections	6	
	Fish NSP per Litre	933.8	
	Fish NISP per Litre	102	
	NTAXA	7	

Figure 15. Chart illustrating the ubiquity and relative abundance of the four most abundant fish taxa and all other fish with NISP (2mm screen size only).

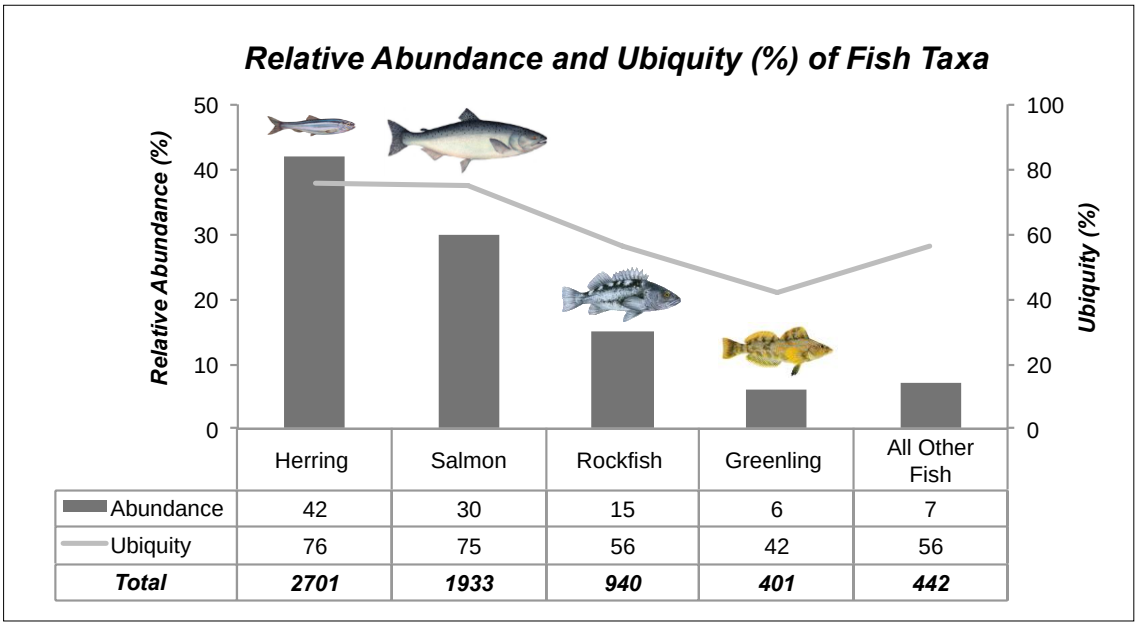
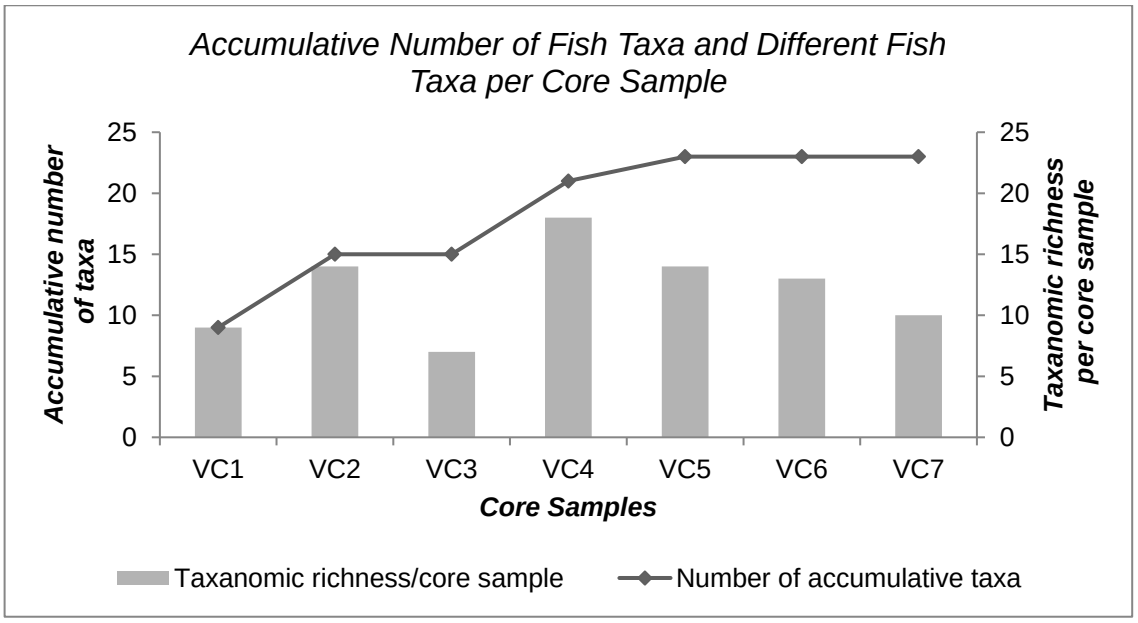


Table 6. Table showing rank order across core samples (1=highest) and fish NISP. Aside from a few instances (e.g., sardine) there is broad similarity in taxonomic rank across core samples for the seven most abundant taxa.

	Rank Order						
Taxa	*VC1*	*VC2*	*VC3*	*VC4*	*VC5*	*VC6*	*VC7*
Herring	1	1	1	2	1	1	1
Salmon	2	2	2	1	2	3	2
Rockfish	3	3	3	3	3	2	3
Greening	4	4	4	4	4	4	5
Sablefish		6	7	6	6	5	4
Sardine				5			
Dogfish	5	7	6	7	7	7	7
Flatfish		5	5	9	5	6	7
Anchovy	6	9		12	9		6
Sculpin	6	7		9		8	
Ratfish				8	11	9	
Halibut	5	5		11	11		
Cod & Pollock		9			8	10	8
Lingcod				10	11		
Gunnel		8					
Eulachon					10		9
Skate				11			
Fish NISP	***249***	***871***	***343***	***1,528***	***1,268***	***1,443***	***715***

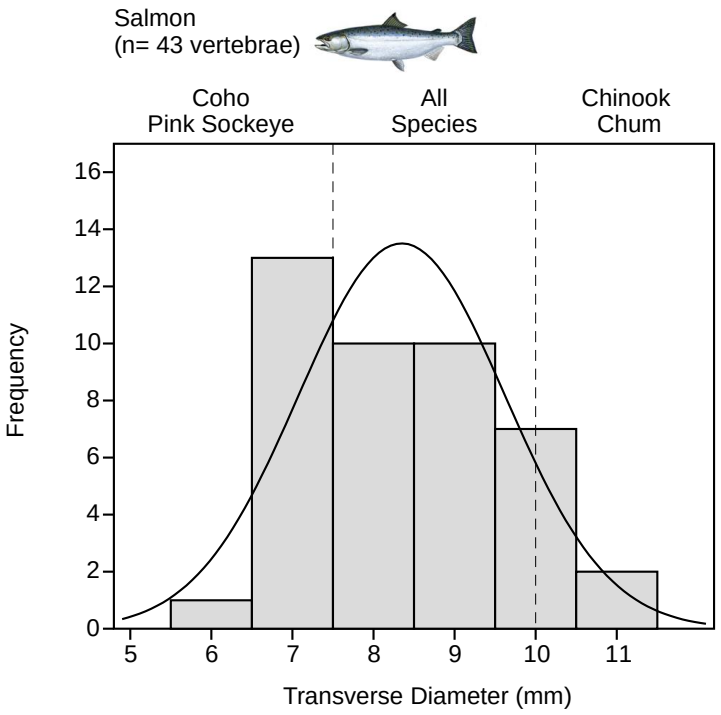
Figure 16. Cumulative number of fish taxa identified by core sample and individual counts of taxonomic richness per core sample (including family, genus and species).



I made exploratory efforts to identify salmon species by measuring the radius and thickness of whole salmon vertebrae recovered. The majority of salmon vertebrae were fragmentary, however a total of 43 complete abdominal and caudal vertebrae were measured from the seven cores and are plotted in Figure 17 (See Appendix C). Despite possible limitations (such as, regional variability in size among salmon populations [Moss et al. 2014]) of using the transverse diameter measurement of salmon vertebrae to infer different salmon species, Cannon and Yang (2006) show a positive relationship between the method of measuring transverse diameter and corresponding results from aDNA analysis. The tentative results from EjTa-13 show that all five salmon species are likely represented based on size distribution, however the salmon species with lower oil

content and therefore preferable for storage (Cannon 2001b) are more abundant.[21] These results remain speculative due to the small sample size (n=43), absence of aDNA analysis and ambiguity surrounding the taphonomic survivability of larger vertebral remains compared to smaller remains (Orchard and Wigen 2016).

Figure 17. Results of transverse diameter measurements from complete salmon vertebrae across the faunal assemblage showing all five species are potentially present.



As is common in small volume column and bulk samples (cf. Moss 1989; McKechnie 2005), very few mammal and bird bones were identifiable to species, genus or family classifications within the faunal assemblage. Identified mammal bones (n=14) contribute to less than one percent of the total NISP, while mammal bone (NISP and NSP) amounts to four percent. Identified (n=2) and unidentified bird bone also contribute

[21] Pink and chum are lower in fat content and therefore preferred for storage over sockeye and coho.

less than one percent to the overall NSP. The two bird taxa, Alcids (i.e., Alcidae family) and large grebe (Podicipediformes) were identified from two elements. Three unidentified bone fragments are classified as “small mammal or bird”, due to the difficulty of differentiating small, poorly preserved fragments that could fit into either category. The small number of identified mammal bones in order of the most to least abundant include: mink, deer, domestic dog, river otter, sea otter, harbour seal, beaver, shrew, and Douglas squirrel (Table 4). Although poorly represented, identified mammal and bird taxa provide yet another viewpoint from which to interpret how inhabitants of EjTa-13 engaged with other vertebrate fauna than fish.

4.6 Summary of Faunal Identification Results within Individual Core Samples

The following paragraphs provide additional information about individual cores and some across-core comparisons. Table 4 presents specific information regarding vertebrate fauna found in individual core samples. The charts contained in Figure 18 outline a simple relationship between vertebrate and shellfish weight by 5 cm core sections over the length of each vibracore sample from the earliest to latest cultural bearing deposits and include radiocarbon dates.

4.6.1 VC1

The following paragraphs describe results from 1 mm and 2 mm screened material respectively from VC1 collected in the initial field season. VC1 was the primary core sample removed from the site. As a result of exploratory processes, I made some changes in protocol with core samples that followed. I analyzed half of VC1 while the other half is archived for future use, amounting to an estimated nine liters of examined

sediments. A subsample of six 5 cm sections was analyzed using 1 mm mesh screens and is discussed separately. Remains collected from the 1 mm diameter screen size were a result of being nested below the 2 mm screen. Therefore, specimens recovered using 1 mm nested screens (~1 mm – 1.99 cm) are discussed separately from the results for fauna recovered using 2 mm screen size.

Unidentified fish taxa totalled 89% of recorded specimens, with a total NSP (fish remains only) of 1,081, while the total NISP amounted to 133 specimens. Apart from the first two sections (5-10 cm and 10-15 cm), I chose sections (65-70 cm, 90-95 cm, 110-115 cm, and 131.5-136.5 cm) judgmentally based on abundance of overall specimens. The percentage of bone identified from VC1 (~1 mm – 1.99 cm) was very low (rate of *fish* specimens identified [ID rate]=11%) in comparison to material screen through ≥2 mm nested screens. This is due to the large volume of unidentified specimens. However, the volume of identified fish bones per litre is relatively high (n=102). In total, seven taxa of fish were identified (Table 5). Salmon was the most abundant and ubiquitous taxon, present in all core sections while herring was the second most abundant and ubiquitous taxon. The remaining taxa were found in very small numbers. Eulachon was identified within the 1 mm screened material only in VC1 but was found elsewhere in the total assemblage of core samples represented by the 2 mm screened material (i.e., within VC5 and VC7). Ultimately, identification of fauna using the 1 mm screen size did not add new taxa to the overall assemblage but did result in a dramatically increased number of bones (NSP) recovered per liter (see Table 4 and Table 5). Results from the 1 mm screened material are not included in the following calculations due to the different recovery

methods and interpreted overrepresentation of the number of fragmentary salmon and unidentified fish elements.

Material analyzed using 2 mm mesh screen size from VC1 resulted in a total fish NSP of 542 and NISP of 249 (ID rate= 30%). A total of nine fish taxa were recovered, which is a low number in comparison to the NTAXA recorded for other core samples. However this also reflects the comparatively low volume (9 L) of screened sediments (Table 4). VC1 showed the most compression of the seven core samples: only 35% of the actual length (dbs) was recovered which might also be indirectly linked to the percentage of bone identified (i.e., due to increase in bone breakage and leading to an increase in unidentifiable bone fragments). As a result of the compression in VC1, methods were revised resulting in reduced compression and higher identification rates in the core samples that followed.

Out of an assemblage of 831 specimens, one identified mammal bone belonging to a shrew was recovered from the VC1 faunal assemblage. A shrew is a small, insectivorous terrestrial mammal whose presence at EjTa-13 likely reflects an intrusive inhabitant and is not considered to be a food resource.

4.6.2 VC2

VC2 was the first core sample removed within the 2016 field season and resulted in a total fish NSP of 1,653 and an NISP of 871 (ID rate=33%). The core assemblage totalled 2,640 specimens, including fourteen identified fish taxa and three mammal taxa in addition to unidentified fish, mammal and bird bone from approximately 18 liters of cored sediment (Table 4). The three identified mammal taxa from VC2 included mink, river otter and harbour seal. Mink was recovered from two separate core sections and was

therefore likely from two different individuals. Mink was also recovered from VC4, whereas VC2 was the only context where river otter and harbour seal were identified. No radiocarbon dates were submitted for VC2.[22]

4.6.3 VC3

Identification of VC3 fauna resulted in a total of 833 specimens. Seven fish taxa were identified in addition to unidentified mammal from approximately 10 liters of examined sediment (Table 4). This is a relatively low number of fish taxa in comparison to other core samples due in part to the low volume of cultural-bearing sediments. Fish taxa totalled to 343 identified and 432 unidentified specimens (ID rate = 41%). VC3 is considered an outlier because of low NTAXA (n=7) and accumulation rate in comparison to other core samples. This later point will be discussed in more detail within this chapter.

4.6.4 VC4

Identification of VC4 fauna resulted in a total of 2,575 specimens (ID rate=36%). Eighteen fish, two mammal and one bird taxon were identified in addition to unidentified fish, mammal and bird bone from approximately 22 liters of cored sediment (Table 4). VC4 recorded the highest NTAXA (n=18) out of the most litres of sediments of the individual core sample assemblages. Of note, sardine appears and diminishes abruptly over two 5 cm core sections. One identified bird element from the Alcid family and eight unidentified bird bone specimens were recovered. In addition to the most fish and bird taxa, mink, domestic dog and sea otter were identified within the VC4 faunal assemblage

[22] Thus the fauna from this core sample are not included in calculations with Namu time periods

(Table 4). As previously mentioned, mink was also identified VC2, however sea otter was found only in VC4. Domestic dog recovered from two contexts including VC5 and VC4 is not considered a food resource.

4.6.5 VC5

Identification of VC5 fauna resulted in a total of 3,372 specimens (ID rate =38). Fourteen fish and three mammal taxa were identified in addition to unidentified fish, mammal and bird taxa from approximately 18 liters of cored sediment (Table 4). Mammal accounted for 5 identified and 197 unidentified specimens including one unidentified large land mammal. Additionally, one specimen was categorized as small mammal or bird and one unidentified bird bone specimen was recovered. Deer, domestic dog and beaver were also identified from the VC5 faunal assemblage. Two deer specimens were recovered from the same core section and may have come from the same individual. Deer and beaver were only found within the VC5 faunal assemblage.

4.6.6 VC6

Identification of VC6 fauna resulted in a total of 4,111 specimens (ID rate =35). Thirteen fish taxa were identified in addition to unidentified mammal bone from approximately 11 liters of cored sediment (Table 4). VC6 was the only core sample containing bone that could not be identified to class (n=34) due to extremely poor condition of the bone including presence of burning and possibly multiple unknown taphonomic processes. This poor preservation quality was encountered in VC6 only. VC6 also contained the most amount of burnt bone per litre (n=46) by a broad margin. Despite this detail, VC6 contained the highest number of identified fish bones per litre (n=131).

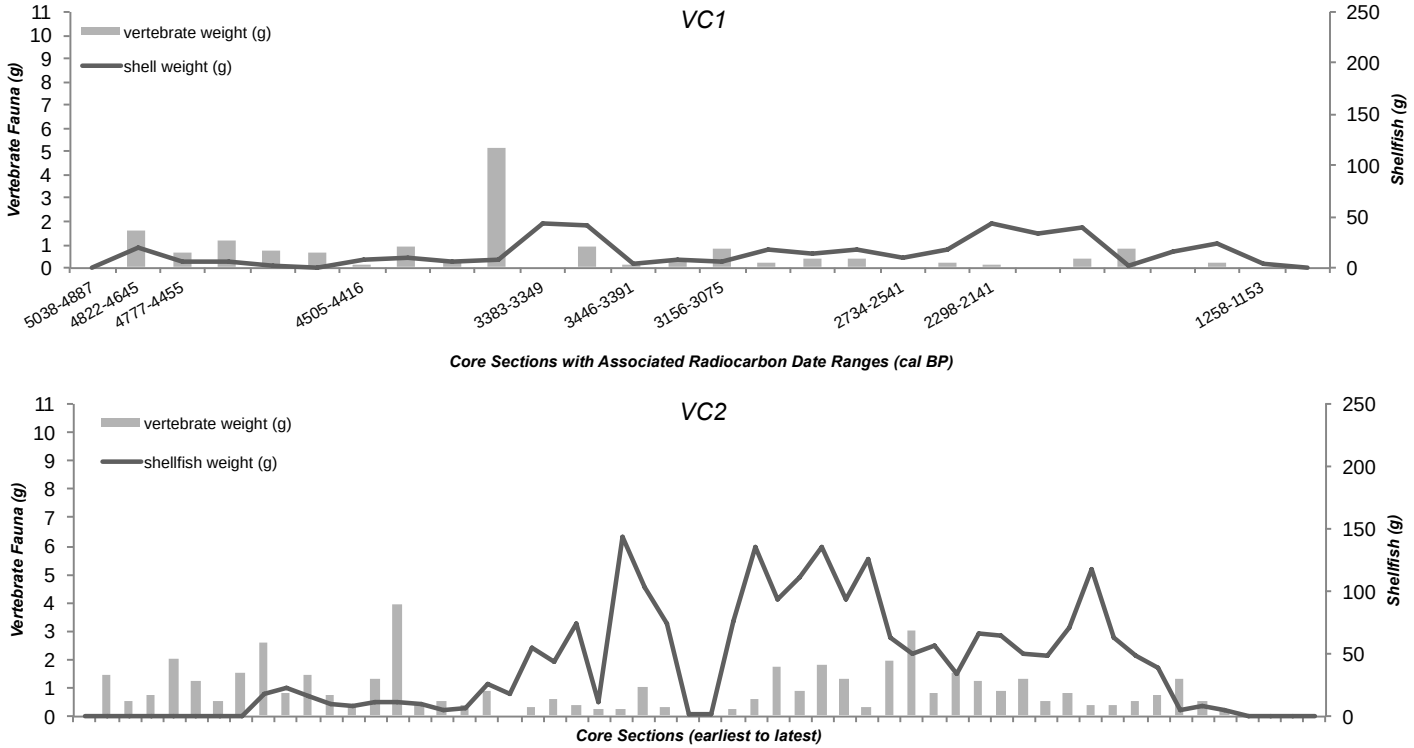
Comparatively, the second highest density of fish bones per litre numbered 70, in both VC4 and VC5, which is markedly less than VC6.

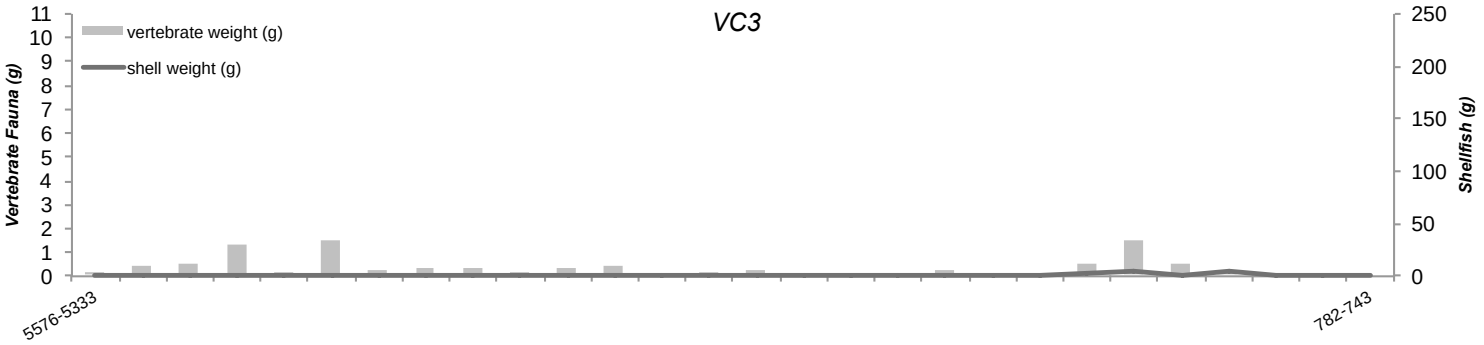
4.6.7 VC7

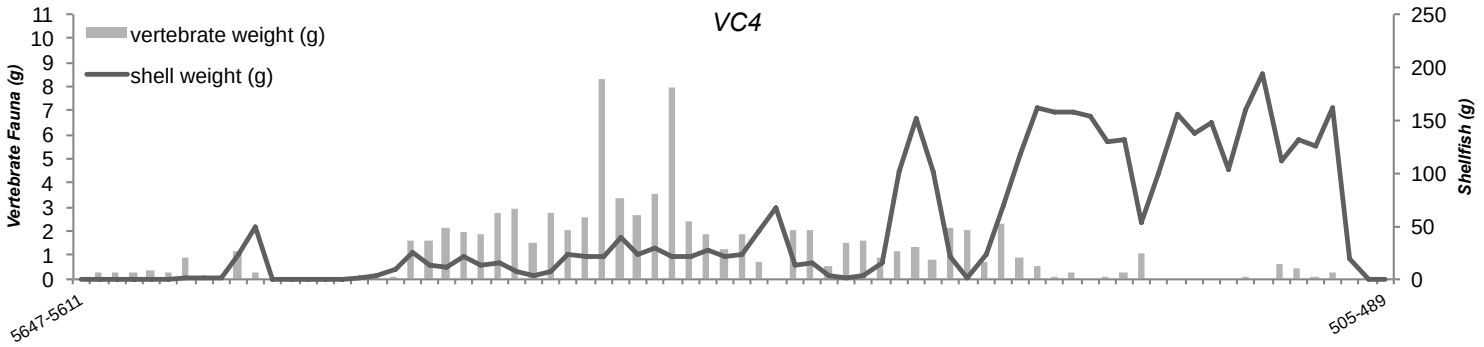
Identification of VC7 fauna resulted in a total of 1,876 specimens (ID rate=38). Ten fish taxa were identified, in addition to identified mammal and bird, and unidentified mammal from approximately 12 liters of cored sediments (Table 4). Notably, anchovy appears and diminishes abruptly over three 5 cm core sections. Mammal amounted to 100 unidentified specimens and one each of identified mammal and bird taxon. VC7 contained approximately 10 burnt bones per litre which is the second highest in comparison to the other core assemblages.

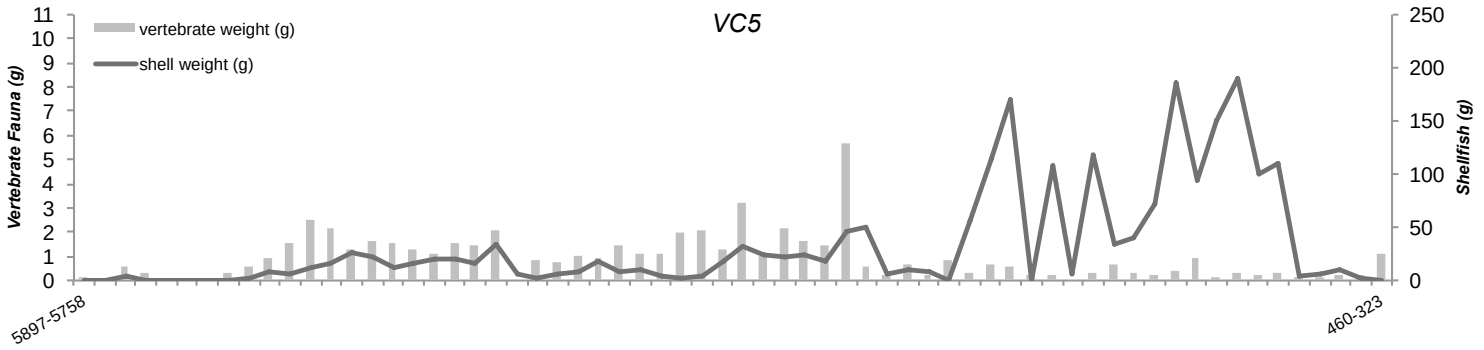
Douglas squirrel and large grebe were identified within the faunal assemblage from VC7. This was the only context where these two taxa were identified. No ethnographic information was encountered that suggests that Douglas squirrel was consumed as a subsistence resource.

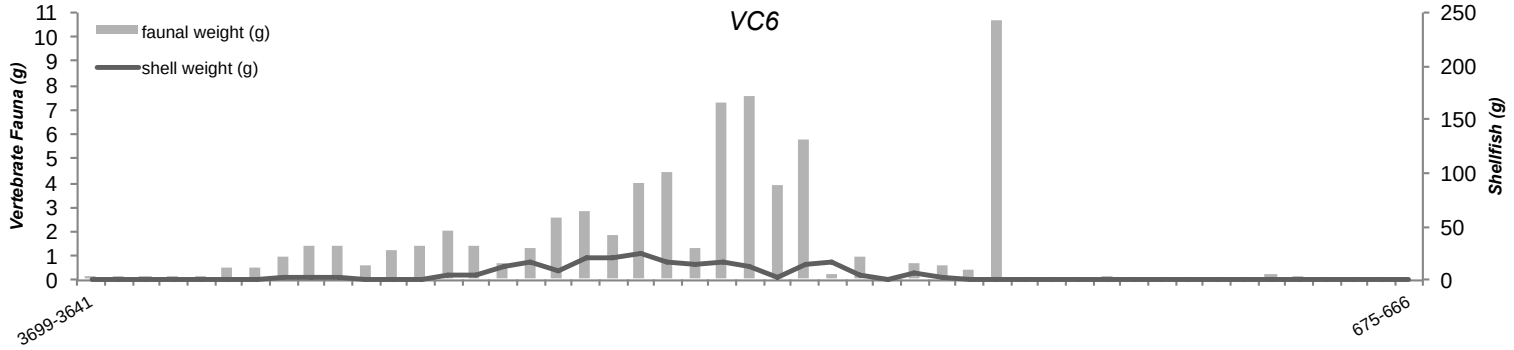
Figure 18. Charts illustrating vertebrate fauna and shellfish weight (g) along the length of individual core samples (compressed sediments) by 5 cm section with associated radiocarbon date ranges, that correspond to the section in which the charcoal was selected from (except for VC2).

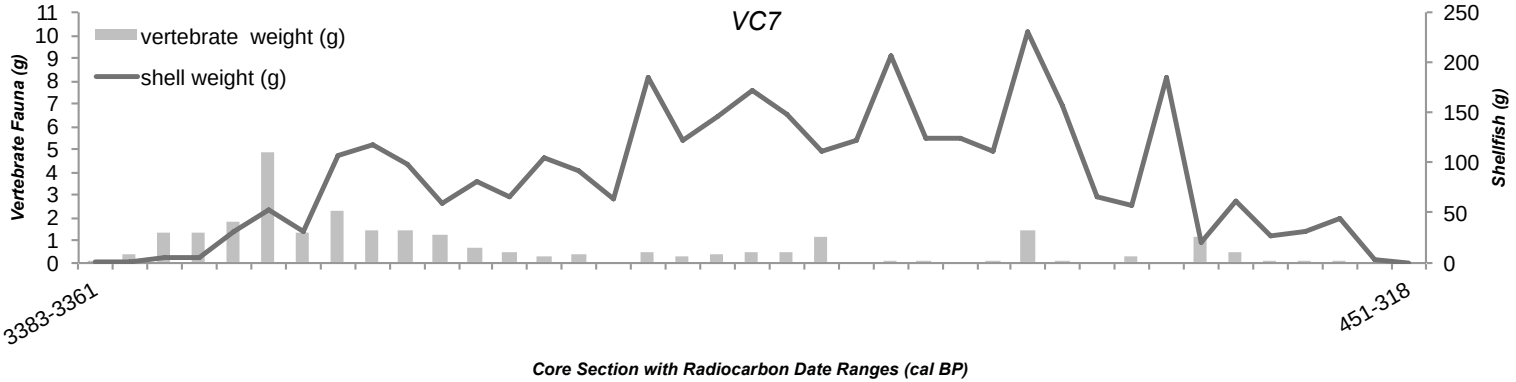



VC3
vertebrate weight (g)
shell weight (g)
Vertebrate Fauna (g)
Shellfish (g)
0 1 2 3 4 5 6 7 8 9 10 11
0 50 100 150 200 250
5576-5333
782-743
Core Sections with Associated Radiocarbon Date Ranges (cal BP)


VC4
vertebrate weight (g)
shell weight (g)
Vertebrate Fauna (g)
Shellfish (g)
0 1 2 3 4 5 6 7 8 9 10 11
0 50 100 150 200 250
5647-5611
505-489
Core Section with Associated Radiocarbon Date Ranges (cal BP)


VC5
vertebrate weight (g)
shell weight (g)
Vertebrate Fauna (g)
Shellfish (g)
0 1 2 3 4 5 6 7 8 9 10 11
0 50 100 150 200 250
5897-5758
460-323
Core Sections with Associated Radiocarbon Date Ranges (cal BP)


VC6
faunal weight (g)
shell weight (g)
Vertebrate Fauna (g)
Shellfish (g)
0
1
2
3
4
5
6
7
8
9
10
11
0
50
100
150
200
250
3699-3641
675-666
Core Sections with Associated Radiocarbon Date Ranges (cal BP)


VC7
vertebrate weight (g)
shell weight (g)
Vertebrate Fauna (g)
Shellfish (g)
0
1
2
3
4
5
6
7
8
9
10
11
0
50
100
150
200
250
3383-3361
451-318
Core Section with Radiocarbon Date Ranges (cal BP)

4.7 Zooarchaeological Patterning in Core Samples Over Time

Archaeologists using available data from different areas of the site have developed estimated time periods to analyze results from the extensive faunal assemblage recovered at Namu to determine trends in resource use where bone has preserved within the matrix of the site (Carlson 1991; Cannon 1991, 2000a). Significantly, the later periods from Namu parallel that of EjTa-13 (6,000 cal BP to contact), providing an opportunity to compare faunal trends over time to the region's most defining and well-studied archaeological site. Carlson (1991) imposed a chronological framework based on a combination of stratigraphic profiling, distribution of artifacts and fauna and radiocarbon dating (BP). Specifically, Carlson (1991:85) assigns these time periods based on 38 radiocarbon dates obtained from the Main Excavation (Main Trench), Rivermouth Pits or Trench, Test Pits and Front Trench. The earliest period coinciding with EjTa-13 is Period 3 (6,000-5,000 cal BP) which is stratigraphically characterized as humus and fragmented shell with lenses of mussel, clams and some barnacle and clam (ibid:91). Stratigraphy in Period 4 (5,000-4,000 cal BP) is described as being similar to Period 3. Period 5 (4,000-2,000 cal BP) and Period 6 (2,000 cal BP-contact) includes major shell bearing deposits (ibid:93). The stratigraphy for Period 5 is defined as containing humus with whole to fragmented shell and layers of mussel, barnacles, clams and ash (ibid:93). Finally, Carlson (1991:93) describes the stratigraphy for Period 6 as a humic mix of mussel and clam shell. Note that the Namu time periods 4,000 to 2,000 and 2,000 to contact encompass more time than the two earlier periods. Table 7 shows calibrated results for radiocarbon dates that bracket four broad time periods determined for Namu (Carlson 1991). To compare data between sites, I utilized the calculated accumulation rates from

EjTa-13 to derive Carlson's (1991) Namu time periods used by Cannon (2011),[23] which overlap with the occupation at EjTa-13. I calibrated Carlson's (1991) previously uncalibrated radiocarbon dates using Calib 7.0.2 (Reimer et al. 2013). Cannon (2011) uses these time periods to analyze salmon and herring (2 mm screen size) from Namu and as a result, I used these same time periods to analyze EjTa-13 data for the purpose of consistency between sites.

Table 7. Table showing calibrated results from Namu's four latest time periods (Carlson 1991) that overlap with the occupation at EjTa-13 (5,800 cal BP to 380 cal BP). "Namu Periods" and C-14 (BP) are sourced from Carlson (1991:92). Calibrations ranges and median probability were calculated using IntCal13 data in Calib 7.0.2 (Reimer et al. 2013).

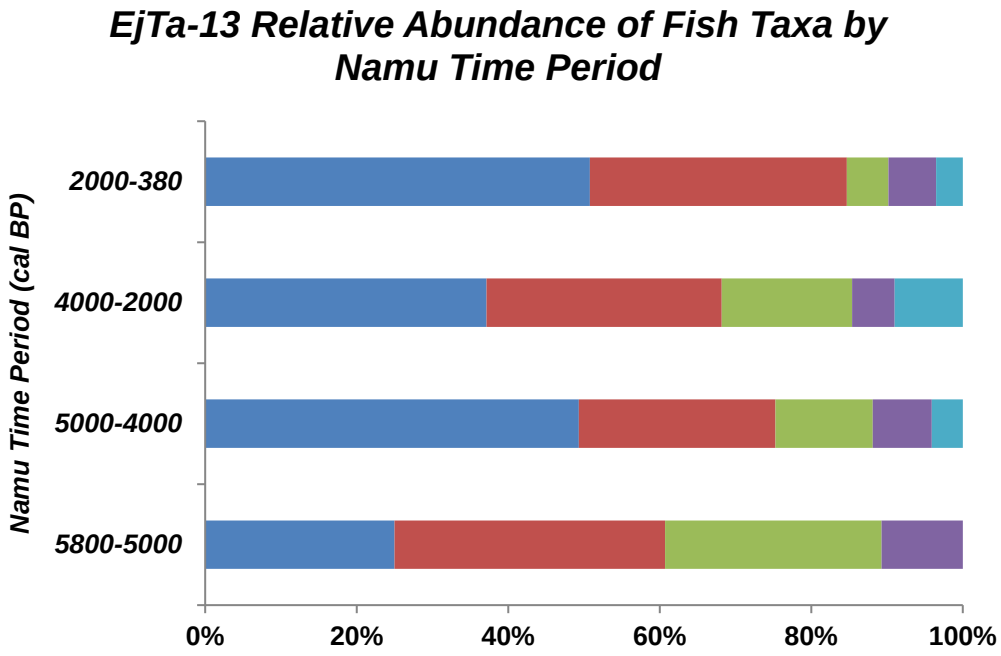
Namu Periods	***C-14 Date BP***	***cal BP Range (2σ)***	***Median Probability (cal BP)***
6	480±80	317-652	514
(2,000-contact)	1,880±90	1,570-2,003	1,815
5	2,185±85	1,953-2,351	2,188
(4,000-2,000)	3,500±100	3,509-4,081	3,778
4	3,825±105	3,925-4,518	4,226
(5,000-4,000)	4,390±160	4,533-5,463	5,020
3	4,540±140	4,856-5,580	5,188
(6,000-5,000)	4,775±130	5,059-5,883	5,495

Applying Namu's time periods to the faunal assemblage from EjTa-13 enabled a comparative analysis in broad-scale trends in faunal use over time between the two sites. By using the y-intercept calculated from Age/Depth models (explained at the beginning of this chapter) specific to individual cores (Figure 11), I plotted calibrated radiocarbon ages with core measurements to group results from faunal identification into time period ranges that align with the Namu time periods.

[23] In Table 5.1, Cannon (2011:62) draws conclusions from a total NISP of 5,870, including salmon (n=3,222), herring (n=2,398) and "other" (n=250).

Figure 19 illustrates the four most abundant and ubiquitous taxa (herring, salmon, rockfish and greenling) and all other fish taxa by Namu time period indicating continuity of fish use through time, especially herring and salmon. It also shows the difference in overall abundance between the four dominant taxa and all other fish taxa. 4,000-2,000 cal BP shows a slight but noticeable relative increase in the category, "all other fish taxa."

Figure 19. Chart showing relative abundance (percent) of most abundant fish taxa and all other fish taxa by Namu time period. The table below reflects the percentages shown in the chart.



	5800-5000	5000-4000	4000-2000	2000-380
Herring	25	49	37	51
Salmon	36	26	31	34
Rockfish	29	13	17	6
Greenling	11	8	6	6
All Other Taxa	0	4	9	4

The bar chart illustrated in Figure 20 represents the amount of identified fish bones per litre and volume of sediments (litres) by time period at EjTa-13. The earliest and latest Namu time periods (5,800-5,000 cal BP and 2,000-380 cal BP

respectively) show that the least amount of fish remains were identified per litre from these two periods. The earliest period was also poorly represented in terms of number of examined litres (3.8 litres). VC3, VC4 and VC5 only, contained sediments that were determined to be between 5,800 and 5,000 cal BP.

Interestingly, investigations within two cut-bank shovel tests at EjTa-13 (McLaren 2018:80) in the HALAP 2015 field season showed less reliance on salmon and more emphasis on mammal than what was recovered from the vibracore tests. The two tests (earliest sediments dating to 4,537 cal BP and 5,636 cal BP) yielded a total of 277 faunal remains (using 1/8" or 3mm screens) and showed a predominance of fish (76%), followed by mammal (23%) and bird (1%). The most abundant fish taxa are rockfish, greenling and herring respectively. The other fish taxa listed in order of abundance are: flatfish, ratfish, lingcod and salmon. Although the latest dates for the tests are not available, these results suggest that salmon may not be distributed evenly throughout the site. The total relative abundance of mammal bone is also much higher in this part of the site.

Namu is situated in close proximity to the mouth of a salmon bearing river (Namu River). Evidence of this is directly reflected in the density of salmon bones recovered from ElSx-1 in contrast to herring (Figure 21). This is also reflected in data from EjTa-13 that shows considerably lower relative abundance of salmon remains (Figure 22 and Figure 23), especially when compared with herring bones. Namu's extensive history of archaeological investigations and long-term temporal record has been used to support theories concerning regional trends such as interpreting complex patterns of variability shown through salmon remains at Namu in contrast with sites in the immediate

surrounding region (Cannon 1991, 2000a, 2001b; Cannon et al. 2011; Cannon and Yang 2011). EjTa-13 has an even higher number of dates and better temporal resolution given the age-depth association and multiple dates from each core section.

Figure 20. Chart showing total core sections and bones per litre by Namu time period at EjTa-13.

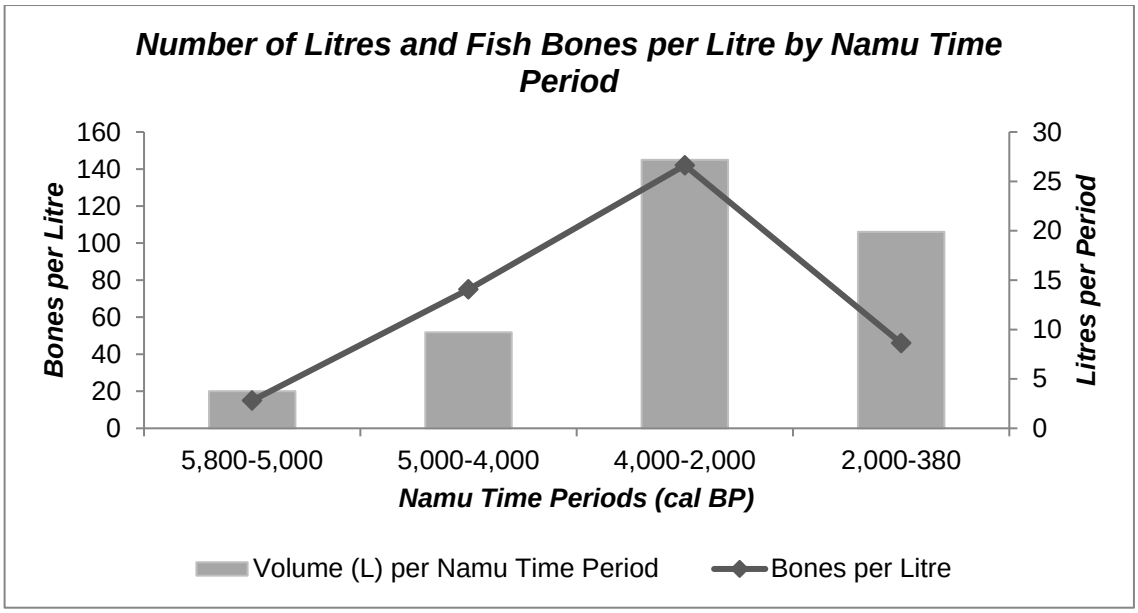


Figure 21. Figure showing relative abundance of herring and salmon (using fish %NISP) from Namu (2mm) from fine screen contexts (adapted from Cannon et al. 2011:62 [Table 5.1])

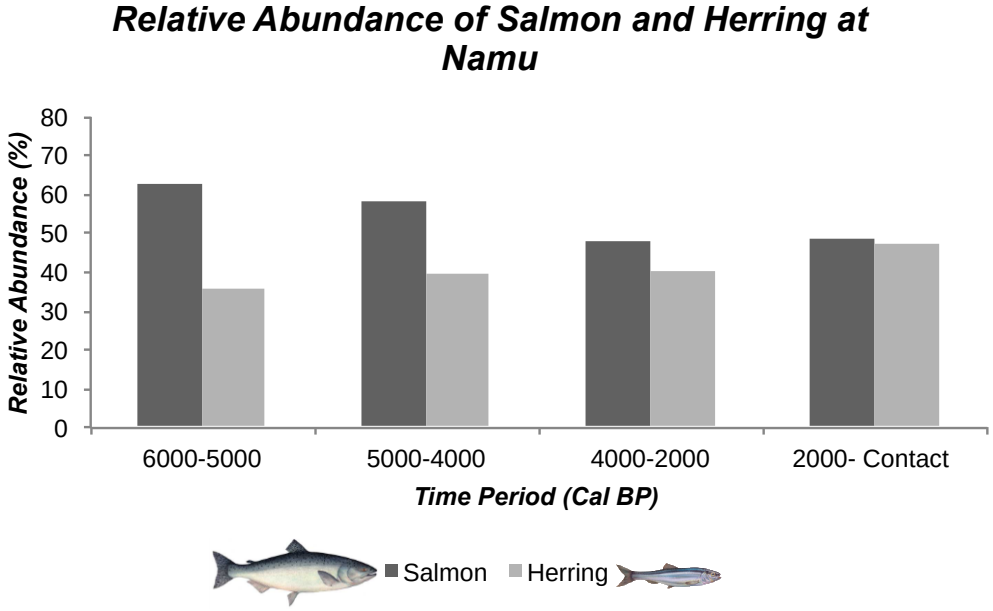


Figure 22. Relative abundance of salmon and herring at EjTa-13 recovered from 2mm screens at EjTa-13.

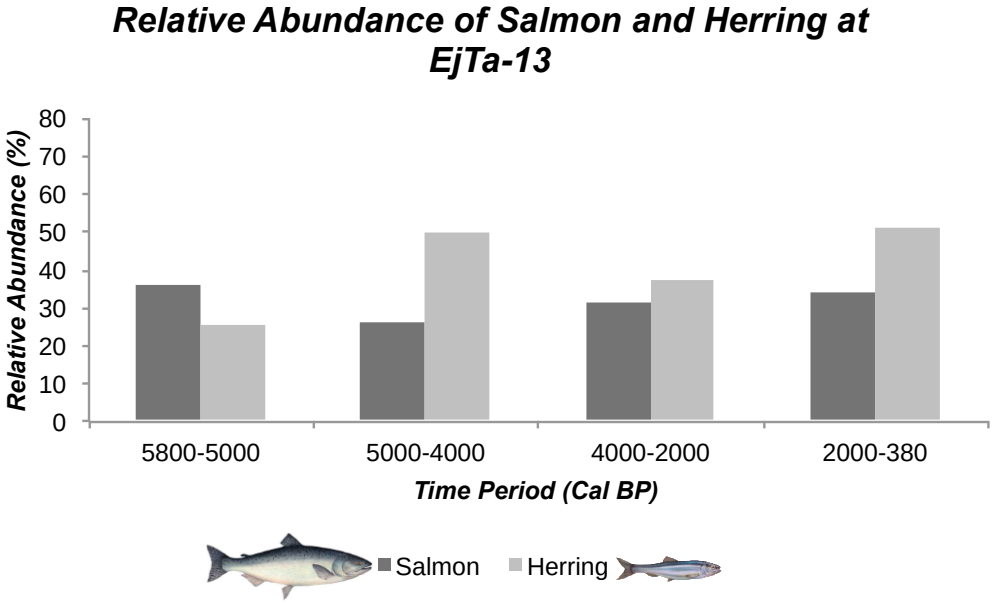


Figure 23. Chart showing a comparison of salmon from Namu and EjTa-13 by Namu time period (Namu data adapted from Cannon et al. 2011:62 [Table 5.1]).

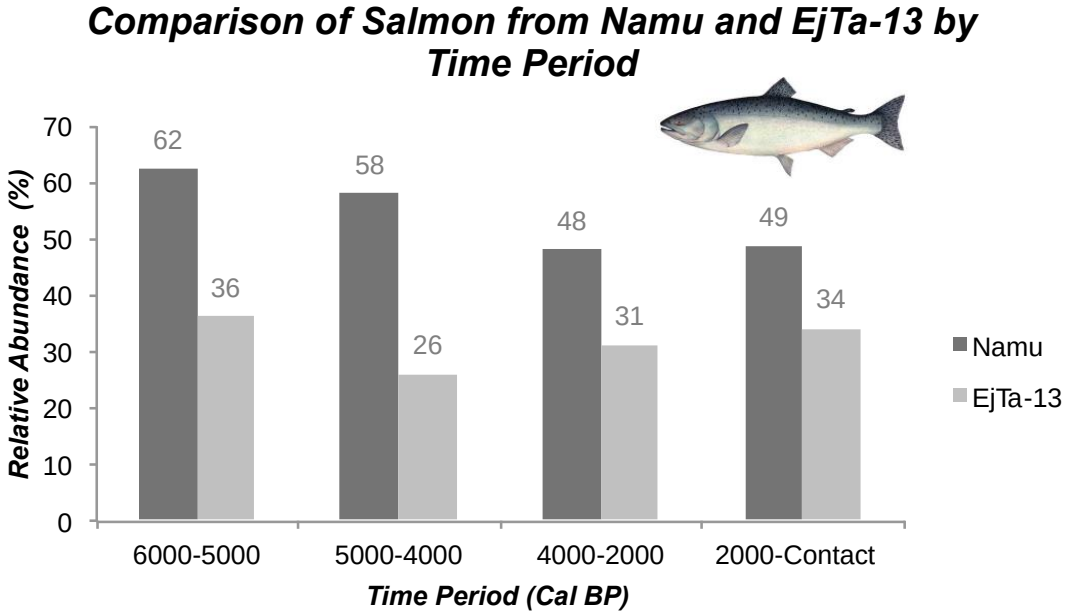


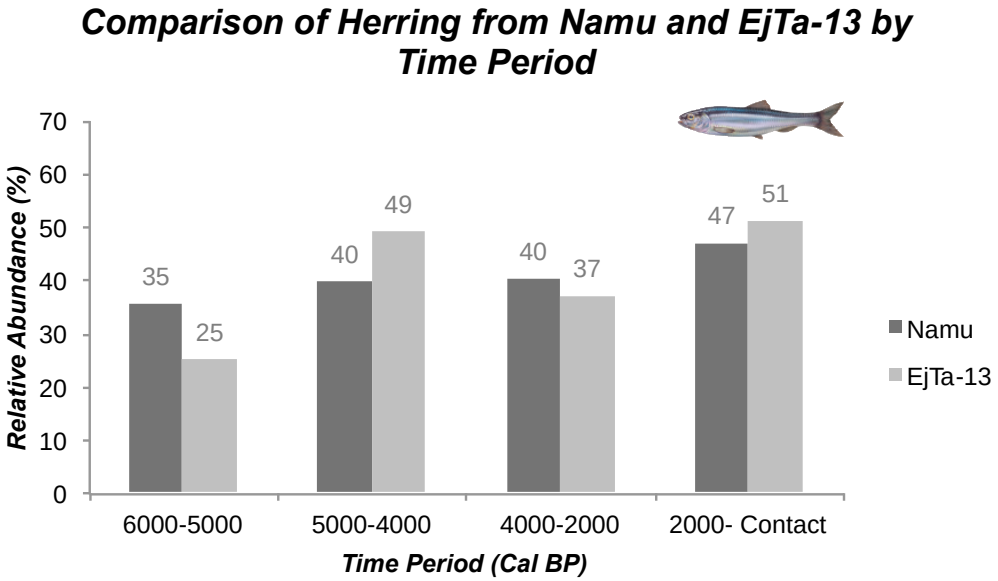
Figure 23 demonstrates a comparison of Namu and EjTa-13 salmon remains (2 mm screen size) by Namu time period.

McKechnie et al. (2014:E812) explore the connection between herring abundance from archaeological contexts (<2,500 BP) and distance to known historically surveyed herring spawn locations, concluding that abundance of archaeological herring remains over 80% indicates a spawning location within approximately 500 m of a site. Although the assemblage from EjTa-13 is not high, these results have the potential to extend the baseline records of herring spawn locations back in time using faunal data from archaeological sites (McKechnie et al. 2014:E812). Historical survey records (1942-2016) indicate that herring spawning events periodically occur along the shoreline of EjTa-13 and larger spawns occur regularly at several locations in Pruth Bay and Kwakshua and Meay Channel (McCarter et al. 2005). The relative abundance of herring remains at EjTa-13 and the occurrence of multiple herring spawn locations in close

vicinity to the site aligns with the results of McKechnie et al. (2014). Cannon et al. (2011) and Wigen (2011) add further evidence for extending the baseline of herring spawn locations back in time in this region.

Comparison of herring bone from Namu and EjTa-13 by time period shows remarkable similarity and suggests continuity of use between sites, indicating this resource was obtained in similar numbers at these two locations (Figure 24). Similar to salmon, herring bones are continuously represented throughout the faunal assemblages at EjTa-13 and Namu reflecting a persistence of use throughout the site occupation and therefore emphasizing the importance of this resource. As mentioned previously, this is *not* an uncommon outcome, as herring is regionally high-ranking in abundance and ubiquity among Central Coast sites. These results also speak to the efficiencies of using this methodology to understand trends through time.

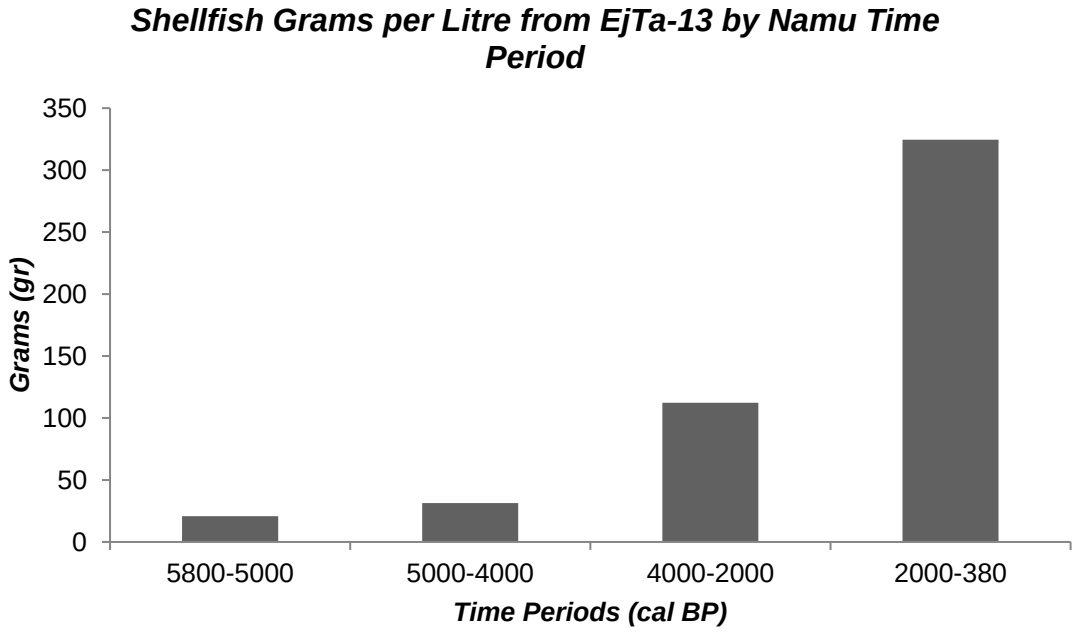
Figure 24. Trends in herring from Namu and EjTa-13 by Namu time period (Namu data adapted from Cannon et al. 2011:62 [Table 5.1]).



4.8 Results of Shellfish Weight Through Time

Although efforts were made to conduct a ubiquity analysis of shellfish taxa found across the core samples, due to time constraints these results did not include a more conventional quantitative analysis of shell weight per taxon. Moreover, the potential changes over time in the relative abundance of shellfish taxa are not known from the broad scale analysis of ubiquity. Figure 25 shows the results of calculating shellfish weight per liter by Namu time period and shows a dramatic increase in the amount of shell per unit volume over time. In the figure below, earlier periods (5,800-5,000 cal BP and 5,000-4,000 cal BP) show very low totals of shellfish weight per litre in comparison to the two later periods. Within the Namu time period 2,000-380 cal BP, shellfish weights per litre were the highest, measuring over 300 grams per litre. This trend may also indicate a greater degree of fragmentation of shellfish and thus taphonomic degeneration of older more compacted layers of the site.

Figure 25. Chart showing shellfish grams per litre from EjTa-13.



4.9 Artifact Recovery

A total of 55 artifacts were located within approximately 100 litres (Table 4) of cultural sediments during the sorting and faunal identification phases of the project. This amounts to an artifact density of 550 artifacts per cubic metre (m^3). The results of these calculations are considerable especially in comparison to the artifact densities at other shell midden sites on the Northwest Coast. For example, artifact densities reported for major Nuu-chah-nulth sites, such as *T'ukw'aa* reported approximately 13.3 artifacts per m^3 while, *Yuquot* in Nootka Sound yielded approximately 17.9 artifacts m^3 (McMillan and St. Claire 2005, 2012:35). Within Tsimshian territory in Prince Rupert Harbour, the site known as Boardwalk (GbTo-31) yielded an artifact density (Area B, AU2) of 7.8 artifacts per m^3(Ames 2005:181).[24] Although many of the artifacts recovered from the vibracore tests at EjTa-13 were unformed (i.e., lithic debitage), this is still a considerable discrepancy in artifact recovery. As such, conventional methods for artifact recovery (using calculations from the well-known archaeological sites mentioned above) are yielding one to three percent of the actual density of artifacts in comparison to densities located at EjTa-13.

Six artifact types and nine artifact materials were identified within the assemblage at EjTa-13 (Table 8). Artifact types assigned to recovered artifacts include, bead, flake, unidentified lithic tool, lithic shatter, worked bone and pigment. Results of material type include, andesite, basalt, bone, dacite, obsidian, ochre, quartzite, shell and unidentified

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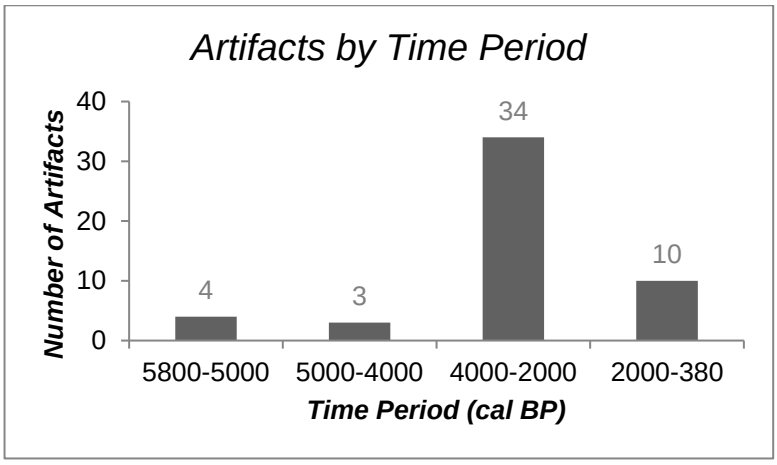
[24] Ames (2005) reports methods did not include screening for excavations at the Boardwalk site due to the volume of shell. *T'ukw'aa* and *Yuquot* were screened through ¼" screens (McMillan 1999).

lithic material. Mussel shell and "white," unidentified shell beads were collected from three different contexts within the core matrices. The majority of artifacts found in the vibracore samples were recovered from dated sediments between 4,000-2,000 cal BP (Figure 26). Obsidian from both EjTa-13 and adjacent archaeological site EjTa-4 (per. coms. F. Rahemtulla, November 2016) was sourced using X-ray florescence (XRF) analysis to the volcanic cone Anahim Peak (McLaren 2014). This obsidian source is located approximately 300 km northeast by water and trail from Hecate Island on the BC Mainland, inferring a significant travel or trade distance over variable terrain to acquire and/or trade for this resource.

Table 8. Table showing artifact type and material type (visual analysis only) from core samples.

	Andesite	Basalt	Dacite	Obsidian	Quartzite	Unidentified lithic material	Bone	Shell	Red ochre	***Total***
Bead						1		8		***9***
Flake	1	7	2	8	2	9				***29***
Lithic tool						1				***1***
Lithic shatter						3				***3***
Worked bone							11			***11***
Pigment									2	***2***
Total	***1***	***7***	***2***	***8***	***2***	***14***	***11***	***8***	***2***	***55***

Figure 26. Chart illustrating artifacts by Namu time period (cal BP) for dated core samples.



The average overall length (10 mm), width (5 mm), thickness (2 mm) and weight (0.3 gr) of the artifact assemblage are very small and may not have been recovered using conventional field screens (i.e., ¼ [6 mm] or 1/8 inch [3 mm]) in sub-optimal conditions. Artifacts were recovered in sediments from six out of the seven core samples, ranging in artifact density between 0.3 and 1.6 per litre of sediment (Table 9). The table below also includes the number of litres of core sediments estimated in order to recover one artifact. Eight bone "flakes" were collected and categorized as non-artifacts. Some bone flakes clearly show dorsal and ventral surfaces, however, due to anecdotal ambiguity surrounding the categorization of flaked bone debitage as artifacts, these items are not included in the artifact calculations. Dimensions of the bone flakes are reported in Appendix E.[25]

A selection of artifact photos below highlights the fragility of artifacts found within cultural sediments dating to the earliest occupation of the site to the most recent from

[25] I also identified one manuport or gastrolith (dimensions appended) and one fish bone (likely rockfish) with three clearly-defined "cut marks" possibly from butchering.

vibracore samples (Figure 27 and Figure 28). Similar fragile artifacts (i.e., numerous shell beads) were recovered from excavation units at the archaeological site, EjTa-4 across Meay Channel from EjTa-13 (Rahemtulla 2014:32). As such, the purpose of highlighting the intricacy of the recovered artifacts from this project is to illustrate that the coring methodology does not destroy these items and that fine screens are conducive, but not necessarily vital to the recovery of these objects. However, results from EjTa-13 show that fine screens are conducive to recovering significantly higher densities of artifacts. Further information concerning the recovered artifacts is available in Appendix E.

Table 9. Table illustrating 1) total number and artifact type of artifacts by core sample, 2) the estimated number of artifacts per litre and 3) number of litres estimated to recover 1 artifact.

Artifact Type	**VC2**	**VC3**	**VC4**	**VC5**	**VC6**	**VC7**
Bead	2			6		1
Flake	1	3	3	7	10	6
Lithic tool				1		
Shatter			1	2		
Worked bone	2			1	8	
Pigment						2
Total	***5***	***3***	***4***	***17***	***18***	***9***
Artifacts per L	***0.3***	***0.3***	***0.2***	***0.9***	***1.6***	***0.7***
No. of L=1 Artifact	***3.6***	***3.5***	***5.6***	***1.1***	***0.6***	***1.5***

Figure 27. Centrally drilled, unidentified white shell beads from two different contexts (Left to right: VC1, EjTa-13:89 [no date] and VC7, EjTa-13:125, 4,000-2,000 cal BP).

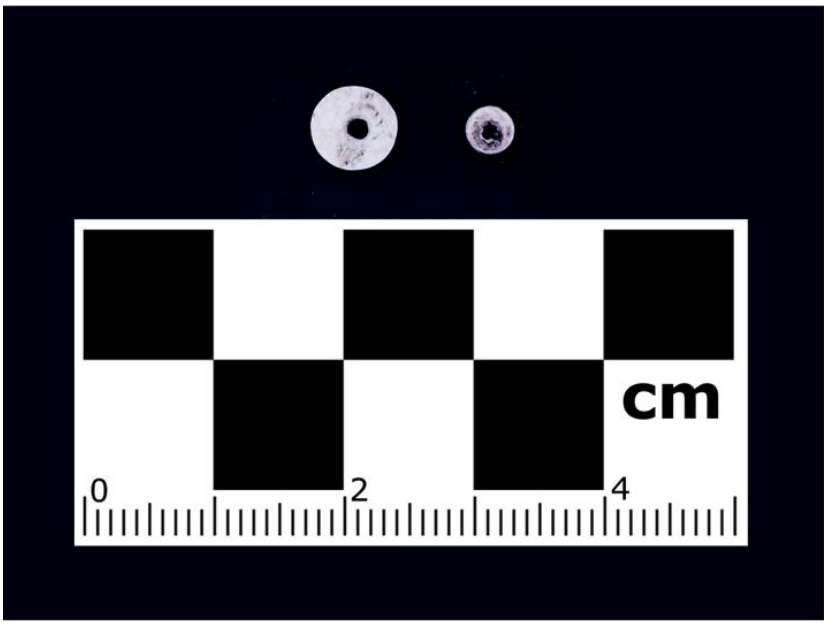


Figure 28. Photo showing worked mammal and bird bone artifacts (EjTa-13:112, 134, 119), obsidian (EjTa-13:90), stone bead (EjTa-13:86), and mussel shell beads (EjTa-13:101-105) from the Namu time period, 4,000-2,000 cal BP. Worked mammal and bird bone were identified from three contexts. The example of an obsidian artifact was recovered from VC2 (no date). The stone bead was retrieved from VC1. Mussel shell beads were recovered within the same core section and may have been part of a composite piece of personal adornment (VC5, 230-235 cm).

4.10 Reburial of Ancestral Remains

On June 2, 2017, Heiltsuk (Maxwell Johnson) and Wuikinuxv (Johnny Johnson and Jennifer Walkus) community and crew members and HALAP archaeologists (Duncan McLaren, Daryl Fedje, Quentin Mackie, Joanne McSporran, Alisha Gauvreau, Seonaid Duffield and Chris Hebda) participated in the reburial of a single, complete

human tooth (premolar) which was originally found embedded in the contents of the initial vibracore sample (VC1) removed in the first field season of this Master's research project in 2015.

The premolar was initially recovered during wet screening of vibracore sediments (5 cm core section, 30-35 cm). The remains were carefully wrapped, handled minimally, and reburied once it was known that no other ancestral remains had been inadvertently disturbed from this site.

The reburial took place at the location of the initial test where the remains had been initially recovered. Wuikinuxv community and crewmember, Jennifer Walkus generously created a small cedar basket for the remains to be reburied in. The basket and contents were placed into the initial vibracore hole. The project director, Duncan McLaren facilitated the short ceremony and Wuikinuxv community and crewmember, Johnny Johnson performed a Wuikinuxv song. Once the ceremony was complete, three remaining crewmembers carefully filled the vibracore test hole with beach sediments and shell to protect the ancestral remains from further disturbance.

4.11 Chapter Summary

In conclusion, this chapter presented integrated results from faunal identification, radiocarbon dating, stratigraphy, sediment accumulation, and artifact identification that underpin discussion in the following chapter concerning the meaning of the site and how it fits into a broader regional context. Principally, results show an enduring focus on specific marine-oriented resources over millennia.

Chapter 5: Discussion and Conclusion

This chapter discusses the results of inferred diet and food preferences over 6,000 cal BP, highlighting patterns of herring and salmon remains and shellfish at EjTa-13. Additionally, I review seasonality and taphonomic processes, sample size adequacy, and overall methodologies. I then explore theoretical implications through shell midden archaeology and historical ecology. Following the discussion, I conclude by providing summary topics outlined in the previous chapters and recommend future directions for the use of vibracoring technology.

5.1 Diet and Food Preferences since 5,800 cal BP at EjTa-13

Continuity of resource use illustrated by the four most abundant fish taxa (herring, salmon, rockfish and greenling) indicates that certain resources were preferentially targeted over 5,000 years at EjTa-13. Although a number of other taxa were also continuously present, their numbers were not as great in comparison to the four main taxa. Nonetheless, persistent occurrence of less abundant taxa represents a continuity of usage of certain niches, technologies and social practices over time and throughout the site.

The proportional abundance of fish remains within Northwest Coast archaeological sites is indicative of a diet rich in marine resources. At EjTa-13, fish taxa contributed to 99% of the identified vertebrate faunal remains recovered from the vibracore samples in fine screens. The abundance of fish remains, especially in comparison to mammal and bird indicates that fish were caught and consumed highly regularly, both for immediate consumption and (presumably) long-term storage as culturally preferred taxa.

5.1.1 Inter-Site and Intra-Site Temporal Patterning

i. Herring and Salmon Bones

When comparing fish taxa from within the assemblage at EjTa-13, relative abundances of salmon are slightly more plentiful than herring during the period 5,800 to 5,000 cal BP only, coinciding with the smallest number of bones per litre. It is difficult to evaluate this trend due to the small sample size both in total fish NISP (n=56) and amount of examined volume (3.8 litres). Conversely, bones per litre are highest within the period 4,000 to 2,000 cal BP, which also corresponds with an increase in the "all other (fish) taxa" category by five percent compared to the period directly before and after. Although a greater NISP is proven to correlate with an increase in overall taxonomic richness (Grayson 1984), this period also exhibits increases in rarely identified species, such as Pacific sardine and Northern anchovy.

Through his extensive core and augering program, Cannon (2000a, 2011) found that abundances of salmon specifically, vary between sites and furthermore, that salmon trends at Namu are connected to the biogeography of the immediate area which is subject to environmental disturbances (e.g., a sudden natural event disrupting a salmon-bearing stream).

A number of researchers have used government mediated salmon escapement data to discuss access to salmon resources within defined political and geographical limits (i.e., Pomeroy 1980; Donald and Mitchell 1994). Comparing the relative abundance of salmon at EjTa-13 and Namu over time suggests the obvious conclusion that salmon is more significant at Namu by the overall higher percentage of NISP, which is also evidenced by the adjacent productive salmon-bearing Namu River. This is in comparison

to EjTa-13, where no *significant or highly productive* salmon-bearing stream or river is evident that drains into Meay or Kwakshua Channel around Calvert and Hecate Island. Furthermore, with regards to EjTa-13 salmon productivity, Pomeroy (1980: 188) notes specifically the lack of salmon-bearing rivers and streams near Calvert and Hecate Island, which he learned from escapement data (1942-1974) provided by Fisheries and Oceans Canada (Chapter 2), as well as through Heiltsuk ethnographic information specific to the region surrounding Calvert Island:

> The Weekenoch [*sic*], of Calvert Island, do not appear to have had *as great* [emphasis mine] a salmon resource within their region as did other groups. Based on the data of only two stream areas, Oatsoalis Creek in Safety Cove and Fish Egg Inlet, I would suspect that this group probably utilized the areas north or south of their ethnographic region, specifically the Koeye River and Kildidt Lagoon, and possibly went as far south as Rivers Inlet. This is an assumption (Pomeroy 1980: 188).

However, it is not wise to use present-day surveys to solely predict or determine conclusions about salmon populations from the past spanning thousands of years. Furthermore, Fisheries and Oceans Canada undertake broad geographic scale repeat surveys of specific medium and large streams, thereby having the potential to miss important runs that may not have large numbers of returning salmon.

White (2011) notes stone fish traps located at small streams throughout Heiltsuk territory were primarily used to catch salmon. This conclusion was supported by information collected from interviews with twelve Heiltsuk oral historians (White 2006). There are two archaeological sites with fish traps in proximity to EjTa-13: EjTa-6 and EjTa-28. Unlike EjTa-28 that is adjacent to Big Spring Creek, and could possibly support a salmon population, there is an ephemeral or seasonal stream associated with the fish

trap feature at EjTa-6, which may have previously supported small spawning populations.

Additionally, according to Tobiasz (2015:151,154) there are also three salmon bearing streams on Calvert Island not known to be associated with shell midden sites. Not unlike using the relative abundance of herring remains at archaeology sites as an ecological indicator of proximity to herring spawning locations (e.g., McKechnie et al. 2014), stone fish trap features at creek mouths in Heiltsuk territory could indicate a prehistoric salmon run.

Comparing salmon from EjTa-13 and Namu by discrete Namu time periods (6,000-5,000 cal BP, 5,000-4,000 cal BP, 4,000-2,000 cal BP, and 2,000-contact) shows no discernable pattern between sites. The relative abundance of salmon from Namu is the most plentiful during the earliest period, between 6,000 to 5,000 cal BP, trends in decline, and is the least rich in the later periods between 4,000 to contact (Cannon 2001:184). Cannon (1991) notes a "precipitous" decline in salmon remains at Namu around 3,500 cal BP associated with the Namu time period, 4,000-2,000 cal BP. At Namu, the relative abundance of salmon remains falls from 58% within the time period 5,000 to 4,000 cal BP to 48% in the following time period (4,000-2,000 cal BP). Salmon remains at EjTa-13 do not show a significant change during this time period, however the relative abundance of the category "all other (fish) taxa", including sardine and anchovy increase markedly.

Interestingly, the abrupt appearance of sardine in the archaeological record at EjTa-13 did not interrupt the abundance of herring or salmon. That is, herring, salmon and sardine were present concurrently within the same section in VC4 indicating that sardine was not replacing either of the most ubiquitous taxa. This is in contrast with the fish assemblage from VC7 where two of three sections (145-150 cm and 150-155 cm)

containing the abrupt presence of anchovy correlated with the conspicuous absence of herring. Overall, however, the pattern is one of persistent, yet regionally variable amounts of salmon, illustrated by the remains at these two archaeological sites.

The continuity of the relative abundance of herring at Namu and EjTa-13 indicates that there was a relatively consistent availability and desire for this resource by inhabitants at both sites. There is a negligible difference (9% and 10%) noted between the relative abundance of herring in the two earliest periods at both sites. The two later periods however, are markedly similar in terms of the relative abundance (i.e., within 3 and 4 percent). Again, a potential explanation is that the earliest period (6,000-5,000 cal BP) at EjTa-13 reflected the least amount of bones per litre. That is, core sections that date to the earliest period number less the than later period sections but also have less faunal remains per litre. Conversely, herring bones are surprisingly robust implying that herring is likely not underrepresented and may simply be absent resulting in a lower relative abundance during this period at EjTa-13. The site may also have been used for different purposes or occupied less intensively resulting in different proportions of taxa within the earliest period.

ii. Shellfish

The sampling strategy for the shellfish included sub-sampling at least one in every five sections along the length of each core sample, with some cores containing more shell (by weight [g]) being sampled in their entirety. To reiterate, the purpose of sampling was to understand ubiquity of shellfish taxa present within the subsample with a simple presence/absence survey. Sampling is a well-established archaeological strategy for interpreting population characteristics (e.g., Cannon and Burchell 2016:184); however, as

a result of the subsampling bias (i.e., cores with more shell were sampled in their entirety over others with less shell), the test areas with the most shell are more representative of the illustrated shellfish results and discussion. Results illustrating shellfish weight (screened using 2 mm) in grams per litre by Namu time period at EjTa-13 show that the recovered marine invertebrate remains increased through time; where the earliest period (5,800-5,000 cal BP) has the lowest shellfish weight per litre and the latest period (2,000-380 cal BP) has the highest.

At Namu, Conover (1978:96) shows that the presence of shellfish was the most abundant between 1,840 BP and 2,440 BP (uncalibrated results), which straddles two Namu time periods (4,000-2,000 cal BP and 2,000-contact cal BP). Trends in shellfish presence decline and are absent previous to 4,540 BP (Conover 1978:96). The results from Namu are similar to EjTa-13 showing an apex of shellfish deposition in the two later periods, with less abundance towards the two earlier periods.

Shell rich matrices create an alkaline environment conducive to preservation, but the duration of preservation is certainly not finite (Stein 1992). Given that fish remains are present through the duration of site occupation, as well as the consistency of certain shellfish taxa represented within the samples, it is difficult *not* to assume that shellfish remains were present throughout the site's occupation and have decayed over millennia. An alternative explanation, is that shellfish were not harvested as intensively in the earlier periods between 5,800 and 4,000 cal BP possibly reflecting an alternative use for the site other than a permanent habitation. However, these statements require further investigations but are noteworthy nonetheless.

5.2 Seasonality

EjTa-13 is rich in marine resources and likely supported a year-round occupation, evidence of which is revealed by the faunal remains identified from within vibracore samples. Many of the identified taxa were either permanent residents to the area (such as rockfish and greenling) or fished intensively and prepared for storage (e.g., herring and salmon), the latter of which made using these taxa to determine seasonality of site occupation unreasonable. It is difficult to determine seasonality from salmon bone for two primary reasons. Firstly, without ancient DNA analysis (the most reliable method, to date) to determine the specific species of salmon present at the site, the season cannot be estimated accurately. Secondly, in addition to being consumed fresh, salmon were intensively harvested during spawning events, likely prepared for storage and consumed throughout the year. Salmon predominantly spawn between spring and late fall depending on the species. This means that that salmon provides a relatively broad timeframe for the season of capture.

In terms of estimating seasonality from Pacific herring, ethnographic accounts from coastal archaeological sites from southern Alaska to Oregon also suggest that although herring were caught out of spawning season, the majority of fish and roe were likely taken in the springtime during the major spawning event (McKechnie and Moss 2016; Moss 2015). Less is known about the movements of herring in the winter (Moss 2015), however, like salmon, the presence of herring indicates the fish were taken and either eaten fresh or prepared whole for storage. As such, herring is also not a reliable seasonal indicator, other than the broad conclusion that they were taken in the springtime.

The most confident marker of late summer occupation within the assemblage,

albeit from a single individual is evidenced through the identification of a juvenile harbour seal (*Phoca vitulina*) tooth. According to Ford (2014:392) in northern British Columbia and southeastern Alaska, pupping season is recorded in mid-June, generally occurring for one to two and a half months with lactation lasting four to five weeks in which time the juvenile's weight doubles (Ford 2014:392). This indicates that the season of capture may have occurred in between mid-June to October, amid the time the pup was born and before it reached maturity. Although this claim is constructed around a single individual and cannot be used to extrapolate 6,000 years of site occupation, it is a confident assertion due to the observed historical pupping season of harbour seals being predictable within the region. There is also no known ethnographic record that suggests harbour seals were captured for storage or transported between sites.

A less confident seasonal indicator involves a single unidentified bird phalange from a juvenile (broken at the diagnostic end but likely from a resident bird, such as a gull or grebe), which was most likely taken in late summer due to the reliability of resident bird lifecycles and the estimated age of the identified individual (Rebecca Wigen, personal communications 2016). However, like the juvenile harbour seal element, interpreting seasonality using a single specimen is not a reliable indicator.

Lastly, ochre has been indicated elsewhere as showing winter occupation at large villages sites on the Central Coast (Cannon 2002, 2013). Ethnographic records suggest ochre was used in the winter ceremonies within both Heiltsuk and Wuikinuxv territories (Cannon 2013:29). Cannon (2013) studied archaeological data from 28 Central Coast shell midden sites through core and auger sampling in the region to support the conclusion that some were winter settlements where ochre was present; ochre being one

of multiple indicators used to determine this result. Only small amounts of the red pigment were recovered which does not inspire confidence in using this archaeological evidence solely as a seasonal indicator of a winter occupation at EjTa-13, but is certainly noteworthy nonetheless.

The most confident marker of seasonality therefore is derived from a single, juvenile harbour sea tooth, indicating that the individual was caught in the late summer. Broad season of captures timeframes for salmon (spring to late fall) and herring (springtime) suggest the site may have been occupied during this time as well. However, there is not sufficient evidence to indicate a definitive season of occupation at EjTa-13 from the faunal assemblage.

5.3 Taphonomy, Sample Size Adequacy, and Overall Methodologies

5.3.1 Taphonomy

Given that shell midden archaeology can reflect highly complex stratigraphy, interpreting the taphonomic processes of faunal remains can be a major undertaking when analyzing an assemblage, as there are many intersecting variables associated with the deposition and degradation of bone over time and space (Holdaway et al. 2017; Lyman 1991; Stein 1992). As such, the following section provides a summary of interpretations concerning the taphonomic processes related to the faunal assemblage from vibracore sampling at EjTa-13.

In some core samples such as in VC6, the preservation of the identified and unidentified bone changes markedly along the length of the core, indicating that the site function changed through time as the shell midden was developed. For example, VC6 shows the most discrepancy between Namu time periods; the sections representing the

latest period, 2,000 to 380 cal BP contain small amounts of bone unidentifiable to "Order" (NISP=85, NSP=426, unidentified to "Order" n=34, 20.0% identification [ID] rate) while the concentration of identified bones found between 4,000 to 2,000 cal BP (NISP=1,358, NSP=2133, 63.7% identification rate) were well preserved and readily identified (See Chapter 4). This result could be explained by any number of factors including animal scavenging (e.g., canid and otter), inhabitants of the site using the location as a thoroughfare resulting in trampling, or vibracore compression (as seen in VC1). The sample could also have been removed from the perimeter of the shell midden and therefore experienced differential preservation and depositional patterning (as seen in VC3). For example, if less shell is deposited at the perimeter of the site then bone would presumably not preserve as well due to the influence of the acidic decomposing forest litter. Additionally, bone is chemically altered in alkaline environments (Linse 1992:342). Furthermore, shell can also be impacted by salt and groundwater (Stein 1992), which may affect basal sediments containing shell at the site. Nonetheless, this section will briefly explore causes of bone breakage or degradation, which hinders the faunal identification process as it related to the vibracore samples.

Animal scavenging is a distinct possibility as domestic dog and river otter remains are both present within the EjTa-13 faunal assemblage. Erlandson and Moss (2001:427) conclude that "...remains of aquatic animals can accumulate in archaeological sites through several biological mechanisms unrelated to humans." For example, Cannon (2000a) links animal scavenging, predominantly the pattern made by domestic dog, to the highly fragmented condition of bone elements found within the faunal assemblage from Namu. However, canid scavenging is difficult to interpret on fish bones because of the

small size of the specimens. That is, larger fragmented or whole mammal bones are more likely to show the presence of canine puncture holes or other diagnostic patterns over fish remains, which on average are quite small in size. This being said, no diagnostic patterns of canid scavenging (i.e., canine puncture holes or gnawing) were decisively noted. Alternatively, in the case of river otter scavenging there would likely be more opportunistic nearshore fish remains present that diverge from the culturally preferred taxa normally represented at the site. Furthermore, Erlandson and Moss (2001:417) describe a river otter "midden" (that was approximately 8 m by 12 m in size) that contained "well-preserved" nearshore fish taxa (e.g., rockfish and greenling, etc.) as well as mussel, chiton, abalone and sea urchin shell. EjTa-13 therefore is not indicative of a river otter "altar"[26] (Wigen and Stucki 1988, Moss 2015) or "midden".

It is also difficult to conclude with certainty whether the early inhabitants of the site used the test locations we chose as an access thoroughfare or intensive taskscape, which would have caused bone breakage.

Evidence of recent fragmentation of bones due to core compression was seen with certainty in VC1, which was the first sample and where compression was greater than other cores as it was removed in a continuous sample as opposed to removing one rod section at a time. Pressure builds up in continuous core samples, which contributes to more compaction and therefore more bone and shell fragmentation. The sample likely became slightly more compact toward basal sediments. It is undetermined how much the

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[26] A river otter altar is described by Moss (2015:34) as a rocky "feeding ledge that is elevated above the shoreline, reached by climbing up steep slopes, and concealed by vegetation."

basal sediments were compacted relative to the entire sample and how compaction might skew the temporal units. Within VC1, the percentage of identified fish taxa within the core assemblage is 31%, whereas in the following field season, when methods were adjusted to reduce core compression, this resulted in an increase in the percentage of identified fish taxa. Incidental observation revealed freshly broken bone within the VC1 assemblage which likely refit with other broken specimens within or adjacent to the 5 cm core section. However, the occurrences of specimens that refit were not recorded until later core assemblages due to a combination of oversight, lack of faunal identification experience and subsequent protocol drift from the initial sample. The smallest and largest percentages reflecting identified fish remains from the 2016 field season equal 35% (VC2) and 44% (VC3) respectively. As such, the condition of the bone found in the core samples is most likely explained by a combined result of compression due to continuous vibracore testing and other unknown factors, such as use of core location on the landform as an access way or intensive taskscape.

Taphonomy of salmon bones in comparison to herring is also a consideration that has been discussed broadly with regards to the overrepresentation of salmon within the archaeological record. Cannon (2000a: 726) notes that some salmon bones are “semi-cartilaginous and particularly vulnerable to chemical and mechanical breakdown” in addition to the vertebrae being extremely easy to identify to genus (Orchard 2007; Wigen and Stucki 1988). This could result in a single broken salmon vertebrae being counted more than once and therefore inflating the overall number of cumulative identified salmon remains (Wigen and Stucki 1988). Using salmon bones from EjTa-13 as an example, the ratio of complete vertebral salmon elements to broken elements is

approximately 1:34. In comparison, the ratio of complete to broken vertebral herring elements is approximately 5:1. These results indicate that salmon vertebral elements, which make up the majority of identified salmon bones, are overrepresented, especially in comparison to herring vertebrae, which appear to be more robust and are not as prone to breakage. Salmon vertebral elements including caudal bones were identified more often than any other part of the fish indicating that salmon may have been processed elsewhere and the non-vertebral elements were discarded at an alternative location. In contrast, bones from entire herring were recovered from EjTa-13 demonstrating that whole fish were processed fresh or stored whole at the study location. Differences in the average size between herring and salmon are considerable (Grier and Lukowski 2012; Monks and Orchard 2011) in terms of meat weight. However, I did not attempt to calculate meat weight during this project and therefore it is not discussed.

5.3.2 Sample Size Adequacy

To reiterate, vibracore tests were collected from the densest vertical portions of the shell midden, spaced approximately one to seven meters apart[27] depending on the site topography and natural obstacles. The approximate age and depth of the site was also determined through alternative methods, including auger and ESP core sampling and subsequent radiocarbon dating as part of prior research efforts (See McLaren et al. 2015; McLaren 2013, 2014). A number of studies have tested the adequacy of using either column or bucket auger samples in comparison to excavation units for the purpose of collecting a representative faunal assemblage within an archaeological site context

[27] Apart from VC7 which, is located approximately 50 m south of VC5

(Cannon 2000a; Casteel 1976; McKechnie 2005; Gray 2008), a sampling strategy akin to vibracore testing in terms of the volume of sediments collected. Although excavation units provide the best sampling method to attain the most information about the site (for example, recovering whole, large sea mammal elements), column and core sampling have also been proven to provide an accurate reflection of fish taxa within shell midden sites on the Northwest Coast (Casteel 1976; McKechnie 2005). The only issue that occurred with sample size adequacy in terms of taxonomic richness was encountered when NISP was categorized by discrete time periods, causing a constrained sample size for periods where fewer bones per litre were recovered. However, this may also reflect a period of time when the site was being used for different purposes. Additionally, taxa that appear less frequently across the core assemblage may have been found more commonly in a project that incorporated an excavation unit. Although this is a predictable outcome of core sampling, what is the most reflective way to report the results on these rare taxa overall and through time? This issue has been an interpretive challenge throughout this project.

5.3.3 Overall Methodologies

Overall, the advantages of using vibracore technology as a methodology outweighed the challenges. The advantages of using this methodology over excavation units have been mentioned at length elsewhere (Chapter 3: Methods) and the results presented in this thesis are clear evidence of the effectiveness of the device. Among the primary efficiencies, the device is excellent for radiometric chronology building (budget permitting), due to the stratigraphy staying in context during high frequency vibration and sample collection. This makes the technology a superior method to auger sampling due to

the enclosed sediments within the sample tube (up to 152.5 cm of unbroken sampling with longer continuous corestrings possible). Here, the inherent challenges and shortcomings of vibracore technology are briefly reiterated.

As a vibracore is a mechanized coring device, there were concerns about the perception of using this machine within the Hakai *Luxvbalis* Conservancy. When the motor is engaged, the machine is noisy and has the appearance of a drilling device. With regards to negotiating challenging sediment-types within the field, the team encountered some difficulty using the vibracore within certain contexts. For example, in deposits described as coarse sandy sediments with inclusions of a variety of angular and sub-rounded clast sizes (e.g., a mix of gravels and cobbles), samples were not collected as quickly as in other softer sediment types and required more machine running time to complete the test. In some instances where rock refusals were met, the corestring was withdrawn and the test was resumed using a bucket auger instead, which was often effective in increasing the sample depth. Typically, samples terminated in a total rock refusal or reached blue-grey fine-silt or clay, characteristic of non-cultural bearing sediments in the region. Using an auger is therefore an effective solution for finishing tests in difficult sediments as the vibracore leaves a “neat” test hole with intact walls (e.g., resulting in minimal “slumpage”) into which an auger fits easily.

Other considerations include the affordances provided by financial support from the Hakai Institute, which may not be available within the context of other projects. For example, the machine itself is a custom made expensive investment (approximately

$15,000), requiring a considerable upfront cost in addition to ongoing maintenance.[28] Additionally, although the machine is necessarily weighty (assembled, likely weighs 250 to 300 pounds), this makes transporting the machine a logistical challenge due to the overall load of all components combined. This is especially precarious when adding the weight of the resulting core samples upon core extraction. Therefore the components of the machine and resultant sediment samples ideally require a sturdy transport vehicle such as a medium to large pickup truck. Manually transporting the individual vibracore components over uneven terrain can also be a considerable safety hazard due to the weight of the components and therefore adds difficulty to accessing locations, but is manageable.[29] EjTa-13 is also easily accessible by a 15-minute boat ride from the Hakai Calvert Ecological Observatory. Affordable access to the site is unique to this project and would otherwise be extremely costly. Finally, the field results of this project were made possible with the support of a strong, able-bodied and mechanically-minded three-person crew.

5.4 Theoretical Integration

There is some debate about intentionality with regards to the processes by which shell middens are created in space and through time (Blukis Onat 1985; McKechnie 2015; Letham et al. 2017). Inferring intentionality within the context of creating a shell midden, either as a sort of "scaffolding" or otherwise, imbues these features with more

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[28] The Wink Vibracore Drill Company Ltd © manufacturer is located in Richmond, British Columbia

[29] There are three different size drilling packages: "H" size being the largest and the model used in this project, allowing for the most sediment collected.

meaning than through a “passive” act of multiple events of discarding food waste at random.

Trant et al. (2016) construct an argument around shell midden construction providing a well-drained surface upon which, in the absence of human occupation due in part to the onset of European disease and subsequent abandonment of habitation sites, there is enhanced forest productivity. Well-drained shell midden matrices are made up of marine derived nutrient-rich components (i.e., calcium and phosphorous), which are the drivers of the enhancement of forest productivity (Trant et al. 2016). At EjTa-13, cultural deposits were formed on top of glacial fine-silt or clay, overlaid by coarse beach sand with gravel and cobble inclusions, noted in vibracore and auger testing during this program where basal sediments were definitively reached. All but one vibracore test location shows that cultural bearing deposits were built up on a landform above the present-day barnacle line. VC7 reached basal sediments void of faunal remains and charcoal indicating that the beginning of non-cultural bearing sediments occurred at approximately 40 cm below the present-day barnacle line.[30] This indicates the test location may have been built up over a stream bed or low-lying slough, a likely conclusion given the test is currently situated between two small streams. It is also possible that the sea level was slightly lower at this time, meaning sediments could have accumulated on top of ground surface and below the current high tide line. The primary test area and deepest part of the shell midden, including VC1 through VC6 shows that the paleo landform, before it was inhabited was approximately 1 to 1.5 m above the present-

[30] All elevation data were calculated from the observed barnacle line at EjTa-13.

day barnacle line (approximately 1 metre below higher high tide [Plafker 1969]), quickly gaining elevation toward the landward or east portion of the site boundary and midden extent. For VC1, the vibracore team did not reach basal sediments using the vibracore and did not attempt auger sampling. Accumulation calculations show a relatively consistent rate of buildup (average = 8cm/100 years) across the site, apart from VC3[31] which accumulated slower and is situated at the toe of a slope, furthest inland from the eroding terrace edge and therefore interpreted as being near the site perimeter.

Combined, the deposits show a "landscape of habit" (Mackie 2003) through the intentional and/or unintentional depositional acts resulting in a "cumulative palimpsest" of activities represented in shell midden accumulations. Intentionality is suggested as the 1 m contour lines (derived from Light Detection and Ranging [LIDAR] imagery) show the site was essentially made "level" through the deposition of cultural material. Although the site typography may undulate and has accumulated approximately 40 cm to 45 cm of forest litter, coupled with evidence from the core samples (e.g., Age/Depth Model and rates of accumulation in Chapter 4), the site built up relatively consistently. It is unknown how the intentionality of site formation may effect interpretations such as the accumulation rates. Furthermore, interpretations derived from faunal remains showing consistency and continuity through time are *not* implying cultural homogenization.

The historical ecological research program is able to uniquely access the decadal, centennial and long-term landscape consequences of human activities (Armstrong et al.

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[31] VC6 is also interpreted as being at the perimeter of the site however the test location accumulated more consistently than VC3 and therefore is not considered an outlier to the same extent as VC3.

2017:8) As a result, historical ecology programs are well situated to provide comment on governance and resource management while working in equal partnerships (i.e., collaboration and joint partnerships) with Indigenous community representatives (Armstrong et al. 2017). However, the terms "management" and "resource" have often historically (and in some cases, presently) been associated with negatively restrictive, hierarchical state sanctioned, and externally imposed programs that have negative effects for local and Indigenous community members. For example, many First Nations and local coastal communities feel the Canadian government is responsible for the *mis*-management of fish stocks including Pacific herring, a species that is so integral to some coastal Indigenous communities that it is considered a "cultural keystone species." With regards to herring specifically, von der Porten et al. (2016:75) state "[t]there is an opportunity for Canada to amend laws, policies and management which together make room for the reinvigoration of Indigenous laws on fisheries governance." As of 2016, the Department of Fisheries and Oceans and the Heiltsuk Nation entered into a "power sharing" agreement concerning the joint management of herring (von der Porten 2016:75). To this effect, Lerzman (2009:351) states, "[a] combination of modern ecological science ... and traditional knowledge is likely to have more power as a tool for developing sustainability than is either alone." In this study, archaeological evidence suggests that Indigenous management of marine resources persisted over a *longue durée* of more than 5,000 years. However, although these results clearly show consistency in resources use over very broad and externally imposed time periods, they are not a reflection of the rich everyday lives lived by the Indigenous occupants of the ancient habitation. As such, caution is advised in interpreting meaning beyond these limited

results. Nonetheless, regional comparison including EjTa-13 and Namu show quite similar patterns of resource use over extraordinarily long periods of time among contemporaneously occupied archaeological sites that have implications for present-day management strategies unique to the two sites which are only 25 km apart or 33 km by boat. Present day management strategies may include community-based management or Indigenous stewardship programs of fish taxa found in the archaeological record over millennia (Quintana Morales et al. 2017).

5.5 Concluding Remarks

This Master's research was undertaken as part of the Hakai Ancient Landscapes Archaeology Project and financially supported by the Hakai Institute and Tula Foundation. Charcoal from vibracore sampling shows the earliest archaeological component at the study location began around 5,800 cal BP and site occupation continued into the 16th Century. Additionally, evidence from CMT coring and anthropogenic burning events show that the occupants were igniting period burns in the region until the late 19th Century as well as harvesting bark and wood (Hoffman et al. 2016). This project tested the application of vibracore technology at a deep Central Coast shell midden site context. Archaeological core sediments were used to obtain evidence of zooarchaeological data to investigate fisheries resource use through time and in comparison to the intensively studied archaeological site of Namu (ElSx-1).

This project set out to explore three primary research goals in the form of questions. In pursuit of this overarching objective, the primary question states: *Can vibracore technology be useful for BC shell midden archaeology?* The results of this study clearly show that vibracore technology is a viable sampling methodology for

Central Coast shell midden archaeology and can likely be applied more broadly on the Northwest Coast. Vibracore samples are particularly effective for collecting a representative sample of zooarchaeological data analogous to the traditional volume of a column or auger sample and analyzed in a controlled laboratory environment. Vibracore sampling also proved excellent for long-term chronology building through radiocarbon dating. The unexpected result of numerous tiny artifacts from the core samples speaks to efficiencies of both vibracore sampling and fine screen (2 mm) methodologies.

The second question asks: *Can fauna from vibracore samples evaluate changes in fisheries resource use through time?* Again, the results from EjTa-13, as illustrated through radiocarbon dating show that fauna from core samples can effectively demonstrate patterns of resource over 5,800 cal BP. Continuity of herring, salmon, rockfish and greenling over millennia is of particular interest due to the implications for sustainable fisheries management. Continuity of resource use through time strongly implies an effective resource management ethic.

The third and final question inquires: *How do coring results fit into the broader discussion of the regional narrative on the Central Coast?* Broadly, results from the EjTa-13 faunal analysis fit into outcomes from Central Coast archaeological sites dating to the mid to late Holocene, which show a predominance of salmon and/or herring. Namu is one of many other sites that were subjected to similar sampling efforts of which the site is the largest and most prominent in the region leading to a well understood site chronology dating to approximately 11,000 years and with fauna dating to the past 6,000 years. Comparing results of herring and salmon between Namu and EjTa-13 shows trends in resource use between sites. Relative abundance of salmon between sites shows more

salmon was used at Namu than at EjTa-13. The former observation also supports the second research question. These results can be explained in part by Namu being situated adjacent to a large, productive salmon-bearing river, whereas EjTa-13 is not. Interestingly, the relative abundance of herring was contiguous between sites suggesting the early inhabitants of both sites exhibited a cultural preference for herring as well as regional-wide trend in abundance on the Central Coast thereby validating the vibracore sampling as a useful sampling strategy for tracking site specific and regional patterns of fish resources over the *longue durée*.

5.6 Future Directions

Vibracores are well suited for testing deep, multicomponent archaeological sites important for investigating long-term (millennial scale) patterns of fisheries resource use and management outcomes. The ability to efficiently take multiple samples from different locations will allow for broad sampling at both site and regional scales. Future directions may include testing vibracore results in comparison with a controlled excavation unit. Although proven extensively elsewhere using auger testing and column samples, it may be prudent to explore how the vibracore captures individual stratigraphic layers as well as the overall representation of taxa in comparison to an adjacent excavation unit. Additionally, testing the equipment in a variety of archaeological settings would ensure that the technology could be used in a multitude of regions, therefore solidifying the usefulness of the vibracore as an archaeological coring device on the Northwest Coast.

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Appendix A

Faunal Identification Spreadsheet (2mm)

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1	12-Oct-16	VC2	30-34	3	Unidentified fish	unid				100	fragments	3	in poor condition
2	12-Oct-16	VC2	30-34	26	Unidentified mammal	unid				100	fragments	26	in poor condition; long bone shaft fragment present
3	12-Oct-16	VC2	25-30	9	Unidentified fish	unid				100	fragments		in poor condition
4	12-Oct-16	VC2	25-30	12	Unidentified mammal	unid				75	fragments	12	in poor condition
6	12-Oct-16	VC2	39-45	4	Unidentified mammal	unid				100	fragments	4	
7	12-Oct-16	VC2	39-45	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	half		
8	12-Oct-16	VC2	39-45	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	fragment		
9	12-Oct-16	VC2	39-45	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
10	12-Oct-16	VC2	39-45	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
11	12-Oct-16	VC2	39-45	1	Sebastes (Rockfish)	genus	vertebrae			100	effectively complete		
12	12-Oct-16	VC2	39-45	1	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments	1	
13	12-Oct-16	VC2	39-45	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments		
14	12-Oct-16	VC2	39-45	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
15	12-Oct-16	VC2	39-45	29	Unidentified fish	unid				100	fragments		
16	12-Oct-16	VC2	45-50	1	Hexagrammos, (Greenling)	genus	angular			100	fragment		
17	12-Oct-16	VC2	45-50	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	3	
18	12-Oct-16	VC2	45-50	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
19	12-Oct-16	VC2	45-50	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
20	12-Oct-16	VC2	45-50	1	Clupea pallasii, (Pacific herring)	species	operculum			100	fragment		
21	12-Oct-16	VC2	45-50	1	Clupea pallasii, (Pacific herring)	species	suboperculum			100	fragment		
22	12-Oct-16	VC2	45-50	1	Clupea pallasii, (Pacific herring)	species	interoperculum			100	fragment		
23	12-Oct-16	VC2	45-50	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
24	12-Oct-16	VC2	45-50	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
25	12-Oct-16	VC2	45-50	3	Clupea pallasii, (Pacific herring)	species	vertebrae			100	fragment		
26	12-Oct-16	VC2	45-50	15	Unidentified fish	unid				100	fragments		
27	13-Oct-16	VC2	34-39	1	Anoplopoma fimbria (Sablefish)	species	vertebrae	small		100	effectively complete		
28	13-Oct-16	VC2	34-39	1	Lepidopsetta bilineata (Rock Sole)	species	post temporal		left	100	effectively complete		rock sole, starry flounder and English sole all similar and possible
29	13-Oct-16	VC2	34-39	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
30	13-Oct-16	VC2	34-39	1	Hexagrammos, (Greenling)	genus	terminal vertebrae			100	effectively complete		
31	13-Oct-16	VC2	34-39	3	Pholidae (Gunnel)	genus	vertebrae			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
32	13-Oct-16	VC2	34-39	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	half		
33	13-Oct-16	VC2	34-39	3	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		MNI=2
34	13-Oct-16	VC2	34-39	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
35	13-Oct-16	VC2	34-39	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		MNI=2; two primary vertebrae
36	13-Oct-16	VC2	34-39	5	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	effectively complete		
37	13-Oct-16	VC2	34-39	6	Unidentified mammal	unid				100	fragments	1	n=1 fragment shows signs of burning
38	13-Oct-16	VC2	34-39	50	Unidentified fish	unid				100	fragment	2	n=2 fragment shows signs of burning
39	13-Oct-16	VC2	50-55	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
40	13-Oct-16	VC2	50-55	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
41	13-Oct-16	VC2	50-55	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
42	13-Oct-16	VC2	50-55	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
43	13-Oct-16	VC2	50-55	1	Sebastes (Rockfish)	genus	vertebrae			100	effectively complete		
44	13-Oct-16	VC2	55-60	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
45	13-Oct-16	VC2	55-60	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
46	13-Oct-16	VC2	55-60	1	Clupea pallasii, (Pacific herring)	species	vertebrae			100	effectively complete		
47	13-Oct-16	VC2	55-60	1	Clupea pallasii, (Pacific herring)	species	dentry			100	fragment		
48	13-Oct-16	VC2	55-60	1	Oncorhynchus (Pacific Salmon)	genus	hypural			100	fragment		
49	13-Oct-16	VC2	55-60	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
50	13-Oct-16	VC2	55-60	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	effectively complete		
51	13-Oct-16	VC2	55-60	27	Unidentified fish	unid				100	fragments		some effectively complete scales present
52	13-Oct-16	VC2	65-70	4	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
53	13-Oct-16	VC2	65-70	2	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
54	13-Oct-16	VC2	65-70	1	Oncorhynchus (Pacific Salmon)	genus	expanded neural process/spine			100	fragment		
55	13-Oct-16	VC2	65-70	1	Clupea pallasii, (Pacific herring)	species	operculum	small	right	100	fragment		
56	13-Oct-16	VC2	65-70	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragment		
57	13-Oct-16	VC2	65-70	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	effectively complete		
58	13-Oct-16	VC2	65-70	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
59	13-Oct-16	VC2	65-70	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
60	13-Oct-16	VC2	65-70	3	Clupea pallasii, (Pacific herring)	species	vertebrae			100	fragments	1	n=1 burning present
61	13-Oct-16	VC2	65-70	1	Engraulis mordax (N. anchovy)	species	vertebra			100	effectively complete		
62	13-Oct-16	VC2	65-70	45	Unidentified fish	unid				100	fragments		n=1 unidentified vert; n=1 scale
63	14-Oct-16	VC2	60-65	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	fragment		
64	14-Oct-16	VC2	60-65	2	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete	2	
65	14-Oct-16	VC2	60-65	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete	1	
66	14-Oct-16	VC2	60-65	1	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete	1	
67	14-Oct-16	VC2	60-65	1	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete		
68	14-Oct-16	VC2	60-65	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
69	14-Oct-16	VC2	60-65	7	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
70	14-Oct-16	VC2	60-65	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
71	14-Oct-16	VC2	60-65	2	Sebastes (Rockfish)	genus	spacer			100	complete		
72	14-Oct-16	VC2	60-65	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
73	14-Oct-16	VC2	60-65	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	half		
74	14-Oct-16	VC2	60-65	2	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
75	14-Oct-16	VC2	60-65	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
76	14-Oct-16	VC2	60-65	1	Unidentified bird	unid				100	fragment		long bone fragment
77	14-Oct-16	VC2	60-65	7	Unidentified mammal	unid				100	fragments		
78	14-Oct-16	VC2	60-65	1	Unidentified fish	unid				100	fragment	1	
79	14-Oct-16	VC2	60-65	59	Unidentified fish	unid				100	fragments		contains full scales
80	14-Oct-16	VC2	70-75	1	Sebastes (Rockfish)	genus	ruberrimus spine			100	fragment		butchering evidence
81	14-Oct-16	VC2	70-75	1	Clupea pallasii, (Pacific herring)	species	pterotic	medium		100	effectively complete		
82	14-Oct-16	VC2	70-75	1	Clupea pallasii, (Pacific herring)	species	exoccipital	medium		100	half		
83	14-Oct-16	VC2	70-75	1	Clupea pallasii, (Pacific herring)	species	ulimate vertebrae			100	complete		
84	14-Oct-16	VC2	70-75	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	complete		
85	14-Oct-16	VC2	70-75	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
86	14-Oct-16	VC2	70-75	4	Clupea pallasii, (Pacific herring)	species	vertebrae			100	fragments		
87	14-Oct-16	VC2	70-75	1	Hexagrammos, (Greenling)	genus	hyomandibular			100	articular surface		
88	14-Oct-16	VC2	70-75	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment		
89	14-Oct-16	VC2	70-75	1	Sebastes (Rockfish)	genus	Interhaemal spine			100	fragment		
90	14-Oct-16	VC2	70-75	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
91	14-Oct-16	VC2	70-75	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
92	14-Oct-16	VC2	70-75	1	Sebastes (Rockfish)	genus	supracleithrum		left	100	articular surface		
93	14-Oct-16	VC2	70-75	1	Sebastes (Rockfish)	genus	vertebral column			100	fragment		
94	14-Oct-16	VC2	70-75	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
95	14-Oct-16	VC2	70-75	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
96	14-Oct-16	VC2	70-75	1	Oncorhynchus (Pacific Salmon)	genus	expanded neural process/spine			100	articular surface		
97	14-Oct-16	VC2	70-75	4	Unidentified mammal	unid				100	fragments		
98	14-Oct-16	VC2	70-75	28	Unidentified fish	unid				100	fragments		
99	14-Oct-16	VC2	70-75	1	Unidentified fish	unid				100	fragment	1	
100	14-Oct-16	VC2	75-80	1	Clupea pallasii, (Pacific herring)	species	quadrate	small	left	100	articular surface		
101	14-Oct-16	VC2	75-80	1	Clupea pallasii, (Pacific herring)	species	dentry	small	left	100	fragment		
102	14-Oct-16	VC2	75-80	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	half	1	
103	14-Oct-16	VC2	75-80	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	half		
104	14-Oct-16	VC2	75-80	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	fragment		
105	14-Oct-16	VC2	75-80	5	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
106	14-Oct-16	VC2	75-80	1	Hexagrammos, (Greenling)	genus	exoccipital			100	half		
107	14-Oct-16	VC2	75-80	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
108	14-Oct-16	VC2	75-80	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
109	14-Oct-16	VC2	75-80	5	Unidentified mammal	unid				100	fragments		
110	14-Oct-16	VC2	75-80	28	Unidentified fish	unid				100	fragments		
111	14-Oct-16	VC2	85-90	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
112	14-Oct-16	VC2	85-90	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
113	14-Oct-16	VC2	85-90	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete	1	
114	14-Oct-16	VC2	85-90	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
115	14-Oct-16	VC2	85-90	2	Hexagrammos, (Greenling)	genus	vertebrae	small		100	effectively complete		
116	14-Oct-16	VC2	85-90	1	Sebastes (Rockfish)	genus	articular	small	right	100	articular surface		
117	14-Oct-16	VC2	85-90	1	Sebastes (Rockfish)	genus	pelvis	small	left	100	fragment		
118	14-Oct-16	VC2	85-90	1	Sebastes (Rockfish)	genus	epihyal	small		100	fragment		
119	14-Oct-16	VC2	85-90	1	Sebastes (Rockfish)	genus	spacer			100	complete		
120	14-Oct-16	VC2	85-90	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
121	14-Oct-16	VC2	85-90	1	Sebastes (Rockfish)	genus	ulimate vertebrae	small		100	half		
122	14-Oct-16	VC2	85-90	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	effectively complete		
123	14-Oct-16	VC2	85-90	1	Oncorhynchus (Pacific Salmon)	genus	epural			100	articular surface		
124	14-Oct-16	VC2	85-90	1	Oncorhynchus (Pacific Salmon)	genus	expanded neural process/spine			100	effectively complete		
125	14-Oct-16	VC2	85-90	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	complete		
126	14-Oct-16	VC2	85-90	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
127	14-Oct-16	VC2	85-90	1	Unidentified mammal	unid				100	fragment		*** worked bone, grinding visible, bone needle fragment??
128	14-Oct-16	VC2	85-90	1	Unidentified mammal	unid				100	fragment		***bone debitage
129	14-Oct-16	VC2	85-90	1	Unidentified mammal	unid				100	fragment	1	
130	14-Oct-16	VC2	85-90	1	Unidentified mammal	unid				100	fragment		
131	14-Oct-16	VC2	85-90	49	Unidentified fish	unid				100	fragments		
132	17-Oct-16	VC2	85	1	Lontra canadensis (North American river otter)	species	vertebra			100	effectively complete		found in situ
133	17-Oct-16	VC2	80-85	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
134	17-Oct-16	VC2	80-85	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
135	17-Oct-16	VC2	80-85	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
136	17-Oct-16	VC2	80-85	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
137	17-Oct-16	VC2	80-85	1	Sebastes (Rockfish)	genus	radial			100	fragment		
138	17-Oct-16	VC2	80-85	2	Sebastes (Rockfish)	genus	atlas spine			100	fragments		
139	17-Oct-16	VC2	80-85	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
140	17-Oct-16	VC2	80-85	1	Unidentified mammal	unid				100	fragment		*** possible artifact
141	17-Oct-16	VC2	80-85	8	Unidentified mammal	unid				100	fragments		contains proximal mammal spine fragment
142	17-Oct-16	VC2	80-85	22	Unidentified fish	unid				100	fragments		contains complete scale
143	17-Oct-16	VC2	90-95	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
144	17-Oct-16	VC2	90-95	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	effectively complete		
145	17-Oct-16	VC2	90-95	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
146	17-Oct-16	VC2	90-95	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
147	17-Oct-16	VC2	90-95	1	Sebastes (Rockfish)	genus	vertebra			100	fragment		
148	17-Oct-16	VC2	90-95	1	Sebastes (Rockfish)	genus	exoccipital			100	fragment		
149	17-Oct-16	VC2	90-95	2	Hexagrammos, (Greenling)	genus	vertebrae			100	fragments		
150	17-Oct-16	VC2	90-95	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment		
151	17-Oct-16	VC2	90-95	2	Unidentified mammal	unid				100	fragments		
152	17-Oct-16	VC2	90-95	48	Unidentified fish	unid				100	fragments		
153	17-Oct-16	VC2	95-100	1	Clupea pallasii, (Pacific herring)	species	vertebra	large		100	effectively complete		
154	17-Oct-16	VC2	95-100	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	effectively complete		
155	17-Oct-16	VC2	95-100	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
156	17-Oct-16	VC2	95-100	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	effectively complete		
157	17-Oct-16	VC2	95-100	13	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
158	17-Oct-16	VC2	95-100	2	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
159	17-Oct-16	VC2	95-100	2	Oncorhynchus (Pacific Salmon)	genus	expanded neural process/spine			100	articular surface		
160	17-Oct-16	VC2	95-100	1	Oncorhynchus (Pacific Salmon)	genus	epural			100	articular surface		
161	17-Oct-16	VC2	95-100	3	Sebastes (Rockfish)	genus	vertebra	small		100	more than half		
162	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
163	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	epihyal	x-small		100	effectively complete		
164	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	hyomandibular	small		100	fragment		
165	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	ulimate vertebrae	small		100	effectively complete		
166	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	pelvis	medium		100	articular surface		
167	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	interhyaemal spine	medium		100	articular surface		
168	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	articular	large	right	100	effectively complete		
169	17-Oct-16	VC2	95-100	1	Sebastes (Rockfish)	genus	articular	x-small	right	100	articular surface		calculatable MNI
170	17-Oct-16	VC2	95-100	3	Hexagrammos, (Greenling)	genus	vertebrae			100	complete		
171	17-Oct-16	VC2	95-100	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment		
172	17-Oct-16	VC2	95-100	1	Hexagrammos, (Greenling)	genus	quadrate			100	articular surface		
173	17-Oct-16	VC2	95-100	1	Hexagrammos, (Greenling)	genus	radial			100	fragment		
174	17-Oct-16	VC2	95-100	2	Hemilepidotus (Irish lord)	genus	parietal			100	fragment		2 pc. Refit
175	17-Oct-16	VC2	95-100	6	Unidentified mammal	unid				100	fragments		
176	17-Oct-16	VC2	95-100	80	Unidentified fish	unid				100	fragment		
177	17-Oct-16	VC2	100-105	3	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
178	17-Oct-16	VC2	100-105	5	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
179	17-Oct-16	VC2	100-105	1	Sebastes (Rockfish)	genus	ulimate vertebrae	small		100	effectively complete		
180	17-Oct-16	VC2	100-105	1	Sebastes (Rockfish)	genus	penultimate vertebra	x-small		100	effectively complete		
181	17-Oct-16	VC2	100-105	1	Sebastes (Rockfish)	genus	penultimate vertebra	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
182	17-Oct-16	VC2	100-105	4	Sebastes (Rockfish)	genus	hyomandibular	small		100	fragments		
183	17-Oct-16	VC2	100-105	1	Sebastes (Rockfish)	genus	hypohyal	small		100	effectively complete		
184	17-Oct-16	VC2	100-105	1	Squalidae (Dogfish)	genus	vertebra			100	half		
185	17-Oct-16	VC2	100-105	3	Unidentified mammal	unid				100	fragments		
186	17-Oct-16	VC2	100-105	1	Parophrys vetulus (English sole)	species	pterygoid			100	complete		
187	17-Oct-16	VC2	100-105	1	Parophrys vetulus (English sole)	species	palatine			100	complete		
188	17-Oct-16	VC2	100-105	1	Unidentified fish	unid				100	fragments	1	
189	17-Oct-16	VC2	100-105	76	Unidentified fish	unid				100	fragments		
190	18-Oct-16	VC2	105-110	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
191	18-Oct-16	VC2	105-110	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		
192	18-Oct-16	VC2	105-110	1	Sebastes (Rockfish)	genus	radial	small		100	half		
193	18-Oct-16	VC2	105-110	1	Sebastes (Rockfish)	genus	vertebra	small		100	fragment		
194	18-Oct-16	VC2	105-110	1	Sebastes (Rockfish)	genus	pelvis	x-small		100	fragment		
195	18-Oct-16	VC2	105-110	17	Unidentified fish	unid				100	fragments		
196	18-Oct-16	VC2	110-115	1	Squalidae (Dogfish)	genus	tooth			100	effectively complete		
197	18-Oct-16	VC2	110-115	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
198	18-Oct-16	VC2	110-115	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
199	18-Oct-16	VC2	110-115	1	Clupea pallasii, (Pacific herring)	species	vertebra	small/medium		100	half		
200	18-Oct-16	VC2	110-115	1	Clupea pallasii, (Pacific herring)	species	ultimate/penultimate vertebra	small		100	half		missing process
201	18-Oct-16	VC2	110-115	1	Clupea pallasii, (Pacific herring)	species	articular	medium		100	articular surface		
202	18-Oct-16	VC2	110-115	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
203	18-Oct-16	VC2	110-115	1	Sebastes (Rockfish)	genus	vertebra			100	half		
204	18-Oct-16	VC2	110-115	1	Sebastes (Rockfish)	genus	premaxillary			100	fragment		
205	18-Oct-16	VC2	110-115	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
206	18-Oct-16	VC2	110-115	1	Sebastes (Rockfish)	genus	radial			100	effectively complete		
207	18-Oct-16	VC2	110-115	1	Sebastes (Rockfish)	genus	pelvis			100	fragment		
208	18-Oct-16	VC2	110-115	1	Sebastes (Rockfish)	genus	spacer			100	complete		
209	18-Oct-16	VC2	110-115	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment		
210	18-Oct-16	VC2	110-115	4	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
211	18-Oct-16	VC2	110-115	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
212	18-Oct-16	VC2	110-115	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
213	18-Oct-16	VC2	110-115	1	Parophrys vetulus (English sole)	species	palatine			100	articular surface		
214	18-Oct-16	VC2	110-115	63	Unidentified fish	unid				100	fragments		
215	18-Oct-16	VC2	115-120	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
216	18-Oct-16	VC2	115-120	7	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
217	18-Oct-16	VC2	115-120	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
218	18-Oct-16	VC2	115-120	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
219	18-Oct-16	VC2	115-120	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
220	18-Oct-16	VC2	115-120	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
221	18-Oct-16	VC2	115-120	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	fragment		
222	18-Oct-16	VC2	115-120	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
223	18-Oct-16	VC2	115-120	1	Hexagrammos, (Greenling)	genus	quadrate	medium	left	100	fragment		
224	18-Oct-16	VC2	115-120	2	Sebastes (Rockfish)	genus	hypercoracoid	small		100	more than half		2 pc. Refit
225	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
226	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	interhyaemal spine	small		100	articular surface		
227	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	hyomandibular	small		100	fragment		
228	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	nasal	small		100	complete		
229	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	radial			100	fragment		
230	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	radial			100	fragment		
231	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	epihyal	small	left	100	effectively complete		
232	18-Oct-16	VC2	115-120	1	Sebastes (Rockfish)	genus	sphenotic	small		100	fragment		
233	18-Oct-16	VC2	115-120	2	Unidentified fish	unid				100	fragments	2	
234	18-Oct-16	VC2	115-120	67	Unidentified fish	unid				100	fragments		
235	18-Oct-16	VC2	115-120	1	Pleuronectiformes (flatfish)	order	parietal			100	fragment		likely Starry Flounder
236	18-Oct-16	VC2	115-120	1	Pleuronectiformes (flatfish)	order	vertebra			100	fragment		Likely English Sole
237	18-Oct-16	VC2	120-125	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	complete		
238	18-Oct-16	VC2	120-125	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
239	18-Oct-16	VC2	120-125	1	Clupea pallasii, (Pacific herring)	species	axis			100	complete		first vertebra
240	18-Oct-16	VC2	120-125	1	Sebastes (Rockfish)	genus	spacer			100	complete		
241	18-Oct-16	VC2	120-125	1	Sebastes (Rockfish)	genus	gill raker			100	complete		
242	18-Oct-16	VC2	120-125	1	Sebastes (Rockfish)	genus	radial			100	fragment		
243	18-Oct-16	VC2	120-125	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
244	18-Oct-16	VC2	120-125	1	Sebastes (Rockfish)	genus	metopterygoid			100	fragment		
245	18-Oct-16	VC2	120-125	1	Unidentified mammal	unid				100	fragment		
246	18-Oct-16	VC2	120-125	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
247	18-Oct-16	VC2	120-125	44	Unidentified fish	unid				100	fragments		
248	18-Oct-16	VC2	120-125	1	Unidentified fish	unid				100	fragment	1	
249	18-Oct-16	VC2	120-125	1	Pleuronectiformes (flatfish)	order	dentary			100	fragment		
250	20-Oct-16	VC2	125-130	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	effectively complete		
251	20-Oct-16	VC2	125-130	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
252	20-Oct-16	VC2	125-130	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	fragment		
253	20-Oct-16	VC2	125-130	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	effectively complete		
254	20-Oct-16	VC2	125-130	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
255	20-Oct-16	VC2	125-130	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
256	20-Oct-16	VC2	125-130	1	Sebastes (Rockfish)	genus	gill raker			100	complete		
257	20-Oct-16	VC2	125-130	2	Sebastes (Rockfish)	genus	hyomandibular			100	fragments		
258	20-Oct-16	VC2	125-130	1	Sebastes (Rockfish)	genus	hypohyal			100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
259	20-Oct-16	VC2	125-130	1	Sebastes (Rockfish)	genus	parietal			100	fragment		
260	20-Oct-16	VC2	125-130	1	Sebastes (Rockfish)	genus	epihyal			100	articular surface		
261	20-Oct-16	VC2	125-130	1	Sebastes (Rockfish)	genus	ceratohyal			100	fragments		3 pc. Refit
262	20-Oct-16	VC2	125-130	2	Sebastes (Rockfish)	genus	parasphenoid			100	fragments		MNI=2
263	20-Oct-16	VC2	125-130	1	Sebastes (Rockfish)	genus	frontal			100	fragment		
264	20-Oct-16	VC2	125-130	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
265	20-Oct-16	VC2	125-130	2	Hexagrammos, (Greenling)	genus	vertebrae			100	half		
266	20-Oct-16	VC2	125-130	1	Hexagrammos, (Greenling)	genus	parasphenoid			100	fragment		
267	20-Oct-16	VC2	125-130	40	Unidentified fish	unid				100	fragments		
268	20-Oct-16	VC2	130-135	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
269	20-Oct-16	VC2	130-135	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
270	20-Oct-16	VC2	130-135	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
271	20-Oct-16	VC2	130-135	1	Sebastes (Rockfish)	genus	vertebra			100	half		
272	20-Oct-16	VC2	130-135	1	Sebastes (Rockfish)	genus	dentary	small		100	fragments		2 pc. Refit
273	20-Oct-16	VC2	130-135	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments		
274	20-Oct-16	VC2	130-135	55	Unidentified fish	unid				100	fragments		
275	20-Oct-16	VC2	135-140	10	Unidentified fish	unid				100	fragments		
276	20-Oct-16	VC2	135-140	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
277	20-Oct-16	VC2	135-140	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
278	20-Oct-16	VC2	135-140	1	Hexagrammos, (Greenling)	genus	quadrate			100	articular surface		
279	20-Oct-16	VC2	135-140	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	half		
280	20-Oct-16	VC2	135-140	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
281	20-Oct-16	VC2	135-140	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
282	20-Oct-16	VC2	135-140	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragment		
283	20-Oct-16	VC2	135-140	1	Clupea pallasii, (Pacific herring)	species	ultimate/penultimate vertebra			100	fragment		
284	20-Oct-16	VC2	140-145	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
285	20-Oct-16	VC2	140-145	1	Unidentified mammal	unid				100	fragment		
286	20-Oct-16	VC2	140-145	3	Unidentified fish	unid				100	fragments		
287	20-Oct-16	VC2	145-150	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
288	20-Oct-16	VC2	145-150	1	Unidentified fish	unid				100	fragment		
289	21-Oct-16	VC2	150-155	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
290	21-Oct-16	VC2	150-155	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		
291	21-Oct-16	VC2	150-155	1	Unidentified fish	unid				100	fragment	1	
292	21-Oct-16	VC2	150-155	1	Unidentified fish	unid				100	fragment		
293	21-Oct-16	VC2	155-160	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
294	21-Oct-16	VC2	155-160	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		MNI=2/<
295	21-Oct-16	VC2	155-160	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
296	21-Oct-16	VC2	155-160	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
297	21-Oct-16	VC2	155-160	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
298	21-Oct-16	VC2	155-160	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragment		
299	21-Oct-16	VC2	155-160	1	Clupea pallasii, (Pacific herring)	species	angular			100	articular surface		
300	21-Oct-16	VC2	155-160	1	Clupea pallasii, (Pacific herring)	species	quadrate		left	100	fragment		
301	21-Oct-16	VC2	155-160	1	Neovison vison (American Mink)	species	humerus		right	100	articular surface		
302	21-Oct-16	VC2	155-160	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
303	21-Oct-16	VC2	155-160	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
304	21-Oct-16	VC2	155-160	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
305	21-Oct-16	VC2	155-160	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment		
306	21-Oct-16	VC2	155-160	13	Unidentified fish	unid				100	fragments		
307	21-Oct-16	VC2	155-160	1	Gadus (Pacific cod and pollock)	genus	atlas vertebra	small		100	fragment		Looks more like Pollock
308	21-Oct-16	VC2	160-165	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	complete		
309	21-Oct-16	VC2	160-165	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
310	21-Oct-16	VC2	160-165	4	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
311	21-Oct-16	VC2	160-165	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	fragment		
312	21-Oct-16	VC2	160-165	1	Sebastes (Rockfish)	genus	vertebrae			100	fragment		2 pc. Refit=1
313	21-Oct-16	VC2	160-165	1	Sebastes (Rockfish)	genus	atlas			100	fragment		
314	21-Oct-16	VC2	160-165	4	Unidentified fish	unid				100	fragments		
315	21-Oct-16	VC2	165-170	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
316	21-Oct-16	VC2	165-170	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
317	21-Oct-16	VC2	165-170	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
318	21-Oct-16	VC2	165-170	1	Clupea pallasii, (Pacific herring)	species	epural/hypural			100	complete		
319	21-Oct-16	VC2	165-170	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
320	21-Oct-16	VC2	165-170	1	Oncorhynchus (Pacific Salmon)	genus	tooth			100	half		
321	21-Oct-16	VC2	165-170	2	Unidentified mammal	unid				100	fragments		
322	21-Oct-16	VC2	165-170	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment		
323	21-Oct-16	VC2	165-170	8	Unidentified fish	unid				100	fragments		
324	21-Oct-16	VC2	170-175	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	complete		MNI=2
325	21-Oct-16	VC2	170-175	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
326	21-Oct-16	VC2	170-175	1	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete		
327	21-Oct-16	VC2	170-175	1	Unidentified mammal	unid				100	fragment		
328	21-Oct-16	VC2	170-175	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
329	21-Oct-16	VC2	170-175	1	Unidentified fish	unid				100	fragment	1	
330	21-Oct-16	VC2	170-175	13	Unidentified fish	unid				100	fragments		
331	21-Oct-16	VC2	170-175	1	Phoca vitulina (Harbour seal)	species	post-canine tooth			100	fragment		root is still open which means it is a younger individual
332	21-Oct-16	VC2	175-180	1	Sebastes (Rockfish)	genus	spacer			100	complete		
333	21-Oct-16	VC2	175-180	1	Sebastes (Rockfish)	genus	post temporal			100	articular surface		
334	21-Oct-16	VC2	175-180	29	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
335	21-Oct-16	VC2	175-180	4	Unidentified fish	unid				100	fragments	4	
336	21-Oct-16	VC2	180-186	14	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
337	21-Oct-16	VC2	180-186	11	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
338	21-Oct-16	VC2	180-186	4	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
339	21-Oct-16	VC2	180-186	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
340	21-Oct-16	VC2	180-186	2	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
341	21-Oct-16	VC2	180-186	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
342	21-Oct-16	VC2	180-186	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
343	21-Oct-16	VC2	180-186	7	Unidentified fish	unid				100	fragments		
344	21-Oct-16	VC2	186-189	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
345	21-Oct-16	VC2	186-189	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
346	21-Oct-16	VC2	186-189	1	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
347	21-Oct-16	VC2	186-189	2	Unidentified fish	unid				100	fragments		
348	24-Oct-16	VC2	189-193	10	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
349	24-Oct-16	VC2	189-193	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	half		
350	24-Oct-16	VC2	189-193	8	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
351	24-Oct-16	VC2	189-193	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	half		
352	24-Oct-16	VC2	189-193	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
353	24-Oct-16	VC2	189-193	1	Clupea pallasii, (Pacific herring)	species	basioccipital			100	articular surface		
354	24-Oct-16	VC2	189-193	1	Clupea pallasii, (Pacific herring)	species	epihyal			100	fragment		
355	24-Oct-16	VC2	189-193	1	Clupea pallasii, (Pacific herring)	species	opisthotic			100	effectively complete		
356	24-Oct-16	VC2	189-193	17	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
357	24-Oct-16	VC2	189-193	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
358	24-Oct-16	VC2	189-193	1	Oncorhynchus (Pacific Salmon)	genus	spacer			100	complete		symetrical "tube-like" structure which is much smaller than a radial or branchial element
359	24-Oct-16	VC2	189-193	3	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
360	24-Oct-16	VC2	189-193	3	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
361	24-Oct-16	VC2	189-193	1	Hippoglossus stenolepis (Pacific halibut)	species	vertebral process			100	fragment		
362	24-Oct-16	VC2	189-193	1	Unidentified fish	unid				100	fragment	1	
363	24-Oct-16	VC2	189-193	54	Unidentified fish	unid				100	fragments		
364	24-Oct-16	VC2	193-200	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
365	24-Oct-16	VC2	193-200	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
366	24-Oct-16	VC2	193-200	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
367	24-Oct-16	VC2	193-200	1	Clupea pallasii, (Pacific herring)	species	hyomandibular	small	right	100	fragment		
368	24-Oct-16	VC2	193-200	1	Clupea pallasii, (Pacific herring)	species	operculum	small	left	100	articular surface		
369	24-Oct-16	VC2	193-200	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
370	24-Oct-16	VC2	193-200	2	Neovison vison (American Mink)	species	caudal vertebrae			100	complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
371	24-Oct-16	VC2	193-200	1	Unidentified mammal	unid				100	fragment		
372	24-Oct-16	VC2	193-200	1	Sebastes (Rockfish)	genus	exoccipital	small		100	articular surface		
373	24-Oct-16	VC2	193-200	4	Hippoglossus stenolepis (Pacific halibut)	species	vertebral process			100	fragments		
373	24-Oct-16	VC2	193-200	11	Unidentified fish	unid				100	fragments		
374	24-Oct-16	VC2	200-205	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
375	24-Oct-16	VC2	200-205	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	half		
376	24-Oct-16	VC2	200-205	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
377	24-Oct-16	VC2	200-205	1	Sebastes (Rockfish)	genus	spinal process			100	fragment		
378	24-Oct-16	VC2	200-205	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
379	24-Oct-16	VC2	200-205	11	Unidentified fish	unid				100	fragments		
380	24-Oct-16	VC2	205-210	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
381	24-Oct-16	VC2	205-210	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
382	24-Oct-16	VC2	205-210	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
383	24-Oct-16	VC2	205-210	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
384	24-Oct-16	VC2	205-210	1	Clupea pallasii, (Pacific herring)	species	post cleithrum	small		100	fragment		
385	24-Oct-16	VC2	205-210	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
386	24-Oct-16	VC2	205-210	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragment		
387	24-Oct-16	VC2	205-210	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	effectively complete		
388	24-Oct-16	VC2	205-210	1	Hexagrammos, (Greenling)	genus	vomer			100	fragments		2 pc. Refit
389	24-Oct-16	VC2	205-210	2	Unidentified bird	unid				100	fragments		2 pc. Refit
390	24-Oct-16	VC2	205-210	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragmented		3 pc. Refit
391	24-Oct-16	VC2	205-210	15	Unidentified fish	unid				100	fragments		
392	25-Oct-16	VC2	210-215	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		MNI=2
393	25-Oct-16	VC2	210-215	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
394	25-Oct-16	VC2	210-215	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
395	25-Oct-16	VC2	210-215	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
396	25-Oct-16	VC2	210-215	2	Unidentified mammal	unid				100	fragments	2	
397	25-Oct-16	VC2	210-215	1	Unidentified mammal	unid				100	fragment		long bone fragment
398	25-Oct-16	VC2	210-215	4	Unidentified fish	unid				100	fragments		
399	25-Oct-16	VC2	210-215	109	Unidentified fish	unid				100	fragments		
400	25-Oct-16	VC2	215-220	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		MNI=2
401	25-Oct-16	VC2	215-220	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
402	25-Oct-16	VC2	215-220	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
403	25-Oct-16	VC2	215-220	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
404	25-Oct-16	VC2	215-220	3	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
405	25-Oct-16	VC2	215-220	1	Clupea pallasii, (Pacific herring)	species	ultimate vertebrae			100	effectively complete		
406	25-Oct-16	VC2	215-220	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	effectively complete		
407	25-Oct-16	VC2	215-220	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
408	25-Oct-16	VC2	215-220	1	Sebastes (Rockfish)	genus	spacer			100	complete		
409	25-Oct-16	VC2	215-220	1	Sebastes (Rockfish)	genus	pterygoid			100	effectively complete		
410	25-Oct-16	VC2	215-220	33	Unidentified fish	unid				100	fragment		
411	25-Oct-16	VC2	215-220	1	Unidentified fish	unid				100	fragment	1	
412	25-Oct-16	VC2	220-225	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
413	25-Oct-16	VC2	220-225	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
414	25-Oct-16	VC2	220-225	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	half		
415	25-Oct-16	VC2	220-225	1	Clupea pallasii, (Pacific herring)	species	epihyal	small	right	100	fragment		
416	25-Oct-16	VC2	220-225	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
417	25-Oct-16	VC2	220-225	1	Sebastes (Rockfish)	genus	post clavicle		right	100	fragment		
418	25-Oct-16	VC2	220-225	20	Unidentified fish	unid				100	fragments		contains 2 gillrakers that I can not identify
419	25-Oct-16	VC2	220-225	1	Unidentified fish	unid				100	fragment	1	
420	25-Oct-16	VC2	220-225	3	Unidentified bird	unid	foot phalanges			100	fragments		did not look through foot phalanges because elemnets were not complete;might be juvinielle (gull, grebe, ect). Local bird likely killed in late summer due to age
421	25-Oct-16	VC2	225-230	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
422	25-Oct-16	VC2	225-230	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
423	25-Oct-16	VC2	225-230	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
424	25-Oct-16	VC2	225-230	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
425	25-Oct-16	VC2	225-230	38	Unidentified fish	unid				100	fragments		2 unidentified branchial arch pc.
426	25-Oct-16	VC2	225-230	1	Unidentified fish	unid				100	fragment	1	
427	25-Oct-16	VC2	225-230	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
428	25-Oct-16	VC2	225-230	1	Sebastes (Rockfish)	genus	vertebra			100	fragment		
429	26-Oct-16	VC2	230-235	14	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
430	26-Oct-16	VC2	230-235	13	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
431	26-Oct-16	VC2	230-235	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
432	26-Oct-16	VC2	230-235	1	Clupea pallasii, (Pacific herring)	species	pre-orbital	small		100	complete		
433	26-Oct-16	VC2	230-235	1	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragment	1	
434	26-Oct-16	VC2	230-235	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
435	26-Oct-16	VC2	230-235	1	Oncorhynchus (Pacific Salmon)	genus	expanded neural process/spine			100	fragment		
436	26-Oct-16	VC2	230-235	1	Sebastes (Rockfish)	genus	basioccipital			100	articular surface		
437	26-Oct-16	VC2	230-235	1	Sebastes (Rockfish)	genus	cleithrum			100	fragment		
438	26-Oct-16	VC2	230-235	1	Sebastes (Rockfish)	genus	cranium/spine			100	fragment		includes highly diagnostic roskfish cranial spine
439	26-Oct-16	VC2	230-235	1	Sebastes (Rockfish)	genus	mesopterygoid			100	fragment		
440	26-Oct-16	VC2	230-235	1	Hexagrammos, (Greenling)	genus	hyomandibular			100	fragment		
441	26-Oct-16	VC2	230-235	33	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
442	26-Oct-16	VC2	230-235	1	Unidentified fish	unid				100	fragment	1	
443	26-Oct-16	VC2	230-235	2	Unidentified mammal	unid				100	fragments		
444	26-Oct-16	VC2	235-240	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
445	26-Oct-16	VC2	235-240	1	Clupea pallasii, (Pacific herring)	species	ceratohyal	small		100	fragment		
446	26-Oct-16	VC2	235-240	8	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
447	26-Oct-16	VC2	235-240	9	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
448	26-Oct-16	VC2	235-240	2	Clupea pallasii, (Pacific herring)	species	vertebra			100	less than half		
449	26-Oct-16	VC2	235-240	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete	1	
450	26-Oct-16	VC2	235-240	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
451	26-Oct-16	VC2	235-240	1	Sebastes (Rockfish)	genus	hypohyal-A	small		100	effectively complete	1	
452	26-Oct-16	VC2	235-240	1	Sebastes (Rockfish)	genus	hypohyal-B	small		100	effectively complete	1	
453	26-Oct-16	VC2	235-240	1	Unidentified mammal	unid				100	fragment		
454	26-Oct-16	VC2	235-240	14	Unidentified fish	unid				100	fragments		
455	26-Oct-16	VC2	235-240	10	Unidentified fish	unid				100	fragments	10	
456	26-Oct-16	VC2	240-245	10	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
457	26-Oct-16	VC2	240-245	9	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
458	26-Oct-16	VC2	240-245	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete	1	
459	26-Oct-16	VC2	240-245	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half	1	
460	26-Oct-16	VC2	240-245	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
461	26-Oct-16	VC2	240-245	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
462	26-Oct-16	VC2	240-245	1	Clupea pallasii, (Pacific herring)	species	exoccipital	small		100	effectively complete		
463	26-Oct-16	VC2	240-245	1	Clupea pallasii, (Pacific herring)	species	epihyal	small	right	100	fragment		
464	26-Oct-16	VC2	240-245	1	Clupea pallasii, (Pacific herring)	species	post temporal	small		100	fragment		
465	26-Oct-16	VC2	240-245	12	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
466	26-Oct-16	VC2	240-245	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
467	26-Oct-16	VC2	240-245	3	Oncorhynchus (Pacific Salmon)	genus	expanded neural process/spine			100	effectively complete		
468	26-Oct-16	VC2	240-245	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			75	fragment		
469	26-Oct-16	VC2	240-245	1	Hexagrammos, (Greenling)	genus	vertebra	x-small		100	effectively complete		MNI= 2 xs and lg vertebrae
470	26-Oct-16	VC2	240-245	1	Hexagrammos, (Greenling)	genus	vertebra	large		100	effectively complete		
471	26-Oct-16	VC2	240-245	1	Hexagrammos, (Greenling)	genus	vomer			100	fragment		
472	26-Oct-16	VC2	240-245	1	Hexagrammos, (Greenling)	genus	post cleithrum			75	fragment		
473	26-Oct-16	VC2	240-245	3	Sebastes (Rockfish)	genus	gillrakers			100	complete		
474	26-Oct-16	VC2	240-245	1	Sebastes (Rockfish)	genus	axis			100	effectively complete		
475	26-Oct-16	VC2	240-245	1	Sebastes (Rockfish)	genus	hyomandibular	large		100	fragment		2 pc. Refit
476	26-Oct-16	VC2	240-245	1	Hippoglossus stenolepis (Pacific halibut)	species	vertebral process			50	fragment		convincingly halibut
477	26-Oct-16	VC2	240-245	63	Unidentified fish	unid				100	fragments		
478	26-Oct-16	VC2	240-245	9	Unidentified fish	unid				100	fragments	9	ochre?

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
479	26-Oct-16	VC2	240-245	2	Unidentified mammal	unid				100	fragments		
480	26-Oct-16	VC2	245-250	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		MNI=2
481	26-Oct-16	VC2	245-250	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
482	26-Oct-16	VC2	245-250	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
483	26-Oct-16	VC2	245-250	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
484	26-Oct-16	VC2	245-250	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
485	26-Oct-16	VC2	245-250	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
486	26-Oct-16	VC2	245-250	1	Clupea pallasii, (Pacific herring)	species	operculum	small		100	articular surface		
487	26-Oct-16	VC2	245-250	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
488	26-Oct-16	VC2	245-250	1	Oncorhynchus (Pacific Salmon)	genus	tooth			100	effectively complete		
489	26-Oct-16	VC2	245-250	2	Hexagrammos, (Greenling)	genus	vertebrae	medium/large		100	effectively complete		MNI=2
490	26-Oct-16	VC2	245-250	2	Hexagrammos, (Greenling)	genus	vertebrae	small		100	effectively complete		
491	26-Oct-16	VC2	245-250	1	Hexagrammos, (Greenling)	genus	epihyal			100	effectively complete		
492	26-Oct-16	VC2	245-250	1	Hexagrammos, (Greenling)	genus	maxillary			100	articular surface		
493	26-Oct-16	VC2	245-250	1	Sebastes (Rockfish)	genus	cranium/spine	medium/large		100	fragment		
494	26-Oct-16	VC2	245-250	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
495	26-Oct-16	VC2	245-250	1	Sebastes (Rockfish)	genus	cleithrum			100	fragment		
496	26-Oct-16	VC2	245-250	62	Unidentified fish	unid				100	fragments		
497	26-Oct-16	VC2	245-250	2	Unidentified fish	unid				100	fragments	2	
498	27-Oct-16	VC2	250-255	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
499	27-Oct-16	VC2	250-255	2	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
500	27-Oct-16	VC2	250-255	1	Clupea pallasii, (Pacific herring)	species	hyomandibular			100	fragment		
501	27-Oct-16	VC2	250-255	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	more than half		
502	27-Oct-16	VC2	250-255	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
503	27-Oct-16	VC2	250-255	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
504	27-Oct-16	VC2	250-255	1	Hippoglossus stenolepis (Pacific halibut)	species	vertebral process			50	fragment		
505	27-Oct-16	VC2	250-255	1	Hexagrammos, (Greenling)	genus	hypohyal-B			100	effectively complete		
506	27-Oct-16	VC2	250-255	1	Unidentified fish	unid				100	fragment	1	
507	27-Oct-16	VC2	250-255	16	Unidentified fish	unid				100	fragments		
508	27-Oct-16	VC2	255-260	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	effectively complete		
509	27-Oct-16	VC2	255-260	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	half		
510	27-Oct-16	VC2	255-260	4	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small/medium		100	effectively complete		
511	27-Oct-16	VC2	255-260	1	Unidentified mammal	unid				75	fragment		
512	27-Oct-16	VC2	255-260	1	Sebastes (Rockfish)	genus	cleithrum	small		75	fragments		2 pc. Refit
513	27-Oct-16	VC2	255-260	1	Hexagrammos, (Greenling)	genus	pterygoid			100	effectively complete		
514	27-Oct-16	VC2	255-260	1	Hemilepidotus (Irish lord)	genus	hyomandibular			100	effectively complete		
515	27-Oct-16	VC2	255-260	44	Unidentified fish	unid				100	fragments		
516	27-Oct-16	VC2	260-265	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium/large		100	effectively complete		MNI=2

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
517	27-Oct-16	VC2	260-265	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
518	27-Oct-16	VC2	260-265	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	large		100	effectively complete		
519	27-Oct-16	VC2	260-265	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
520	27-Oct-16	VC2	260-265	3	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
521	27-Oct-16	VC2	260-265	1	Clupea pallasii, (Pacific herring)	species	supraorbital	small		100	articular surface		
522	27-Oct-16	VC2	260-265	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
523	27-Oct-16	VC2	260-265	1	Sebastes (Rockfish)	genus	Interhaemal-spine-1			100	articular surface		
524	27-Oct-16	VC2	260-265	1	Hexagrammos, (Greenling)	genus	vertebra	large		100	effectively complete		MNI=2
525	27-Oct-16	VC2	260-265	2	Hexagrammos, (Greenling)	genus	vertebrae	medium/large		100	half		
526	27-Oct-16	VC2	260-265	3	Hexagrammos, (Greenling)	genus	vertebrae	small		100	half		
527	27-Oct-16	VC2	260-265	1	Unidentified mammal	unid				100	fragment	1	
528	27-Oct-16	VC2	260-265	31	Unidentified fish	unid				100	fragments		
529	27-Oct-16	VC2	265-270	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	effectively complete		
530	27-Oct-16	VC2	265-270	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium/large		100	effectively complete		
531	27-Oct-16	VC2	265-270	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
532	27-Oct-16	VC2	265-270	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
533	27-Oct-16	VC2	265-270	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	fragment		
534	27-Oct-16	VC2	265-270	1	Oncorhynchus (Pacific Salmon)	genus	spacer			100	complete		
535	27-Oct-16	VC2	265-270	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
536	27-Oct-16	VC2	265-270	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	articular surface		
537	27-Oct-16	VC2	265-270	1	Sebastes (Rockfish)	genus	gillrakers			100	complete		
538	27-Oct-16	VC2	265-270	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	half		
539	27-Oct-16	VC2	265-270	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	half		
540	27-Oct-16	VC2	265-270	1	Hexagrammos, (Greenling)	genus	quadrate			100	articular surface		
541	27-Oct-16	VC2	265-270	1	Hexagrammos, (Greenling)	genus	radial			100	complete		
542	27-Oct-16	VC2	265-270	1	Hemilepidotus (Irish lord)	genus	vertebra			100	effectively complete		
543	27-Oct-16	VC2	265-270	48	Unidentified fish	unid				100	fragments		
544	27-Oct-16	VC2	270-275	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
545	27-Oct-16	VC2	270-275	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	effectively complete		
546	27-Oct-16	VC2	270-275	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	effectively complete		
547	27-Oct-16	VC2	270-275	1	Unidentified mammal	unid				100	fragment		
548	27-Oct-16	VC2	270-275	31	Unidentified fish	unid				100	fragments		
549	27-Oct-16	VC2	275-280	8	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
550	27-Oct-16	VC2	275-280	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	effectively complete		
551	27-Oct-16	VC2	275-280	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
552	27-Oct-16	VC2	275-280	30	Unidentified fish	unid				100	fragments		
553	27-Oct-16	VC2	275-280	1	Unidentified fish	unid				100	fragment	1	
554	27-Oct-16	VC2	280-285	1	Unidentified fish	unid				100	fragment		
555	28-Oct-16	VC4	20-25	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
556	28-Oct-16	VC4	20-25	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
557	28-Oct-16	VC4	20-25	1	Unidentified fish	unid				100	fragment		
558	28-Oct-16	VC4	25-30	1	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	effectively complete		
559	28-Oct-16	VC4	25-30	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
560	28-Oct-16	VC4	25-30	1	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragment	1	
561	28-Oct-16	VC4	25-30	1	Oncorhynchus (Pacific Salmon)	genus	hyperal 7/8			100	fragment		
562	28-Oct-16	VC4	30-35	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	effectively complete		
563	28-Oct-16	VC4	30-35	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
564	28-Oct-16	VC4	30-35	2	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	complete		
565	28-Oct-16	VC4	30-35	2	Oncorhynchus (Pacific Salmon)	genus	hypural/epural			100	effectively complete		
566	28-Oct-16	VC4	30-35	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
567	28-Oct-16	VC4	30-35	8	Unidentified fish	unid				100	fragments		
568	28-Oct-16	VC4	35-40	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
569	28-Oct-16	VC4	35-40	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
570	28-Oct-16	VC4	35-40	1	Clupea pallasii, (Pacific herring)	species	hypohyal			100	articular surface		
571	28-Oct-16	VC4	35-40	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
572	28-Oct-16	VC4	35-40	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
573	28-Oct-16	VC4	35-40	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	effectively complete		
574	28-Oct-16	VC4	35-40	1	Anoplopoma fimbria (Sablefish)	species	epiotic			75	fragment		
575	28-Oct-16	VC4	35-40	2	Unidentified mammal	unid				100	fragments		
576	28-Oct-16	VC4	35-40	23	Unidentified fish	unid				100	fragments		
577	28-Oct-16	VC4	40-45	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragments		
578	28-Oct-16	VC4	40-45	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
579	28-Oct-16	VC4	40-45	1	Unidentified fish	unid				100	fragment		
580	29-Oct-16	VC4	45-50	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
581	29-Oct-16	VC4	45-50	1	Unidentified bird	unid	trachea ring			100	complete		
582	29-Oct-16	VC4	45-50	11	Unidentified fish	unid				100	fragments		
583	01-Nov-16	VC4	50-55	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
584	01-Nov-16	VC4	50-55	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	effectively complete		
585	01-Nov-16	VC4	50-55	8	Unidentified fish	unid				100	fragments		
586	01-Nov-16	VC4	55-59	10	Unidentified fish	unid				100	fragments		
587	01-Nov-16	VC4	59-65	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
588	01-Nov-16	VC4	59-65	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
589	01-Nov-16	VC4	59-65	3	Unidentified fish	unid				100	fragments		
590	01-Nov-16	VC4	65-68	2	Unidentified mammal	unid				100	fragments		
591	01-Nov-16	VC4	65-68	3	Unidentified fish	unid				100	fragments		
592	01-Nov-16	VC4	68-75	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
593	01-Nov-16	VC4	68-75	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
594	01-Nov-16	VC4	68-75	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
595	01-Nov-16	VC4	68-75	3	Unidentified fish	unid				100	fragments		
596	01-Nov-16	VC4	75-80	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
597	01-Nov-16	VC4	75-80	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
598	01-Nov-16	VC4	75-80	1	Oncorhynchus (Pacific Salmon)	genus	spacer			100	effectively complete		
599	01-Nov-16	VC4	75-80	3	Unidentified mammal	unid				100	fragments		
600	01-Nov-16	VC4	75-80	5	Unidentified mammal	unid				100	fragments	5	
601	01-Nov-16	VC4	75-80	5	Unidentified fish	unid				100	fragments		
602	01-Nov-16	VC4	80-85	14	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
603	01-Nov-16	VC4	80-85	4	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
604	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	fragment		
605	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragment		
606	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	supracleithrum			100	fragment		
607	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	hypural			100	fragment		
608	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	fragment		
609	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	articular			100	articular surface		
610	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	frontal			100	fragment		
611	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	basioccipital			100	fragment		
612	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	maxillary			100	fragment		
613	01-Nov-16	VC4	80-85	1	Clupea pallasii, (Pacific herring)	species	epihyal			100	fragment		
614	01-Nov-16	VC4	80-85	1	Oncorhynchus (Pacific Salmon)	genus	spacer			100	complete		
615	01-Nov-16	VC4	80-85	7	Unidentified fish	unid				100	fragments		
616	01-Nov-16	VC4	85-90	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	complete		
617	01-Nov-16	VC4	85-90	1	Sebastes (Rockfish)	genus	post clavicle			100	fragmented		2 pc. Refit
618	01-Nov-16	VC4	85-90	1	Unidentified fish	unid				100	fragment		
619	01-Nov-16	VC4	90-95	1	Sebastes (Rockfish)	genus	pharyngeal plate			100	fragment		
620	01-Nov-16	VC4	90-95	2	Unidentified fish	unid				100	fragments		
621	01-Nov-16	VC4	90-95	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
622	01-Nov-16	VC4	95-100	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
623	01-Nov-16	VC4	95-100	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	fragment		
624	01-Nov-16	VC4	95-100	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
625	01-Nov-16	VC4	95-100	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	2	
626	01-Nov-16	VC4	95-100	1	Unidentified mammal	unid				100	fragment		
627	01-Nov-16	VC4	95-100	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
628	01-Nov-16	VC4	95-100	9	Unidentified fish	unid				100	fragments		
629	01-Nov-16	VC4	100-105	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
630	01-Nov-16	VC4	100-105	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
631	01-Nov-16	VC4	100-105	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
632	01-Nov-16	VC4	100-105	1	Clupea pallasii, (Pacific herring)	species	prootic			100	fragment		
633	01-Nov-16	VC4	100-105	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
634	01-Nov-16	VC4	100-105	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
635	01-Nov-16	VC4	100-105	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	fragment		
636	01-Nov-16	VC4	100-105	1	Engraulis mordax (N. anchovy)	species	vertebra			100	effectively complete		
637	01-Nov-16	VC4	100-105	8	Unidentified fish	unid				100	fragments		
638	01-Nov-16	VC4	105-110	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	medium		100	effectively complete		
639	01-Nov-16	VC4	105-110	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
640	01-Nov-16	VC4	105-110	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	fragment		
641	01-Nov-16	VC4	105-110	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
642	01-Nov-16	VC4	105-110	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
643	01-Nov-16	VC4	105-110	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
644	01-Nov-16	VC4	105-110	1	Sebastes (Rockfish)	genus	vertebrae			100	effectively complete		
645	01-Nov-16	VC4	105-110	1	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	more than half		
646	01-Nov-16	VC4	105-110	1	Unidentified mammal	unid				100	fragments		
647	01-Nov-16	VC4	105-110	22	Unidentified fish	unid				100	fragments		
648	04-Nov-16	VC4	110-115	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
649	04-Nov-16	VC4	110-115	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
650	04-Nov-16	VC4	110-115	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
651	04-Nov-16	VC4	110-115	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	more than half		
652	04-Nov-16	VC4	110-115	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	complete		
653	04-Nov-16	VC4	110-115	3	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
654	04-Nov-16	VC4	110-115	1	Squalidae (Dogfish)	genus	vertebra			100	half		
655	04-Nov-16	VC4	110-115	2	Hexagrammos, (Greenling)	genus	caudal vertebra	large		75	effectively complete		
656	04-Nov-16	VC4	110-115	1	Hexagrammos, (Greenling)	genus	hypural	large		100	effectively complete		
657	04-Nov-16	VC4	110-115	3	Hexagrammos, (Greenling)	genus	epural	large		75	effectively complete		
658	04-Nov-16	VC4	110-115	1	Hexagrammos, (Greenling)	genus	penultimate vertebra	large		75	effectively complete		
659	04-Nov-16	VC4	110-115	28	Unidentified fish	unid				100	fragments		
660	04-Nov-16	VC4	115-120	7	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
661	04-Nov-16	VC4	115-120	2	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
662	04-Nov-16	VC4	115-120	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
663	04-Nov-16	VC4	115-120	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
664	04-Nov-16	VC4	115-120	16	Unidentified fish	unid				100	fragments		
665	04-Nov-16	VC4	120-125	9	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
666	04-Nov-16	VC4	120-125	9	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
667	04-Nov-16	VC4	120-125	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		
668	04-Nov-16	VC4	120-125	1	Clupea pallasii, (Pacific herring)	species	articular	small		100	articular surface		
669	04-Nov-16	VC4	120-125	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
670	04-Nov-16	VC4	120-125	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
671	04-Nov-16	VC4	120-125	2	Squalidae (Dogfish)	genus	vertebrae			100	half		
672	04-Nov-16	VC4	120-125	11	Squalidae (Dogfish)	genus	vertebrae			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
673	04-Nov-16	VC4	120-125	1	Hexagrammos, (Greenling)	genus	hypural			100	effectively complete		
674	04-Nov-16	VC4	120-125	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
675	04-Nov-16	VC4	120-125	2	Sebastes (Rockfish)	genus	vertebrae			100	effectively complete		
676	04-Nov-16	VC4	120-125	2	Sebastes (Rockfish)	genus	gillrakers			100	complete		
677	04-Nov-16	VC4	120-125	1	Unidentified mammal	unid				100	fragment		
678	04-Nov-16	VC4	120-125	33	Unidentified fish	unid				100	fragments		
679	06-Nov-16	VC4	125-130	17	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
680	06-Nov-16	VC4	125-130	21	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
681	06-Nov-16	VC4	125-130	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
682	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	prootic	xs		100	effectively complete		MNI=2
683	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
684	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
685	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	frontal	small		100	fragment		
686	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	hypercoracoid	small		100	fragment		
687	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	opisthotic	small		100	effectively complete		
688	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	articular	small		100	fragment		
689	06-Nov-16	VC4	125-130	1	Clupea pallasii, (Pacific herring)	species	epihyal	small		100	effectively complete		
690	06-Nov-16	VC4	125-130	12	Sardinops sagax (Pacific sardine)	species	vertebrae	large		100	effectively complete		
691	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	articular	large		100	effectively complete		
692	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	hyomandibular	large		100	effectively complete		
693	06-Nov-16	VC4	125-130	2	Sardinops sagax (Pacific sardine)	species	mesopterygoid	large		100	effectively complete		
694	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	operculum	large		100	effectively complete		
695	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	epihyal	large		100	effectively complete		
696	06-Nov-16	VC4	125-130	3	Sardinops sagax (Pacific sardine)	species	pterotic	large		100	effectively complete		MNI=2
697	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	prootic	large		100	effectively complete		
698	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	exoccipital	large		100	effectively complete		
699	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	mesopterygoid	medium		100	effectively complete		MNI=2
700	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	urohyal	large		100	effectively complete		
701	06-Nov-16	VC4	125-130	1	Sardinops sagax (Pacific sardine)	species	scale			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
702	06-Nov-16	VC4	125-130	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragment	2	
703	06-Nov-16	VC4	125-130	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
704	06-Nov-16	VC4	125-130	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	complete		
705	06-Nov-16	VC4	125-130	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
706	06-Nov-16	VC4	125-130	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
707	06-Nov-16	VC4	125-130	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
708	06-Nov-16	VC4	125-130	1	Squalidae (Dogfish)	genus	vertebra			100	half		
709	06-Nov-16	VC4	125-130	1	Sebastes (Rockfish)	genus	atlas			100	more than half	1	
710	06-Nov-16	VC4	125-130	1	Sebastes (Rockfish)	genus	vertebra			100	more than half		
711	06-Nov-16	VC4	125-130	1	Unidentified mammal	unid				100	fragment	1	
712	06-Nov-16	VC4	125-130	3	Unidentified mammal	unid				100	fragments		
713	06-Nov-16	VC4	125-130	3	Unidentified fish	unid				100	fragments	3	
714	06-Nov-16	VC4	125-130	81	Unidentified fish	unid				100	fragments		
715	06-Nov-16	VC4	125-130	1	Lepidopsetta bilineata (Rock Sole)	species	pharyngeal branchial			100	effectively complete		
716	10-Nov-16	VC4	130-135	18	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
717	10-Nov-16	VC4	130-135	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
718	10-Nov-16	VC4	130-135	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	complete		
719	10-Nov-16	VC4	130-135	19	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
720	10-Nov-16	VC4	130-135	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
721	10-Nov-16	VC4	130-135	1	Clupea pallasii, (Pacific herring)	species	articular	small		100	articular surface		
722	10-Nov-16	VC4	130-135	2	Clupea pallasii, (Pacific herring)	species	dentary	small		100	articular surface		MNI=2, same side
723	10-Nov-16	VC4	130-135	1	Clupea pallasii, (Pacific herring)	species	hyomandibular	small		100	fragment		
724	10-Nov-16	VC4	130-135	1	Clupea pallasii, (Pacific herring)	species	exoccipital	small		100	fragment		
725	10-Nov-16	VC4	130-135	1	Clupea pallasii, (Pacific herring)	species	epihyal	small	left	100	fragment		
726	10-Nov-16	VC4	130-135	4	Sardinops sagax (Pacific sardine)	species	abdominal vertebra	large		100	effectively complete		
727	10-Nov-16	VC4	130-135	17	Sardinops sagax (Pacific sardine)	species	caudal vertebra	large		100	effectively complete		
728	10-Nov-16	VC4	130-135	4	Sardinops sagax (Pacific sardine)	species	vertebrae	large		75	fragments		
729	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	articular	large		100	fragment		
730	10-Nov-16	VC4	130-135	3	Sardinops sagax (Pacific sardine)	species	prootic	large		100	effectively complete		MNI=2, 2=same side
731	10-Nov-16	VC4	130-135	2	Sardinops sagax (Pacific sardine)	species	quadrate	large		100	fragment		MNI=2, 2=same side
732	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	hypercoracoid	large		100	fragment		
733	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific	species	hyomandibular	large		100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
					sardine)								
734	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	exoccipital	large		100	effectively complete		
735	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	post temporal	large		100	fragment		
736	10-Nov-16	VC4	130-135	2	Sardinops sagax (Pacific sardine)	species	basioccipital	large		100	effectively complete		MNI=2
737	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	opisthotic	large		100	effectively complete		
738	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	preorbital	large		100	fragment		
739	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	operculum	large		100	fragment		2 pc. Refit
740	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	epihyal	large		100	fragment		
741	10-Nov-16	VC4	130-135	2	Sardinops sagax (Pacific sardine)	species	supraorbital	large		100	fragment		MNI=2
742	10-Nov-16	VC4	130-135	2	Sardinops sagax (Pacific sardine)	species	ethmoid	large		100	fragment		
743	10-Nov-16	VC4	130-135	4	Sardinops sagax (Pacific sardine)	species	scale	large		100	effectively complete		
744	10-Nov-16	VC4	130-135	2	Sardinops sagax (Pacific sardine)	species	gillrakers	large		75	effectively complete		
745	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	sphenotic	large		100	fragment		
746	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	scoot	large		100	effectively complete		
747	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	ultimate vertebra	large		100	effectively complete		
748	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	post cleithrum-2	large		100	fragment		
749	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	hypocorocoid	large		100	effectively complete		
750	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	post cleithrum-1	large		75	effectively complete		
751	10-Nov-16	VC4	130-135	1	Sardinops sagax (Pacific sardine)	species	unidentified element	large		100	effectively complete		
752	10-Nov-16	VC4	130-135	1	Unidentified bird	unid	trachae			100	complete		
753	10-Nov-16	VC4	130-135	3	Unidentified bird	unid				100	fragments	3	
754	10-Nov-16	VC4	130-135	3	Unidentified mammal	unid				100	fragments		
755	10-Nov-16	VC4	130-135	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
756	10-Nov-16	VC4	130-135	1	Rajidae (skate)	family	vertebra			100	half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
757	10-Nov-16	VC4	130-135	1	Cottidae (Sculpin)	family	scoot			75	fragment		
758	10-Nov-16	VC4	130-135	137	Unidentified fish	unid				100	fragments		
759	10-Nov-16	VC4	135-140	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
760	10-Nov-16	VC4	135-140	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
761	10-Nov-16	VC4	135-140	1	Clupea pallasii, (Pacific herring)	species	operculum	small		100	articular surface		
762	10-Nov-16	VC4	135-140	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
763	10-Nov-16	VC4	135-140	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	fragment		
764	10-Nov-16	VC4	135-140	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	effectively complete		
765	10-Nov-16	VC4	135-140	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	2	
766	10-Nov-16	VC4	135-140	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
767	10-Nov-16	VC4	135-140	1	Unidentified mammal	unid				100	fragment		
768	10-Nov-16	VC4	135-140	1	Atheresthes stomias (arrowtooth flounder)	species	vertebra			100	effectively complete		
769	10-Nov-16	VC4	135-140	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
770	10-Nov-16	VC4	135-140	2	Unidentified fish	unid				100	fragment		
771	10-Nov-16	VC4	135-140	31	Unidentified fish	unid				100	fragments		
772	10-Nov-16	VC4	140-145	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
773	10-Nov-16	VC4	140-145	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		
774	10-Nov-16	VC4	140-145	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
775	10-Nov-16	VC4	140-145	1	Sebastes (Rockfish)	genus	ceratohyal			100	effectively complete		
776	10-Nov-16	VC4	140-145	1	Large unidentified land mammal	class	long bone			100	fragment		
777	10-Nov-16	VC4	140-145	21	Unidentified fish	unid				100	fragments		
778	10-Nov-16	VC4	145-150	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
779	10-Nov-16	VC4	145-150	3	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
780	10-Nov-16	VC4	145-150	1	Clupea pallasii, (Pacific herring)	species	ultimate vertebra	small		100	effectively complete		
781	10-Nov-16	VC4	145-150	2	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
782	10-Nov-16	VC4	145-150	1	Clupea pallasii, (Pacific herring)	species	opisthotic	small		100	effectively complete		
783	10-Nov-16	VC4	145-150	1	Clupea pallasii, (Pacific herring)	species	prootic/pterotic	small		100	fragment		
784	10-Nov-16	VC4	145-150	1	Clupea pallasii, (Pacific herring)	species	hyomandibular	small		100	fragment		
785	10-Nov-16	VC4	145-150	1	Clupea pallasii, (Pacific herring)	species	sphenotic	small		100	effectively complete		
786	10-Nov-16	VC4	145-150	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
787	10-Nov-16	VC4	145-150	1	Squalidae (Dogfish)	genus	vertebra			100	half		
788	10-Nov-16	VC4	145-150	1	Squalidae (Dogfish)	genus	vertebra			100	half		
789	10-Nov-16	VC4	145-150	2	Squalidae (Dogfish)	genus	vertebrae			100	fragment		
790	10-Nov-16	VC4	145-150	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragment		
791	10-Nov-16	VC4	145-150	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	effectively complete		
792	10-Nov-16	VC4	145-150	4	Unidentified mammal	unid				100	fragments		
793	10-Nov-16	VC4	145-150	1	Unidentified mammal	unid				100	fragment	1	
794	10-Nov-16	VC4	145-150	1	Unidentified fish	unid				100	fragments	1	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
795	10-Nov-16	VC4	145-150	17	Unidentified fish	unid				100	fragment		
796	10-Nov-16	VC4	150-155	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
797	10-Nov-16	VC4	150-155	1	Clupea pallasii, (Pacific herring)	species	opisthotic			100	effectively complete		
798	10-Nov-16	VC4	150-155	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	more than half		
799	10-Nov-16	VC4	150-155	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
800	10-Nov-16	VC4	150-155	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	effectively complete		
801	10-Nov-16	VC4	150-155	1	Squalidae (Dogfish)	genus	vertebra			100	fragment		
802	10-Nov-16	VC4	150-155	4	Unidentified mammal	unid				100	fragments		
803	10-Nov-16	VC4	150-155	1	Unidentified mammal	unid				100	fragment	1	
804	10-Nov-16	VC4	150-155	1	Sebastes (Rockfish)	genus	basioccipital			100	fragment		
805	10-Nov-16	VC4	150-155	1	Sebastes (Rockfish)	genus	exoccipital			100	fragment		
806	10-Nov-16	VC4	150-155	1	Sebastes (Rockfish)	genus	vertebra			100	fragment		
807	10-Nov-16	VC4	150-155	1	Sebastes (Rockfish)	genus	hypobranchial-1			100	effectively complete		
808	10-Nov-16	VC4	150-155	41	Unidentified fish	unid				100	fragments		
809	10-Nov-16	VC4	155-160	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
810	10-Nov-16	VC4	155-160	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
811	10-Nov-16	VC4	155-160	1	Squalidae (Dogfish)	genus	vertebra			100	half		
812	10-Nov-16	VC4	155-160	6	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
813	10-Nov-16	VC4	155-160	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
814	10-Nov-16	VC4	155-160	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis/vertebral spine			100	fragment		
815	10-Nov-16	VC4	155-160	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
816	10-Nov-16	VC4	155-160	5	Unidentified mammal	unid				100	fragments		
817	10-Nov-16	VC4	155-160	2	Unidentified mammal	unid				100	fragments	2	
818	10-Nov-16	VC4	155-160	2	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
819	10-Nov-16	VC4	155-160	1	Sebastes (Rockfish)	genus	vomer			100	fragment		
820	10-Nov-16	VC4	155-160	1	Sebastes (Rockfish)	genus	spacer			100	complete		
821	10-Nov-16	VC4	155-160	1	Sebastes (Rockfish)	genus	quadrate			100	articular surface		
822	10-Nov-16	VC4	155-160	2	Unidentified fish	unid				100	fragments	2	
823	10-Nov-16	VC4	155-160	55	Unidentified fish	unid				100	fragment		
824	10-Nov-16	VC4	155-160	1	Neovison vison (American Mink)	species	canine			100	effectively complete		juvenile: root not complete
825	15-Nov-16	VC4	160-165	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
826	15-Nov-16	VC4	160-165	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete	1	
827	15-Nov-16	VC4	160-165	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	more than half		
828	15-Nov-16	VC4	160-165	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
829	15-Nov-16	VC4	160-165	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
830	15-Nov-16	VC4	160-165	1	Hexagrammos, (Greenling)	genus	exoccipital			100	effectively complete		
831	15-Nov-16	VC4	160-165	1	Hexagrammos, (Greenling)	genus	hypohyal			100	effectively complete		
832	15-Nov-16	VC4	160-165	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
833	15-Nov-16	VC4	160-165	1	Squalidae (Dogfish)	genus	vertebra			100	half		
834	15-Nov-16	VC4	160-165	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete	1	
835	15-Nov-16	VC4	160-165	2	Sebastes (Rockfish)	genus	radial			100	effectively complete		
836	15-Nov-16	VC4	160-165	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
837	15-Nov-16	VC4	160-165	1	Sebastes (Rockfish)	genus	quadrate			100	articular surface		
838	15-Nov-16	VC4	160-165	1	Sebastes (Rockfish)	genus	pharyngobranchial			100	effectively complete		2 pc. Refit
839	15-Nov-16	VC4	160-165	11	Unidentified mammal	unid				100	fragments		
840	15-Nov-16	VC4	160-165	1	Unidentified fish	unid				100	fragment	1	
841	15-Nov-16	VC4	160-165	45	Unidentified fish	unid				100	fragments		
842	15-Nov-16	VC4	160-165	1	Canis familiaris (Domestic dog)	species	molar			75	effectively complete		domesticated dog
843	15-Nov-16	VC4	165-169	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
844	15-Nov-16	VC4	165-169	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
845	15-Nov-16	VC4	165-169	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
846	15-Nov-16	VC4	165-169	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
847	15-Nov-16	VC4	165-169	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
848	15-Nov-16	VC4	165-169	3	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	more than half		
849	15-Nov-16	VC4	165-169	8	Unidentified mammal	unid				100	fragments		
850	15-Nov-16	VC4	165-169	24	Unidentified fish	unid				100	fragments		
851	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
852	15-Nov-16	VC4	169-177	7	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
853	15-Nov-16	VC4	169-177	7	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
854	15-Nov-16	VC4	169-177	9	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	fragments		
855	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
856	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	prootic	small/medium		100	effectively complete		
857	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
858	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	operculum	small		100	articular surface		
859	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	preorbital	small		100	effectively complete		
860	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	epihyal	small		100	fragment		
861	15-Nov-16	VC4	169-177	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
862	15-Nov-16	VC4	169-177	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
863	15-Nov-16	VC4	169-177	16	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
864	15-Nov-16	VC4	169-177	5	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	more than half		
865	15-Nov-16	VC4	169-177	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments		
866	15-Nov-16	VC4	169-177	2	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
867	15-Nov-16	VC4	169-177	1	Sebastes (Rockfish)	genus	spine			100	fragment		
868	15-Nov-16	VC4	169-177	1	Sebastes (Rockfish)	genus	post temporal			100	fragment		
869	15-Nov-16	VC4	169-177	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		~~sardine~~
870	15-Nov-16	VC4	169-177	1	Hexagrammos, (Greenling)	genus	atlas			100	effectively complete		
871	15-Nov-16	VC4	169-177	1	Hexagrammos, (Greenling)	genus	vertebra			100	less than half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
872	15-Nov-16	VC4	169-177	1	Unidentified mammal	unid				100	fragment	1	
873	15-Nov-16	VC4	169-177	2	Unidentified mammal	unid				100	fragments		
874	15-Nov-16	VC4	169-177	92	Unidentified fish	unid				100	fragments		
875	15-Nov-16	VC4	177-180	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
876	15-Nov-16	VC4	177-180	9	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
877	15-Nov-16	VC4	177-180	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
878	15-Nov-16	VC4	177-180	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
879	15-Nov-16	VC4	177-180	1	Clupea pallasii, (Pacific herring)	species	cranial fragment			75	fragment		
880	15-Nov-16	VC4	177-180	11	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
881	15-Nov-16	VC4	177-180	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
882	15-Nov-16	VC4	177-180	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
883	15-Nov-16	VC4	177-180	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
884	15-Nov-16	VC4	177-180	1	Sebastes (Rockfish)	genus	vomer			100	fragment		
885	15-Nov-16	VC4	177-180	1	Sebastes (Rockfish)	genus	radial			100	fragment		
886	15-Nov-16	VC4	177-180	1	Hexagrammos, (Greenling)	genus	epihyal			100	articular surface		
887	15-Nov-16	VC4	177-180	1	Hexagrammos, (Greenling)	genus	atlas			100	effectively complete		
888	15-Nov-16	VC4	177-180	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	effectively complete		
889	15-Nov-16	VC4	177-180	2	Hydrolagus colliei (spotted ratfish)	species	tooth			100	effectively complete		2-3 ratfish sp. Off the pacific coast
890	15-Nov-16	VC4	177-180	61	Unidentified fish	unid				100	fragments		
891	16-Nov-16	VC4	180-185	1	Sebastes (Rockfish)	genus	retroarticular			100	complete		
892	16-Nov-16	VC4	180-185	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
893	16-Nov-16	VC4	180-185	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
894	16-Nov-16	VC4	180-185	2	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
895	16-Nov-16	VC4	180-185	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	effectively complete		
896	16-Nov-16	VC4	180-185	5	Unidentified fish	unid				100	fragments		
897	16-Nov-16	VC4	185-190	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
898	16-Nov-16	VC4	185-190	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
899	16-Nov-16	VC4	185-190	1	Clupea pallasii, (Pacific herring)	species	exoccipital			100	fragment		
900	16-Nov-16	VC4	185-190	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
901	16-Nov-16	VC4	185-190	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
902	16-Nov-16	VC4	185-190	1	Clupea pallasii, (Pacific herring)	species	penultimate vertebra			100	complete		
903	16-Nov-16	VC4	185-190	1	Clupea pallasii, (Pacific herring)	species	basioccipital			100	effectively complete		
904	16-Nov-16	VC4	185-190	1	Clupea pallasii, (Pacific herring)	species	cranial fragment			100	fragment		
905	16-Nov-16	VC4	185-190	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
906	16-Nov-16	VC4	185-190	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
907	16-Nov-16	VC4	185-190	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	fragment		
908	16-Nov-16	VC4	185-190	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
909	16-Nov-16	VC4	185-190	1	Sebastes (Rockfish)	genus	articular			100	articular surface		MNI=2, larger bone

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
910	16-Nov-16	VC4	185-190	1	Sebastes (Rockfish)	genus	vertebra			100	less than half		
911	16-Nov-16	VC4	185-190	1	Sebastes (Rockfish)	genus	premaxillary			100	fragment		
912	16-Nov-16	VC4	185-190	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
913	16-Nov-16	VC4	185-190	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
914	16-Nov-16	VC4	185-190	1	Unidentified fish	unid				100	fragment	1	
915	16-Nov-16	VC4	185-190	29	Unidentified fish	unid				100	fragments		
916	16-Nov-16	VC4	190-195	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
917	16-Nov-16	VC4	190-195	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
918	16-Nov-16	VC4	190-195	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
919	16-Nov-16	VC4	190-195	1	Clupea pallasii, (Pacific herring)	species	cranial fragment			100	fragment		
920	16-Nov-16	VC4	190-195	1	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete		
921	16-Nov-16	VC4	190-195	29	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
922	16-Nov-16	VC4	190-195	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
923	16-Nov-16	VC4	190-195	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	more than half		
924	16-Nov-16	VC4	190-195	5	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	complete		
925	16-Nov-16	VC4	190-195	3	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	effectively complete		
926	16-Nov-16	VC4	190-195	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	effectively complete		
927	16-Nov-16	VC4	190-195	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
928	16-Nov-16	VC4	190-195	1	Sebastes (Rockfish)	genus	spine			100	fragment		
929	16-Nov-16	VC4	190-195	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
930	16-Nov-16	VC4	190-195	1	Hexagrammos, (Greenling)	genus	parasphenoid			100	fragment		
931	16-Nov-16	VC4	190-195	1	Unidentified mammal	unid				100	fragment		
932	16-Nov-16	VC4	190-195	74	Unidentified fish	unid				100	fragments		
933	16-Nov-16	VC4	195-200	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
934	16-Nov-16	VC4	195-200	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
935	16-Nov-16	VC4	195-200	15	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
936	16-Nov-16	VC4	195-200	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
937	16-Nov-16	VC4	195-200	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	fragment		
938	16-Nov-16	VC4	195-200	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	articular surface		
939	16-Nov-16	VC4	195-200	1	Sebastes (Rockfish)	genus	interhaemal spine			100	effectively complete		
940	16-Nov-16	VC4	195-200	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
941	16-Nov-16	VC4	195-200	1	Sebastes (Rockfish)	genus	gillraker			100	more than half		
942	16-Nov-16	VC4	195-200	1	Sebastes (Rockfish)	genus	exoccipital			100	more than half		
943	16-Nov-16	VC4	195-200	1	Sebastes (Rockfish)	genus	atlas arch			100	fragment		
944	16-Nov-16	VC4	195-200	1	Sebastes (Rockfish)	genus	quadrate			100	articular surface		
945	16-Nov-16	VC4	195-200	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
946	16-Nov-16	VC4	195-200	1	Hexagrammos, (Greenling)	genus	hyomandibular			100	fragment		
947	16-Nov-16	VC4	195-200	1	Squalidae (Dogfish)	genus	vertebra			100	fragment		
948	16-Nov-16	VC4	195-200	73	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
949	16-Nov-16	VC4	195-200	1	Unidentified fish	unid				100	fragment	1	
950	16-Nov-16	VC4	200-205	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
951	16-Nov-16	VC4	200-205	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
952	16-Nov-16	VC4	200-205	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
953	16-Nov-16	VC4	200-205	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	fragment		
954	16-Nov-16	VC4	200-205	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
955	16-Nov-16	VC4	200-205	3	Sebastes (Rockfish)	genus	vertebrae			100	more than half		
956	16-Nov-16	VC4	200-205	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
957	16-Nov-16	VC4	200-205	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
958	16-Nov-16	VC4	200-205	1	Sebastes (Rockfish)	genus	articular			100	articular surface		
959	16-Nov-16	VC4	200-205	1	Hexagrammos, (Greenling)	genus	vomer			100	effectively complete		
960	16-Nov-16	VC4	200-205	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
961	16-Nov-16	VC4	200-205	1	Unidentified fish	unid				100	fragment	1	
962	16-Nov-16	VC4	200-205	64	Unidentified fish	unid				100	fragments		
963	16-Nov-16	VC4	205-210	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
964	16-Nov-16	VC4	205-210	2	Clupea pallasii, (Pacific herring)	species	maxillary			100	fragments		
965	16-Nov-16	VC4	205-210	1	Clupea pallasii, (Pacific herring)	species	epihyal			100	fragment		
966	16-Nov-16	VC4	205-210	2	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
967	16-Nov-16	VC4	205-210	1	Oncorhynchus (Pacific Salmon)	genus	tooth			100	half		
968	16-Nov-16	VC4	205-210	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
969	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
970	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	interhaemal spine			100	effectively complete		
971	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	supercleithrum		right	100	articular surface		
972	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	supercleithrum		left	100	articular surface		
973	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	pterygoid			100	complete		
974	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	hypohyal			100	complete		
975	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	dentry			100	fragment		
976	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	hypobranchial			100	complete		
977	16-Nov-16	VC4	205-210	1	Sebastes (Rockfish)	genus	retroarticular			100	complete		
978	16-Nov-16	VC4	205-210	6	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
979	16-Nov-16	VC4	205-210	1	Hexagrammos, (Greenling)	genus	vomer			100	effectively complete		
980	16-Nov-16	VC4	205-210	1	Hexagrammos, (Greenling)	genus	epihyal			100	articular surface		
981	16-Nov-16	VC4	205-210	1	Hexagrammos, (Greenling)	genus	hypohyal			100	effectively complete		
982	16-Nov-16	VC4	205-210	1	Squalidae (Dogfish)	genus	vertebra			100	less than half		
983	16-Nov-16	VC4	205-210	61	Unidentified fish	unid				100	fragments		
984	16-Nov-16	VC4	205-210	1	Enophrys bison (Buffalo sculpin)	species	cranial fragment			100	fragment		
985	16-Nov-16	VC4	205-210	1	Hemilepidotus (Irish lord)	genus	vertebra			100	effectively complete		
986	16-Nov-16	VC4	205-210	1	Ophiodon elongatus (lingcod)	species	vertebra			50	effectively complete		50% to sp. 75%
987	16-Nov-16	VC4	210-215	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
988	16-Nov-16	VC4	210-215	4	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
989	16-Nov-16	VC4	210-215	12	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
990	16-Nov-16	VC4	210-215	4	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
991	16-Nov-16	VC4	210-215	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	effectively complete		
992	16-Nov-16	VC4	210-215	2	Sebastes (Rockfish)	genus	vertebrae			100	more than half		
993	16-Nov-16	VC4	210-215	1	Sebastes (Rockfish)	genus	hypobranchial			100	effectively complete		
994	16-Nov-16	VC4	210-215	1	Sebastes (Rockfish)	genus	pharyngobranchial			100	fragment		
995	16-Nov-16	VC4	210-215	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
996	16-Nov-16	VC4	210-215	1	Hexagrammos, (Greenling)	genus	terminal vertebra			100	effectively complete		
997	16-Nov-16	VC4	210-215	1	Hexagrammos, (Greenling)	genus	hypural			100	fragment		
998	16-Nov-16	VC4	210-215	2	Hydrolagus colliei (spotted ratfish)	species	spine			100	fragments		likey a refit but pc.s too broken
999	16-Nov-16	VC4	210-215	1	Unidentified fish	unid				100	fragment	1	
1000	16-Nov-16	VC4	210-215	52	Unidentified fish	unid				100	fragments		
1001	16-Nov-16	VC4	210-215	77	Unidentified mammal	unid		medium/large		100	fragments		
1002	21-Nov-16	VC4	215-220	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
1003	21-Nov-16	VC4	215-220	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1004	21-Nov-16	VC4	215-220	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
1005	21-Nov-16	VC4	215-220	8	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1006	21-Nov-16	VC4	215-220	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	medium		100	effectively complete		
1007	21-Nov-16	VC4	215-220	1	Clupea pallasii, (Pacific herring)	species	hypural			100	effectively complete		
1008	21-Nov-16	VC4	215-220	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1009	21-Nov-16	VC4	215-220	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragment		
1010	21-Nov-16	VC4	215-220	1	Clupea pallasii, (Pacific herring)	species	opisthotic			100	effectively complete		
1011	21-Nov-16	VC4	215-220	1	Clupea pallasii, (Pacific herring)	species	suborbital			100	effectively complete		
1012	21-Nov-16	VC4	215-220	2	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
1013	21-Nov-16	VC4	215-220	13	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragment		
1014	21-Nov-16	VC4	215-220	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1015	21-Nov-16	VC4	215-220	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	effectively complete		
1016	21-Nov-16	VC4	215-220	1	Sebastes (Rockfish)	genus	penultimate vertebra			100	effectively complete		
1017	21-Nov-16	VC4	215-220	1	Sebastes (Rockfish)	genus	interhaemal spine-2/3			100	fragment		
1018	21-Nov-16	VC4	215-220	2	Sebastes (Rockfish)	genus	spacer			100	half		
1019	21-Nov-16	VC4	215-220	1	Hexagrammos, (Greenling)	genus	operculum			100	articular surface		
1020	21-Nov-16	VC4	215-220	1	Hexagrammos, (Greenling)	genus	epihyal			100	effectively complete		2 pc. Refit
1021	21-Nov-16	VC4	215-220	1	Hexagrammos, (Greenling)	genus	exoccipital			100	effectively complete		
1022	21-Nov-16	VC4	215-220	14	Unidentified mammal	unid				100	fragments		
1023	21-Nov-16	VC4	215-220	1	Unidentified fish	unid				100	fragments	1	scorched
1024	21-Nov-16	VC4	215-220	116	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1025	21-Nov-16	VC4	220-225	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1026	21-Nov-16	VC4	220-225	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
1027	21-Nov-16	VC4	220-225	3	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1028	21-Nov-16	VC4	220-225	4	Clupea pallasii, (Pacific herring)	species	caudal vertebra	medium		100	effectively complete		
1029	21-Nov-16	VC4	220-225	1	Clupea pallasii, (Pacific herring)	species	maxillary			100	articular surface		
1030	21-Nov-16	VC4	220-225	1	Clupea pallasii, (Pacific herring)	species	prootic			100	fragment		
1031	21-Nov-16	VC4	220-225	1	Clupea pallasii, (Pacific herring)	species	prootic			100	fragment		
1032	21-Nov-16	VC4	220-225	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
1033	21-Nov-16	VC4	220-225	12	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
1034	21-Nov-16	VC4	220-225	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1035	21-Nov-16	VC4	220-225	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
1036	21-Nov-16	VC4	220-225	1	Sebastes (Rockfish)	genus	pharyngobranchial			100	fragment		
1037	21-Nov-16	VC4	220-225	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
1038	21-Nov-16	VC4	220-225	1	Sebastes (Rockfish)	genus	supercleithrum			100	articular surface		
1039	21-Nov-16	VC4	220-225	1	Sebastes (Rockfish)	genus	vertebra			100	fragment		
1040	21-Nov-16	VC4	220-225	1	Hexagrammos, (Greenling)	genus	cleithrum			100	fragment		
1041	21-Nov-16	VC4	220-225	1	Hexagrammos, (Greenling)	genus	epihyal			100	fragment		
1042	21-Nov-16	VC4	220-225	1	Hexagrammos, (Greenling)	genus	prootic			100	effectively complete		
1043	21-Nov-16	VC4	220-225	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1044	21-Nov-16	VC4	220-225	1	Hexagrammos, (Greenling)	genus	supercleithrum			100	articular surface		
1045	21-Nov-16	VC4	220-225	1	Hemilepidotus (Irish lord)	genus	suborbital			100	effectively complete		
1046	21-Nov-16	VC4	220-225	4	Unidentified mammal	unid				100	fragments		
1047	21-Nov-16	VC4	220-225	120	Unidentified fish	unid				100	fragments		
1048	21-Nov-16	VC4	220-225	1	Unidentified fish	unid				100	fragment	1	calcined
1049	21-Nov-16	VC4	225-230	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1050	21-Nov-16	VC4	225-230	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	complete		
1051	21-Nov-16	VC4	225-230	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	less than half		
1052	21-Nov-16	VC4	225-230	27	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1053	21-Nov-16	VC4	225-230	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1054	21-Nov-16	VC4	225-230	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
1055	21-Nov-16	VC4	225-230	1	Oncorhynchus (Pacific Salmon)	genus	hypural-1			100	effectively complete		
1056	21-Nov-16	VC4	225-230	3	Oncorhynchus (Pacific Salmon)	genus	teeth			100	effectively complete		
1057	21-Nov-16	VC4	225-230	1	Sebastes (Rockfish)	genus	vomer			100	fragments		2 pc. Refit
1058	21-Nov-16	VC4	225-230	2	Ophiodon elongatus (lingcod)	species	gillraker			100	effectively complete		could be lingcod
1059	21-Nov-16	VC4	225-230	1	Hexagrammos, (Greenling)	genus	pterygoid			100	effectively complete		
1060	21-Nov-16	VC4	225-230	6	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1061	21-Nov-16	VC4	225-230	4	Unidentified mammal	unid				100	fragments		
1062	21-Nov-16	VC4	225-230	2	Unidentified fish	unid				100	fragments	2	calcined and scorched
1063	21-Nov-16	VC4	225-230	140	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1064	01-Dec-16	VC4	230-235	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1065	01-Dec-16	VC4	230-235	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1066	01-Dec-16	VC4	230-235	4	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
1067	01-Dec-16	VC4	230-235	109	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1068	01-Dec-16	VC4	230-235	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	more than half		
1069	01-Dec-16	VC4	230-235	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1070	01-Dec-16	VC4	230-235	5	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragments		
1071	01-Dec-16	VC4	230-235	1	Oncorhynchus (Pacific Salmon)	genus	tooth			100	effectively complete		
1072	01-Dec-16	VC4	230-235	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragments		
1073	01-Dec-16	VC4	230-235	8	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1074	01-Dec-16	VC4	230-235	3	Unidentified mammal	unid				100	fragments		2 pc refit; Land mammal (including otter)
1075	01-Dec-16	VC4	230-235	1	Lepidopsetta bilineata (Rock Sole)	species	vertebra			100	effectively complete		
1076	01-Dec-16	VC4	230-235	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
1077	01-Dec-16	VC4	230-235	6	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
1078	01-Dec-16	VC4	230-235	3	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	half		
1079	01-Dec-16	VC4	230-235	1	Hexagrammos, (Greenling)	genus	hypohyal			100	complete		
1080	01-Dec-16	VC4	230-235	1	Hexagrammos, (Greenling)	genus	radial			100	fragment		
1081	01-Dec-16	VC4	230-235	2	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
1082	01-Dec-16	VC4	230-235	1	Sebastes (Rockfish)	genus	vertebra			100	more than half		
1083	01-Dec-16	VC4	230-235	1	Sebastes (Rockfish)	genus	cleithrum			100	fragment		
1084	01-Dec-16	VC4	230-235	1	Sebastes (Rockfish)	genus	spacer			100	complete		
1085	01-Dec-16	VC4	230-235	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
1086	01-Dec-16	VC4	230-235	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
1087	01-Dec-16	VC4	230-235	209	Unidentified fish	unid				100	fragments		
1088	05-Dec-16	VC4	235-240	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1089	05-Dec-16	VC4	235-240	3	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1090	05-Dec-16	VC4	235-240	2	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	more than half		
1091	05-Dec-16	VC4	235-240	2	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
1092	05-Dec-16	VC4	235-240	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
1093	05-Dec-16	VC4	235-240	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	effectively complete	1	
1094	05-Dec-16	VC4	235-240	8	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1095	05-Dec-16	VC4	235-240	1	Oncorhynchus (Pacific Salmon)	genus	hypural			100	effectively complete		
1096	05-Dec-16	VC4	235-240	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	effectively complete		
1097	05-Dec-16	VC4	235-240	2	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	fragments		
1098	05-Dec-16	VC4	235-240	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1099	05-Dec-16	VC4	235-240	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
1100	05-Dec-16	VC4	235-240	1	Hexagrammos, (Greenling)	genus	vertebra	small/medium		100	effectively complete		
1101	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	vertebra	large		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1102	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	penultimate vertebra			100	more than half		
1103	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	vertebra	x-small		100	effectively complete		
1104	05-Dec-16	VC4	235-240	2	Sebastes (Rockfish)	genus	vertebrae	x-small		100	more than half		
1105	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	half		
1106	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	vomer			100	fragment		
1107	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	penultimate vertebra-process			100	fragment		
1108	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	pharyngeal plate			100	effectively complete		
1109	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	retroarticular			100	complete		
1110	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
1111	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	post temporal			100	fragment		
1112	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	quadrate			100	more than half		
1113	05-Dec-16	VC4	235-240	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
1114	05-Dec-16	VC4	235-240	2	Unidentified mammal	unid				100	fragments		
1115	05-Dec-16	VC4	235-240	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	half		
1116	05-Dec-16	VC4	235-240	116	Unidentified fish	unid				100	fragments		
1117	05-Dec-16	VC4	240-245	8	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1118	05-Dec-16	VC4	240-245	4	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1119	05-Dec-16	VC4	240-245	3	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small/medium		100	effectively complete		
1120	05-Dec-16	VC4	240-245	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1121	05-Dec-16	VC4	240-245	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1122	05-Dec-16	VC4	240-245	5	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
1123	05-Dec-16	VC4	240-245	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1124	05-Dec-16	VC4	240-245	1	Oncorhynchus (Pacific Salmon)	genus	hypural/epural			100	fragment		
1125	05-Dec-16	VC4	240-245	2	Sebastes (Rockfish)	genus	vertebrae	small		100	effectively complete		
1126	05-Dec-16	VC4	240-245	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	effectively complete		
1127	05-Dec-16	VC4	240-245	1	Sebastes (Rockfish)	genus	abdominal vertebra	x-small		100	effectively complete		
1128	05-Dec-16	VC4	240-245	2	Sebastes (Rockfish)	genus	vertebrae	x-small		100	effectively complete		
1129	05-Dec-16	VC4	240-245	1	Sebastes (Rockfish)	genus	spacer			100	complete		
1130	05-Dec-16	VC4	240-245	1	Sebastes (Rockfish)	genus	penultimate vertebra			100	effectively complete		
1131	05-Dec-16	VC4	240-245	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
1132	05-Dec-16	VC4	240-245	1	Sebastes (Rockfish)	genus	dentry			100	fragment		
1133	05-Dec-16	VC4	240-245	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1134	05-Dec-16	VC4	240-245	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		
1135	05-Dec-16	VC4	240-245	1	Hexagrammos, (Greenling)	genus	pterygoid			100	effectively complete		
1136	05-Dec-16	VC4	240-245	1	Hexagrammos, (Greenling)	genus	hypohyal			100	effectively complete		
1137	05-Dec-16	VC4	240-245	2	Anoplopoma fimbria (Sablefish)	species	vertebrae	x-small		100	effectively complete		
1138	05-Dec-16	VC4	240-245	1	Anoplopoma fimbria (Sablefish)	species	vertebra	x-small		100	more than half		
1139	05-Dec-16	VC4	240-245	1	Pleuronectiformes (flatfish)	order	prootic			75	fragment		likely rock sole or English sole

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1140	05-Dec-16	VC4	240-245	102	Unidentified fish	unid				100	fragments		
1141	05-Dec-16	VC4	240-245	1	Unidentified fish	unid				100	fragment	1	
1142	12-Dec-16	VC4	255-260	1	Hippoglossus stenolepis (Pacific halibut)	species	caudal vertebra	small		100	effectively complete		
1143	12-Dec-16	VC4	255-260	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	complete		
1144	12-Dec-16	VC4	255-260	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1145	12-Dec-16	VC4	255-260	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
1146	12-Dec-16	VC4	255-260	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	fragment		
1147	12-Dec-16	VC4	255-260	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1148	12-Dec-16	VC4	255-260	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		lost to the floor
1149	12-Dec-16	VC4	255-260	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1150	12-Dec-16	VC4	255-260	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1151	12-Dec-16	VC4	255-260	1	Sebastes (Rockfish)	genus	vertebral process-arch			100	effectively complete		
1152	12-Dec-16	VC4	255-260	1	Sebastes (Rockfish)	genus	epihyal			100	fragment		
1153	12-Dec-16	VC4	255-260	1	Sebastes (Rockfish)	genus	hypural			100	fragment		
1154	12-Dec-16	VC4	255-260	1	Sebastes (Rockfish)	genus	supracleithrum			100	articular surface		
1155	12-Dec-16	VC4	255-260	2	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	effectively complete		
1156	12-Dec-16	VC4	255-260	1	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	effectively complete		
1157	12-Dec-16	VC4	255-260	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1158	12-Dec-16	VC4	255-260	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		
1159	12-Dec-16	VC4	255-260	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
1160	12-Dec-16	VC4	255-260	2	Unidentified mammal	unid				100	fragments		
1161	12-Dec-16	VC4	255-260	1	Unidentified mammal	unid				100	fragment	1	
1162	12-Dec-16	VC4	255-260	59	Unidentified fish	unid				100	fragments		
1163	12-Dec-16	VC4	245-250	9	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1164	12-Dec-16	VC4	245-250	4	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1165	12-Dec-16	VC4	245-250	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
1166	12-Dec-16	VC4	245-250	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	more than half		
1167	12-Dec-16	VC4	245-250	17	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1168	12-Dec-16	VC4	245-250	4	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragments		
1169	12-Dec-16	VC4	245-250	4	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1170	12-Dec-16	VC4	245-250	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
1171	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	vertebra			100	more than half		
1172	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	vertebra			100	more than half		
1173	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1174	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1175	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	exoccipital		left	100	effectively complete		
1176	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	exoccipital		right	100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1177	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	penultimate vertebra			100	half		
1178	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	vertebral process-arch			100	effectively complete		
1179	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	dentry		right	100	fragment		
1180	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	hypercoracoid		right	100	fragment		
1181	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	post temporal		left	100	fragment		
1182	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	maxilla		left	100	fragment		
1183	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	articular		right	100	fragment		
1184	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	epihyal		left	100	articular surface		
1185	12-Dec-16	VC4	245-250	1	Sebastes (Rockfish)	genus	operculum			100	fragment		
1186	12-Dec-16	VC4	245-250	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1187	12-Dec-16	VC4	245-250	1	Hexagrammos, (Greenling)	genus	hypural			100	effectively complete		
1188	12-Dec-16	VC4	245-250	4	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
1189	12-Dec-16	VC4	245-250	1	Hippoglossus stenolepis (Pacific halibut)	species	vertebral process			75	fragment		
1190	12-Dec-16	VC4	245-250	1	Pleuronectiformes (flatfish)	order	vertebra			100	more than half		
1191	12-Dec-16	VC4	245-250	1	Pleuronectiformes (flatfish)	order	cleithrum			100	fragment		
1192	12-Dec-16	VC4	245-250	126	Unidentified fish	unid				100	fragments		
1193	12-Dec-16	VC4	250-255	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1194	12-Dec-16	VC4	250-255	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1195	12-Dec-16	VC4	250-255	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
1196	12-Dec-16	VC4	250-255	1	Sebastes (Rockfish)	genus	frontal			100	fragment		
1197	12-Dec-16	VC4	250-255	1	Sebastes (Rockfish)	genus	epural			100	effectively complete		
1198	12-Dec-16	VC4	250-255	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1199	12-Dec-16	VC4	250-255	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
1200	12-Dec-16	VC4	250-255	1	Hexagrammos, (Greenling)	genus	hypohyal			100	effectively complete		
1201	12-Dec-16	VC4	250-255	3	Anoplopoma fimbria (Sablefish)	species	vertebrae	small		100	effectively complete		
1202	12-Dec-16	VC4	250-255	18	Unidentified fish	unid				100	fragments		
1203	12-Dec-16	VC4	250-255	2	Unidentified fish	unid				100	fragments	2	
1204	12-Dec-16	VC4	260-265	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small/medium		100	effectively complete		
1205	12-Dec-16	VC4	260-265	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small/medium		100	effectively complete		
1206	12-Dec-16	VC4	260-265	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1207	12-Dec-16	VC4	260-265	1	Clupea pallasii, (Pacific herring)	species	axis	small		100	effectively complete		
1208	12-Dec-16	VC4	260-265	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1209	12-Dec-16	VC4	260-265	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	less than half		
1210	12-Dec-16	VC4	260-265	1	Clupea pallasii, (Pacific herring)	species	basioccipital			100	fragment		
1211	12-Dec-16	VC4	260-265	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1212	12-Dec-16	VC4	260-265	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	3	
1213	12-Dec-16	VC4	260-265	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1214	12-Dec-16	VC4	260-265	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
1215	12-Dec-16	VC4	260-265	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	articular surface		
1216	12-Dec-16	VC4	260-265	1	Sebastes (Rockfish)	genus	pterotic			100	fragment		
1217	12-Dec-16	VC4	260-265	1	Sebastes (Rockfish)	genus	penultimate vertebra			100	more than half		
1218	12-Dec-16	VC4	260-265	1	Sebastes (Rockfish)	genus	quadrate			100	articular surface		
1219	12-Dec-16	VC4	260-265	2	Sebastes (Rockfish)	genus	parasphenoid			100	fragments		
1220	12-Dec-16	VC4	260-265	2	Sebastes (Rockfish)	genus	vertebrae			100	more than half		
1221	12-Dec-16	VC4	260-265	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1222	12-Dec-16	VC4	260-265	1	Sebastes (Rockfish)	genus	dentry			100	fragment		
1223	12-Dec-16	VC4	260-265	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1224	12-Dec-16	VC4	260-265	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
1225	12-Dec-16	VC4	260-265	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
1226	12-Dec-16	VC4	260-265	1	Hexagrammos, (Greenling)	genus	vertebra			100	less than half		
1227	12-Dec-16	VC4	260-265	1	Hexagrammos, (Greenling)	genus	hypural			100	complete		
1228	12-Dec-16	VC4	260-265	2	Hexagrammos, (Greenling)	genus	cleithrum			100	fragments		
1229	12-Dec-16	VC4	260-265	5	Anoplopoma fimbria (Sablefish)	species	vertebrae	small		100	effectively complete		
1230	12-Dec-16	VC4	260-265	1	Unidentified mammal/bird	unid				100	fragment		small mammal/bird
1231	12-Dec-16	VC4	260-265	1	Hemilepidotus (Irish lord)	genus	vertebra			100	effectively complete		
1232	12-Dec-16	VC4	260-265	1	Hemilepidotus (Irish lord)	genus	pterotic		right	100	effectively complete		
1233	12-Dec-16	VC4	260-265	1	Hemilepidotus (Irish lord)	genus	pterotic		left	100	effectively complete		
1234	12-Dec-16	VC4	260-265	70	Unidentified fish	unid				100	fragments		
1235	12-Dec-16	VC4	265-270	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1236	12-Dec-16	VC4	265-270	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
1237	12-Dec-16	VC4	265-270	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1238	12-Dec-16	VC4	265-270	8	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	effectively complete		
1239	12-Dec-16	VC4	265-270	3	Clupea pallasii, (Pacific herring)	species	caudal vertebra			100	effectively complete		
1240	12-Dec-16	VC4	265-270	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragment		
1241	12-Dec-16	VC4	265-270	1	Clupea pallasii, (Pacific herring)	species	articular			100	articular surface		
1242	12-Dec-16	VC4	265-270	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	effectively complete		
1243	12-Dec-16	VC4	265-270	4	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
1244	12-Dec-16	VC4	265-270	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1245	12-Dec-16	VC4	265-270	1	Hexagrammos, (Greenling)	genus	hyomandibular			100	complete		
1246	12-Dec-16	VC4	265-270	1	Sebastes (Rockfish)	genus	vertebra			100	half		
1247	12-Dec-16	VC4	265-270	1	Sebastes (Rockfish)	genus	pterotic			100	fragment		
1248	12-Dec-16	VC4	265-270	1	Rajidae (skate)	family	tooth			100	effectively complete		
1249	12-Dec-16	VC4	265-270	1	Unidentified mammal	unid				100	fragment		flaked bone - artifact
1250	12-Dec-16	VC4	265-270	38	Unidentified fish	unid				100	fragments		
1251	12-Dec-16	VC4	270-275	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1252	12-Dec-16	VC4	270-275	7	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1253	12-Dec-16	VC4	270-275	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		
1254	12-Dec-16	VC4	270-275	1	Clupea pallasii, (Pacific herring)	species	exoccipital	small		100	effectively complete		
1255	12-Dec-16	VC4	270-275	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
1256	12-Dec-16	VC4	270-275	19	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1257	12-Dec-16	VC4	270-275	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1258	12-Dec-16	VC4	270-275	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
1259	12-Dec-16	VC4	270-275	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1260	12-Dec-16	VC4	270-275	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	more than half		
1261	12-Dec-16	VC4	270-275	1	Hexagrammos, (Greenling)	genus	exoccipital			100	more than half		
1262	12-Dec-16	VC4	270-275	2	Squalidae (Dogfish)	genus	vertebrae			100	less than half		
1263	12-Dec-16	VC4	270-275	1	Sebastes (Rockfish)	genus	hypercoracoid			100	fragment		
1264	12-Dec-16	VC4	270-275	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1265	12-Dec-16	VC4	270-275	1	Sebastes (Rockfish)	genus	epihyal			100	effectively complete		
1266	12-Dec-16	VC4	270-275	1	Sebastes (Rockfish)	genus	lacrimal			100	effectively complete		
1267	12-Dec-16	VC4	270-275	36	Unidentified fish	unid				100	fragments		
1268	12-Dec-16	VC4	270-275	1	Unidentified fish	unid				100	fragment	1	
1269	14-Dec-16	VC4	275-280	1	Clupea pallasii, (Pacific herring)	species	axis	small		100	effectively complete		
1270	14-Dec-16	VC4	275-280	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1271	14-Dec-16	VC4	275-280	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1272	14-Dec-16	VC4	275-280	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
1273	14-Dec-16	VC4	275-280	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	effectively complete		
1274	14-Dec-16	VC4	275-280	1	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid			100	effectively complete		
1275	14-Dec-16	VC4	275-280	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1276	14-Dec-16	VC4	275-280	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1277	14-Dec-16	VC4	275-280	1	Sebastes (Rockfish)	genus	atlas			100	effectively complete		
1278	14-Dec-16	VC4	275-280	1	Sebastes (Rockfish)	genus	vertebra			100	half		
1279	14-Dec-16	VC4	275-280	1	Sebastes (Rockfish)	genus	post temporal			100	fragment		
1280	14-Dec-16	VC4	275-280	1	Sebastes (Rockfish)	genus	frontal			100	fragment		2 pc. Refit
1281	14-Dec-16	VC4	275-280	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1282	14-Dec-16	VC4	275-280	1	Hexagrammos, (Greenling)	genus	hyomandibular			100	fragment		
1283	14-Dec-16	VC4	275-280	1	Pleuronectiformes (flatfish)	order	vertebra			100	more than half		structure compressed laterally
1284	14-Dec-16	VC4	275-280	32	Unidentified fish	unid				100	fragments		
1285	14-Dec-16	VC4	275-280	1	Unidentified fish	unid				100	fragment	1	scorched
1286	14-Dec-16	VC4	280-285	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1287	14-Dec-16	VC4	280-285	1	Clupea pallasii, (Pacific herring)	species	ceratohyal			100	fragment		
1288	14-Dec-16	VC4	280-285	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1289	14-Dec-16	VC4	280-285	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1290	14-Dec-16	VC4	280-285	1	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	effectively complete		
1291	14-Dec-16	VC4	280-285	1	Hexagrammos, (Greenling)	genus	caudal vertebra			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1292	14-Dec-16	VC4	280-285	1	Hexagrammos, (Greenling)	genus	vertebra			100	less than half		
1293	14-Dec-16	VC4	280-285	7	Unidentified fish	unid				100	fragments		
1294	14-Dec-16	VC4	280-285	3	Unidentified fish	unid				100	fragments	3	
1295	14-Dec-16	VC4	280-285	1	Enhydra lutris (Sea otter)	species	tooth			75	fragment	1	scorched
1296	14-Dec-16	VC4	285-290	3	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1297	14-Dec-16	VC4	285-290	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1298	14-Dec-16	VC4	285-290	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	more than half		
1299	14-Dec-16	VC4	285-290	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
1300	14-Dec-16	VC4	285-290	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
1301	14-Dec-16	VC4	285-290	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
1302	14-Dec-16	VC4	285-290	1	Sebastes (Rockfish)	genus	articular	small		100	more than half		
1303	14-Dec-16	VC4	285-290	1	Sebastes (Rockfish)	genus	spacer			100	complete		
1304	14-Dec-16	VC4	285-290	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
1305	14-Dec-16	VC4	285-290	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	large		100	effectively complete	1	~~sardine~~
1306	14-Dec-16	VC4	285-290	1	Alcidae (Alcid)	family	vertebra			100	effectively complete		
1307	14-Dec-16	VC4	285-290	1	Unidentified bird	unid	vertebra			100	fragment		likely Alcidae
1308	14-Dec-16	VC4	285-290	15	Unidentified fish	unid				100	fragments		
1309	14-Dec-16	VC4	285-290	1	Unidentified fish	unid				100	fragment		
1310	14-Dec-16	VC4	290-295	3	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1311	14-Dec-16	VC4	290-295	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1312	14-Dec-16	VC4	290-295	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
1313	14-Dec-16	VC4	290-295	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
1314	14-Dec-16	VC4	290-295	3	Unidentified fish	unid				100	fragments		
1315	14-Dec-16	VC4	290-295	1	Unidentified fish	unid				100	fragment	1	
1316	14-Dec-16	VC4	295-300	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	fragment		
1317	14-Dec-16	VC4	295-300	1	Unidentified bird	unid				100	fragment		
1318	14-Dec-16	VC4	295-300	2	Unidentified fish	unid				100	fragments		
1319	14-Dec-16	VC4	300-305	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	more than half		
1320	14-Dec-16	VC4	300-305	1	Unidentified fish	unid				100	fragment		
1321	14-Dec-16	VC4	300-305	1	Unidentified fish	unid				100	fragment	1	
1322	14-Dec-16	VC4	305-310	2	Unidentified fish	unid				100	fragments		
1323	14-Dec-16	VC4	315-320	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	less than half		
1324	14-Dec-16	VC4	315-320	3	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
1325	14-Dec-16	VC4	315-320	1	Hexagrammos, (Greenling)	genus	caudal vertebra			100	effectively complete		
1326	14-Dec-16	VC4	315-320	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		
1327	14-Dec-16	VC4	315-320	2	Unidentified fish	unid				100	fragments		
1328	14-Dec-16	VC4	320-325	1	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	more than half		
1329	14-Dec-16	VC4	320-325	1	Unidentified mammal	unid				100	fragment		cancellous bone
1330	14-Dec-16	VC4	320-325	4	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1331	14-Dec-16	VC4	325-330	4	Unidentified fish	unid				100	fragments		
1332	15-Dec-16	VC4	330-335	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1333	15-Dec-16	VC4	330-335	1	Unidentified mammal	unid				100	fragment		
1334	15-Dec-16	VC4	330-335	14	Unidentified fish	unid				100	fragments		
1335	15-Dec-16	VC4	330-335	1	Unidentified fish	unid				100	fragments	1	3 piece refit
1336	15-Dec-16	VC4	330-335	1	Sebastes (Rockfish)	genus	gillraker			100	complete		
1337	15-Dec-16	VC4	335-340	1	Sebastes (Rockfish)	genus	vomer			100	fragment		2 pc refit; candidate for measurement
1338	15-Dec-16	VC4	335-340	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1339	15-Dec-16	VC4	335-340	29	Unidentified fish	unid				100	fragments		
1340	15-Dec-16	VC4	335-340	1	Unidentified mammal	unid				100	fragment		
1341	15-Dec-16	VC4	335-340	2	Unidentified fish	unid				100	fragments	2	
1342	15-Dec-16	VC4	340-345	1	Sebastes (Rockfish)	genus	vertebra			100	more than half		
1343	15-Dec-16	VC4	340-345	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1344	15-Dec-16	VC4	340-345	10	Unidentified fish	unid				100	fragments		
1345	15-Dec-16	VC4	345-350	10	Unidentified fish	unid				100	fragments		
1346	15-Dec-16	VC4	345-350	1	Sebastes (Rockfish)	genus	atlas spine			100	fragment		
1347	15-Dec-16	VC4	350-355	6	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
1348	15-Dec-16	VC4	350-355	1	Sebastes (Rockfish)	genus	atlas			100	effectively complete		
1349	15-Dec-16	VC4	350-355	28	Unidentified fish	unid				100	fragments		
1350	15-Dec-16	VC4	350-355	1	Unidentified mammal	unid				100	fragment		
1351	15-Dec-16	VC4	355-360	19	Unidentified fish	unid				100	fragments		
1352	15-Dec-16	VC4	355-360	1	Unidentified mammal	unid				100	fragment		artifact EjTa-13:133
1353	15-Dec-16	VC4	360-365	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
1354	15-Dec-16	VC4	360-365	1	Sebastes (Rockfish)	genus	radial			100	fragment		
1355	15-Dec-16	VC4	360-365	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
1356	15-Dec-16	VC4	360-365	15	Unidentified fish	unid				100	fragments		
1357	15-Dec-16	VC4	360-365	1	Atheresthes stomias (arrowtooth flounder)	species	tooth			100	effectively complete		
1358	15-Dec-16	VC4	365-370	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
1359	15-Dec-16	VC4	365-370	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
1360	15-Dec-16	VC4	365-370	2	Unidentified mammal	unid				100	fragments		
1361	15-Dec-16	VC4	365-370	10	Unidentified fish	unid				100	fragments		
1362	15-Dec-16	VC4	370-375	20	Unidentified fish	unid				100	fragments		
1363	15-Dec-16	VC4	375-380	2	Unidentified fish	unid				100	fragments		
1364	15-Dec-16	VC4	375-380	1	Unidentified mammal	unid				100	fragment	1	
1365	04-Jan-17	VC5	10-15	2	Sebastes (Rockfish)	genus	vertebra	large		100	effectively complete		
1366	04-Jan-17	VC5	10-15	3	Unidentified fish	unid				100	fragments		
1367	04-Jan-17	VC5	15-20	4	Unidentified fish	unid				100	fragments		
1368	04-Jan-17	VC5	20-25	1	Clupea pallasii, (Pacific herring)	species	dentary	small		100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1369	04-Jan-17	VC5	20-25	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
1370	04-Jan-17	VC5	20-25	1	Unidentified mammal	unid				100	fragment		
1371	04-Jan-17	VC5	20-25	1	Unidentified bird/small mammal	unid				100	fragment		
1372	04-Jan-17	VC5	20-25	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1373	04-Jan-17	VC5	20-25	5	Unidentified fish	unid				100	fragment		
1374	04-Jan-17	VC5	25-30	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
1375	04-Jan-17	VC5	25-30	1	Unidentified mammal	unid				100	fragment		
1376	04-Jan-17	VC5	30-35	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1377	04-Jan-17	VC5	30-35	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
1378	04-Jan-17	VC5	30-35	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1379	04-Jan-17	VC5	30-35	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	6	
1380	04-Jan-17	VC5	30-35	1	Squalidae (Dogfish)	genus	tooth			100	effectively complete	1	
1381	04-Jan-17	VC5	30-35	6	Unidentified fish	unid				100	fragments		
1382	04-Jan-17	VC5	30-35	1	Unidentified fish	unid				100	fragment	1	
1383	04-Jan-17	VC5	30-35	1	Unidentified mammal	unid				100	fragment		
1384	04-Jan-17	VC5	35-40	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1385	04-Jan-17	VC5	35-40	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	x-small		100	effectively complete		
1386	04-Jan-17	VC5	35-40	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	x-small		100	effectively complete		
1387	04-Jan-17	VC5	35-40	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1388	04-Jan-17	VC5	35-40	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	2	
1389	04-Jan-17	VC5	35-40	1	Unidentified mammal	unid				100	fragment		
1390	04-Jan-17	VC5	35-40	9	Unidentified fish	unid				100	fragments		
1391	04-Jan-17	VC5	35-40	1	Unidentified fish	unid				100	fragment	1	
1392	04-Jan-17	VC5	40-45	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	more than half		
1393	04-Jan-17	VC5	40-45	4	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
1394	04-Jan-17	VC5	40-45	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	articular surface		
1395	04-Jan-17	VC5	40-45	1	Unidentified fish	unid				100	fragment		cartilaginous fish - dogfish, ratfish or skate likely; 2 piece refit
1396	04-Jan-17	VC5	40-45	10	Unidentified fish	unid				100	fragments		
1397	04-Jan-17	VC5	45-50	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1398	04-Jan-17	VC5	45-50	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
1399	04-Jan-17	VC5	45-50	1	Engraulis mordax (N. anchovy)	species	vertebra			100	effectively complete		
1400	04-Jan-17	VC5	45-50	1	Sebastes (Rockfish)	genus	premaxillary			100	fragment		
1401	04-Jan-17	VC5	45-50	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1402	04-Jan-17	VC5	45-50	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1403	04-Jan-17	VC5	45-50	15	Unidentified fish	unid				100	fragments		
1404	04-Jan-17	VC5	45-50	2	Unidentified fish	unid				100	fragments	2	
1405	04-Jan-17	VC5	50-55	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	x-small		100	effectively complete		
1406	04-Jan-17	VC5	50-55	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	x-small		100	half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1407	04-Jan-17	VC5	50-55	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	x-small		100	half		
1408	04-Jan-17	VC5	50-55	1	Clupea pallasii, (Pacific herring)	species	ultimate vertebra	x-small		100	effectively complete		
1409	04-Jan-17	VC5	50-55	1	Clupea pallasii, (Pacific herring)	species	epural/hypural	x-small		100	effectively complete		
1410	04-Jan-17	VC5	50-55	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
1411	04-Jan-17	VC5	50-55	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1412	04-Jan-17	VC5	50-55	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments		
1413	04-Jan-17	VC5	50-55	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1414	04-Jan-17	VC5	50-55	1	Sebastes (Rockfish)	genus	vertebra			100	fragment		possibly showing butchery-odd fragment pattern
1415	04-Jan-17	VC5	50-55	2	Unidentified fish	unid				100	fragments		2 piece refit
1416	04-Jan-17	VC5	55-60	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	more than half		
1417	04-Jan-17	VC5	55-60	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1418	04-Jan-17	VC5	55-60	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete	1	
1419	04-Jan-17	VC5	55-60	1	Sebastes (Rockfish)	genus	premaxillary			100	fragment		
1420	04-Jan-17	VC5	55-60	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1421	04-Jan-17	VC5	55-60	1	Sebastes (Rockfish)	genus	premaxillary			100	fragment	1	
1422	04-Jan-17	VC5	55-60	1	Unidentified mammal	unid				100	fragment		
1423	04-Jan-17	VC5	55-60	1	Unidentified mammal	unid				75	fragment		
1424	04-Jan-17	VC5	55-60	29	Unidentified fish	unid				100	fragments		
1425	04-Jan-17	VC5	55-60	2	Unidentified fish	unid				100	fragments	2	
1426	04-Jan-17	VC5	55-60	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1427	04-Jan-17	VC5	55-60	1	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid			100	fragment		
1428	04-Jan-17	VC5	55-60	1	Oncorhynchus (Pacific Salmon)	genus	spinal process			100	articular surface		
1429	04-Jan-17	VC5	55-60	1	Oncorhynchus (Pacific Salmon)	genus	pectoral fin ray			100	articular surface		
1430	04-Jan-17	VC5	60-65	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	x-small		100	more than half		
1431	04-Jan-17	VC5	60-65	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	x-small		100	effectively complete		
1432	04-Jan-17	VC5	60-65	1	Sebastes (Rockfish)	genus	mesopterygoid			100	effectively complete		
1433	04-Jan-17	VC5	60-65	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
1434	04-Jan-17	VC5	60-65	24	Unidentified fish	unid				100	fragments		
1435	04-Jan-17	VC5	65-70	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1436	04-Jan-17	VC5	65-70	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
1437	04-Jan-17	VC5	65-70	1	Clupea pallasii, (Pacific herring)	species	preorbital		left	100	fragment		
1438	04-Jan-17	VC5	65-70	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1439	04-Jan-17	VC5	65-70	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
1440	04-Jan-17	VC5	65-70	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1441	04-Jan-17	VC5	65-70	1	Hexagrammos, (Greenling)	genus	radial			100	effectively complete		
1442	04-Jan-17	VC5	65-70	1	Hexagrammos, (Greenling)	genus	epihyal			100	fragments		2 piece refit
1443	04-Jan-17	VC5	65-70	1	Hexagrammos, (Greenling)	genus	supracleithrum			100	effectively complete		
1444	04-Jan-17	VC5	65-70	13	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1445	04-Jan-17	VC5	70-73	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1446	04-Jan-17	VC5	70-73	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	x-small		100	effectively complete		
1447	04-Jan-17	VC5	70-73	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	x-small		100	more than half		
1448	04-Jan-17	VC5	70-73	1	Clupea pallasii, (Pacific herring)	species	articular		right	100	articular surface		
1449	04-Jan-17	VC5	70-73	1	Clupea pallasii, (Pacific herring)	species	gillraker			100	effectively complete		
1450	04-Jan-17	VC5	70-73	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
1451	04-Jan-17	VC5	70-73	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1452	04-Jan-17	VC5	70-73	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1453	04-Jan-17	VC5	70-73	1	Squalidae (Dogfish)	genus	vertebra			100	half		
1454	04-Jan-17	VC5	70-73	8	Unidentified fish	unid				100	fragments		
1455	04-Jan-17	VC5	70-73	3	Unidentified mammal	unid				75	fragments		
1456	04-Jan-17	VC5	73-74	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	more than half		
1457	04-Jan-17	VC5	73-74	1	Clupea pallasii, (Pacific herring)	species	hyomandibular		right	100	fragment		
1458	04-Jan-17	VC5	73-74	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1459	04-Jan-17	VC5	73-74	6	Unidentified fish	unid				100	fragments		
1460	04-Jan-17	VC5	73-74	2	Odocoileus (North american deer)	genus	distal phalanx			100	fragments		2 piece refit
1461	04-Jan-17	VC5	73-74	1	Gadus chalcogrammus ([Alaskan] walleye pollock)	species	vomer			100	fragment		
1462	04-Jan-17	VC5	74-80	1	Clupea pallasii, (Pacific herring)	species	dentary			100	fragment		
1463	04-Jan-17	VC5	74-80	1	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid			100	fragment		
1464	04-Jan-17	VC5	74-80	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
1465	04-Jan-17	VC5	74-80	14	Unidentified fish	unid				100	fragments		
1466	04-Jan-17	VC5	74-80	1	Unidentified fish	unid				100	fragment	1	
1467	05-Jan-17	VC5	85-90	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1468	05-Jan-17	VC5	85-90	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	more than half		
1469	05-Jan-17	VC5	85-90	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
1470	05-Jan-17	VC5	85-90	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments		
1471	05-Jan-17	VC5	85-90	1	Anoplopoma fimbria (Sablefish)	species	quadrate			100	fragment		
1472	05-Jan-17	VC5	85-90	1	Sebastes (Rockfish)	genus	epiotic			100	fragment		
1473	05-Jan-17	VC5	85-90	2	Unidentified mammal	unid				100	fragments		
1474	05-Jan-17	VC5	85-90	2	Unidentified mammal	unid				100	fragments	2	
1475	05-Jan-17	VC5	85-90	10	Unidentified fish	unid				100	fragments		
1476	05-Jan-17	VC5	85-90	3	Unidentified fish	unid				100	fragments		
1477	06-Jan-17	VC5	90-95	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
1478	06-Jan-17	VC5	90-95	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1479	06-Jan-17	VC5	90-95	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	effectively complete		
1480	06-Jan-17	VC5	90-95	8	Unidentified fish	unid				100	fragments		
1481	06-Jan-17	VC5	90-95	2	Unidentified fish	unid				100	fragments	2	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1482	06-Jan-17	VC5	95-100	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
1483	06-Jan-17	VC5	95-100	1	Oncorhynchus (Pacific Salmon)	genus	pectoral fin ray			100	fragment		
1484	06-Jan-17	VC5	95-100	21	Unidentified fish	unid				100	fragments		
1485	06-Jan-17	VC5	95-100	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
1486	06-Jan-17	VC5	100-105	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1487	06-Jan-17	VC5	100-105	9	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	x-small		100	effectively complete		
1488	06-Jan-17	VC5	100-105	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	more than half		
1489	06-Jan-17	VC5	100-105	5	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1490	06-Jan-17	VC5	100-105	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	x-small		100	effectively complete		
1491	06-Jan-17	VC5	100-105	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	more than half		
1492	06-Jan-17	VC5	100-105	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	half		
1493	06-Jan-17	VC5	100-105	1	Clupea pallasii, (Pacific herring)	species	maxillary			100	more than half		
1494	06-Jan-17	VC5	100-105	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	effectively complete		
1495	06-Jan-17	VC5	100-105	1	Clupea pallasii, (Pacific herring)	species	ultimate vertebra			100	effectively complete		
1496	06-Jan-17	VC5	100-105	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
1497	06-Jan-17	VC5	100-105	1	Clupea pallasii, (Pacific herring)	species	hypural/epural			100	effectively complete		
1498	06-Jan-17	VC5	100-105	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1499	06-Jan-17	VC5	100-105	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1500	06-Jan-17	VC5	100-105	2	Unidentified mammal	unid				100	fragments		
1501	06-Jan-17	VC5	100-105	2	Sebastes (Rockfish)	genus	altas			100	fragments		
1502	06-Jan-17	VC5	100-105	1	Sebastes (Rockfish)	genus	maxillary			100	articular surface		
1503	06-Jan-17	VC5	100-105	1	Sebastes (Rockfish)	genus	hypocorocoid			100	fragments		2 pc refit
1504	06-Jan-17	VC5	100-105	40	Unidentified fish	unid				100	fragments		
1505	06-Jan-17	VC5	100-105	1	Unidentified fish	unid				100	fragment	1	
1506	06-Jan-17	VC5	105-110	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1507	06-Jan-17	VC5	105-110	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1508	06-Jan-17	VC5	105-110	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	x-small		100	effectively complete		
1509	06-Jan-17	VC5	105-110	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
1510	06-Jan-17	VC5	105-110	1	Clupea pallasii, (Pacific herring)	species	maxillary			100	fragment		
1511	06-Jan-17	VC5	105-110	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
1512	06-Jan-17	VC5	105-110	4	Unidentified mammal	unid				100	fragments		
1513	06-Jan-17	VC5	105-110	24	Unidentified fish	unid				100	fragments		
1514	06-Jan-17	VC5	110-115	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1515	06-Jan-17	VC5	110-115	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1516	06-Jan-17	VC5	110-115	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	more than half		
1517	06-Jan-17	VC5	110-115	2	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1518	06-Jan-17	VC5	110-115	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
1519	06-Jan-17	VC5	110-115	1	Clupea pallasii, (Pacific herring)	species	opisphotic			100	fragment		
1520	06-Jan-17	VC5	110-115	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1521	06-Jan-17	VC5	110-115	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	fragment		
1522	06-Jan-17	VC5	110-115	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	fragment		
1523	06-Jan-17	VC5	110-115	1	Sebastes (Rockfish)	genus	radial			100	effectively complete		
1524	06-Jan-17	VC5	110-115	1	Sebastes (Rockfish)	genus	vertebra			100	more than half		
1525	06-Jan-17	VC5	110-115	1	Hexagrammos, (Greenling)	genus	palatine			100	fragment		
1526	06-Jan-17	VC5	110-115	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
1527	06-Jan-17	VC5	110-115	20	Unidentified fish	unid				100	fragments		
1528	06-Jan-17	VC5	115-120	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1529	06-Jan-17	VC5	115-120	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1530	06-Jan-17	VC5	115-120	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
1531	06-Jan-17	VC5	115-120	1	Sebastes (Rockfish)	genus	vertebrae			100	more than half		
1532	06-Jan-17	VC5	115-120	1	Unidentified mammal	unid				100	fragment		
1533	06-Jan-17	VC5	115-120	1	Unidentified mammal	unid				100	fragment	1	
1534	06-Jan-17	VC5	115-120	7	Unidentified fish	unid				100	fragments		
1535	06-Jan-17	VC5	120-125	9	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	x-small		100	effectively complete		
1536	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1537	06-Jan-17	VC5	120-125	18	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	x-small		100	effectively complete		
1538	06-Jan-17	VC5	120-125	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1539	06-Jan-17	VC5	120-125	4	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
1540	06-Jan-17	VC5	120-125	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	less than half		
1541	06-Jan-17	VC5	120-125	2	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
1542	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	penultimate vertebra			100	effectively complete		
1543	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	preorbital		left	100	fragment		
1544	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	preorbital		right	100	fragment		
1545	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	ceratohyal		right	100	fragment		
1546	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	epihyal		left	100	fragment		
1547	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	opisthotic			100	effectively complete		
1548	06-Jan-17	VC5	120-125	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
1549	06-Jan-17	VC5	120-125	1	Engraulis mordax (N. anchovy)	species	vertebra			100	effectively complete		
1550	06-Jan-17	VC5	120-125	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1551	06-Jan-17	VC5	120-125	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1552	06-Jan-17	VC5	120-125	1	Sebastes (Rockfish)	genus	neural arch			100	fragment		
1553	06-Jan-17	VC5	120-125	1	Hexagrammos, (Greenling)	genus	epihyal			100	effectively complete		
1554	06-Jan-17	VC5	120-125	36	Unidentified fish	unid				100	fragments		
1555	06-Jan-17	VC5	120-125	2	Pleuronectiformes (flatfish)	order	vertebrae			100	effectively complete		likely english sole
1556	06-Jan-17	VC5	125-130	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1557	06-Jan-17	VC5	125-130	1	Clupea pallasii, (Pacific herring)	species	altas	small		100	effectively complete		
1558	06-Jan-17	VC5	125-130	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	half		
1559	06-Jan-17	VC5	125-130	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	x-small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1560	06-Jan-17	VC5	125-130	3	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
1561	06-Jan-17	VC5	125-130	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1562	06-Jan-17	VC5	125-130	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	effectively complete		
1563	06-Jan-17	VC5	125-130	1	Engraulis mordax (N. anchovy)	species	vertebra			100	effectively complete		
1564	06-Jan-17	VC5	125-130	1	Hydrolagus colliei (spotted ratfish)	species	tooth			100	fragment		
1565	06-Jan-17	VC5	125-130	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
1566	06-Jan-17	VC5	125-130	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
1567	06-Jan-17	VC5	125-130	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1568	06-Jan-17	VC5	125-130	1	Sebastes (Rockfish)	genus	radial			100	effectively complete		
1569	06-Jan-17	VC5	125-130	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1570	06-Jan-17	VC5	125-130	1	Unidentified mammal	unid				100	fragment	1	
1571	06-Jan-17	VC5	125-130	2	Gadus (Pacific cod and pollock)	genus	vertebrae			100	fragments		likely 2 piece from the same vertebrea
1572	06-Jan-17	VC5	125-130	5	Unidentified fish	unid				100	fragments		
1573	06-Jan-17	VC5	130-135	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1574	06-Jan-17	VC5	130-135	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1575	06-Jan-17	VC5	130-135	1	Clupea pallasii, (Pacific herring)	species	ceratohyal		right	100	fragment		
1576	06-Jan-17	VC5	130-135	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1577	06-Jan-17	VC5	130-135	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
1578	06-Jan-17	VC5	130-135	1	Sebastes (Rockfish)	genus	post temporal			100	effectively complete		
1579	06-Jan-17	VC5	130-135	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
1580	06-Jan-17	VC5	130-135	1	Hexagrammos, (Greenling)	genus	epihyal			100	effectively complete		
1581	06-Jan-17	VC5	130-135	1	Hexagrammos, (Greenling)	genus	vertebra			100	less than half		
1582	06-Jan-17	VC5	130-135	4	Unidentified mammal	unid				100	fragments		
1583	06-Jan-17	VC5	130-135	2	Unidentified mammal	unid				100	fragments		
1584	06-Jan-17	VC5	130-135	17	Unidentified fish	unid				100	fragments		
1585	06-Jan-17	VC5	130-135	1	Unidentified fish	unid				100	fragment		
1586	06-Jan-17	VC5	135-140	4	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
1587	06-Jan-17	VC5	135-140	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	x-small		100	effectively complete		
1588	06-Jan-17	VC5	135-140	4	Clupea pallasii, (Pacific herring)	species	vertebrae			100	more than half		
1589	06-Jan-17	VC5	135-140	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1590	06-Jan-17	VC5	135-140	1	Sebastes (Rockfish)	genus	epihyal	small		100	articular surface		
1591	06-Jan-17	VC5	135-140	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
1592	06-Jan-17	VC5	135-140	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragment		
1593	06-Jan-17	VC5	135-140	1	Canis familiaris (Domestic dog)	species	innominate		right	100	fragment		
1594	06-Jan-17	VC5	135-140	42	Unidentified mammal	unid				100	fragments		
1595	06-Jan-17	VC5	135-140	1	Unidentified mammal	unid				100	fragment		
1596	06-Jan-17	VC5	135-140	15	Unidentified fish	unid				100	fragments		
1597	09-Jan-17	VC5	140-145	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1598	09-Jan-17	VC5	140-145	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1599	09-Jan-17	VC5	140-145	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
1600	09-Jan-17	VC5	140-145	1	Clupea pallasii, (Pacific herring)	species	prootic			100	fragment		
1601	09-Jan-17	VC5	140-145	1	Clupea pallasii, (Pacific herring)	species	supra occiptal			100	more than half		
1602	09-Jan-17	VC5	140-145	1	Clupea pallasii, (Pacific herring)	species	articular			100	fragment		
1603	09-Jan-17	VC5	140-145	1	Clupea pallasii, (Pacific herring)	species	urohyal			100	fragment		
1604	09-Jan-17	VC5	140-145	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	fragment		
1605	09-Jan-17	VC5	140-145	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1606	09-Jan-17	VC5	140-145	1	Sebastes (Rockfish)	genus	dentary			100	fragment		
1607	09-Jan-17	VC5	140-145	1	Sebastes (Rockfish)	genus	hypural			100	effectively complete		
1608	09-Jan-17	VC5	140-145	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1609	09-Jan-17	VC5	140-145	1	Hexagrammos, (Greenling)	genus	palatine			100	effectively complete		
1610	09-Jan-17	VC5	140-145	1	Unidentified mammal	unid				100	fragment		Bone chip
1611	09-Jan-17	VC5	140-145	6	Unidentified mammal	unid				100	fragments		
1612	09-Jan-17	VC5	140-145	4	Unidentified mammal	unid				100	fragments	4	
1613	09-Jan-17	VC5	140-145	38	Unidentified fish	unid				100	fragments		
1614	09-Jan-17	VC5	145-150	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	large		100	effectively complete		
1615	09-Jan-17	VC5	145-150	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1616	09-Jan-17	VC5	145-150	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1617	09-Jan-17	VC5	145-150	6	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
1618	09-Jan-17	VC5	145-150	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1619	09-Jan-17	VC5	145-150	1	Clupea pallasii, (Pacific herring)	species	ultimate vertebra			100	fragment		
1620	09-Jan-17	VC5	145-150	1	Clupea pallasii, (Pacific herring)	species	epiotic			100	effectively complete		
1621	09-Jan-17	VC5	145-150	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1622	09-Jan-17	VC5	145-150	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	articular surface		
1623	09-Jan-17	VC5	145-150	1	Hexagrammos, (Greenling)	genus	scapula			100	fragment		
1624	09-Jan-17	VC5	145-150	5	Unidentified mammal	unid				100	fragments		
1625	09-Jan-17	VC5	145-150	5	Unidentified mammal	unid				100	fragments	5	
1626	09-Jan-17	VC5	145-150	1	Unidentified large mammal	unid				100	fragment		likely deer-sized
1627	09-Jan-17	VC5	145-150	1	Castor canadensis (Beaver)	species	medial phallange-epiphasis			100	fragment		
1628	09-Jan-17	VC5	145-150	36	Unidentified fish	unid				100	fragments		
1629	09-Jan-17	VC5	145-150	2	Pleuronectiformes (flatfish)	order	branchial			75	fragments		
1630	09-Jan-17	VC5	150-155	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
1631	09-Jan-17	VC5	150-155	12	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1632	09-Jan-17	VC5	150-155	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1633	09-Jan-17	VC5	150-155	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	more than half		
1634	09-Jan-17	VC5	150-155	1	Clupea pallasii, (Pacific herring)	species	supra occiptal			100	effectively complete		
1635	09-Jan-17	VC5	150-155	1	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1636	09-Jan-17	VC5	150-155	3	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragments		
1637	09-Jan-17	VC5	150-155	1	Hippoglossus stenolepis (Pacific halibut)	species	vertebra	medium		100	effectively complete		eroded
1638	09-Jan-17	VC5	150-155	2	Unidentified mammal	unid				100	fragments		
1639	09-Jan-17	VC5	150-155	2	Unidentified mammal	unid				100	fragments	2	
1640	09-Jan-17	VC5	150-155	30	Unidentified fish	unid				100	fragments		
1641	10-Jan-17	VC5	155-160	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1642	10-Jan-17	VC5	155-160	1	Clupea pallasii, (Pacific herring)	species	atlas	small		100	effectively complete		
1643	10-Jan-17	VC5	155-160	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1644	10-Jan-17	VC5	155-160	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
1645	10-Jan-17	VC5	155-160	1	Clupea pallasii, (Pacific herring)	species	quadrate		right	100	effectively complete		
1646	10-Jan-17	VC5	155-160	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	effectively complete		
1647	10-Jan-17	VC5	155-160	1	Sebastes (Rockfish)	genus	gillraker			100	fragment		
1648	10-Jan-17	VC5	155-160	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1649	10-Jan-17	VC5	155-160	4	Unidentified mammal	unid				100	fragments		
1650	10-Jan-17	VC5	155-160	1	Unidentified bird	unid				100	fragment		
1651	10-Jan-17	VC5	155-160	1	Pleuronectiformes (flatfish)	order	exoccipital			100	effectively complete		likely English sole or rock sole
1652	10-Jan-17	VC5	155-160	58	Unidentified fish	unid				100	fragments		
1653	10-Jan-17	VC5	155-160	1	Unidentified fish	unid				100	fragment		
1654	10-Jan-17	VC5	160-165	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
1655	10-Jan-17	VC5	160-165	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
1656	10-Jan-17	VC5	160-165	8	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1657	10-Jan-17	VC5	160-165	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebrae			100	more than half		
1658	10-Jan-17	VC5	160-165	1	Oncorhynchus (Pacific Salmon)	genus	hypural 7/8			100	effectively complete		
1659	10-Jan-17	VC5	160-165	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1660	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	vertebra			100	more than half		
1661	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	spacer	large		100	effectively complete		
1662	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1663	10-Jan-17	VC5	160-165	2	Sebastes (Rockfish)	genus	ultimate vertebra			100	effectively complete		
1664	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
1665	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	hypohyal			100	more than half		
1666	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	suborbital 2			100	fragment		
1667	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	interhyal			100	complete		
1668	10-Jan-17	VC5	160-165	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
1669	10-Jan-17	VC5	160-165	1	Hexagrammos, (Greenling)	genus	quadrate		left	100	fragment		
1670	10-Jan-17	VC5	160-165	1	Hexagrammos, (Greenling)	genus	radial			100	effectively complete		
1671	10-Jan-17	VC5	160-165	1	Hexagrammos, (Greenling)	genus	premaxillary		left	100	fragment		
1672	10-Jan-17	VC5	160-165	1	Squalidae (Dogfish)	genus	vertebra			100	fragment		
1673	10-Jan-17	VC5	160-165	1	Ophiodon elongatus (lingcod)	species	hypohyal			100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1674	10-Jan-17	VC5	160-165	4	Unidentified mammal	unid				100	fragments		
1675	10-Jan-17	VC5	160-165	53	Unidentified fish	unid				100	fragments		
1676	10-Jan-17	VC5	165-170	1	Clupea pallasii, (Pacific herring)	species	hypohyal			100	effectively complete		
1677	10-Jan-17	VC5	165-170	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1678	10-Jan-17	VC5	165-170	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1679	10-Jan-17	VC5	165-170	1	Sebastes (Rockfish)	genus	pelvis		right	100	fragment		
1680	10-Jan-17	VC5	165-170	1	Sebastes (Rockfish)	genus	retroarticular		left	100	complete		
1681	10-Jan-17	VC5	165-170	1	Sebastes (Rockfish)	genus	vertebral process		left	100	fragment		
1682	10-Jan-17	VC5	165-170	1	Sebastes (Rockfish)	genus	vertebral process		right	100	fragment		
1683	10-Jan-17	VC5	165-170	1	Sebastes (Rockfish)	genus	pterotic			100	more than half		
1684	10-Jan-17	VC5	165-170	1	Sebastes (Rockfish)	genus	hypural			100	articular surface		
1685	10-Jan-17	VC5	165-170	14	Unidentified mammal	unid				100	fragments		
1686	10-Jan-17	VC5	165-170	1	Unidentified mammal	unid	podial			100	more than half		
1687	10-Jan-17	VC5	165-170	33	Unidentified fish	unid				100	fragments		
1688	10-Jan-17	VC5	170-175	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1689	10-Jan-17	VC5	170-175	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1690	10-Jan-17	VC5	170-175	2	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1691	10-Jan-17	VC5	170-175	3	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
1692	10-Jan-17	VC5	170-175	12	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1693	10-Jan-17	VC5	170-175	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1694	10-Jan-17	VC5	170-175	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	articular surface		
1695	10-Jan-17	VC5	170-175	2	Sebastes (Rockfish)	genus	ultimate vertebra			100	effectively complete		
1696	10-Jan-17	VC5	170-175	1	Sebastes (Rockfish)	genus	articular		right	100	articular surface		
1697	10-Jan-17	VC5	170-175	1	Sebastes (Rockfish)	genus	spacer			100	fragment		
1698	10-Jan-17	VC5	170-175	1	Sebastes (Rockfish)	genus	vertebral arch			100	fragment		
1699	10-Jan-17	VC5	170-175	1	Sebastes (Rockfish)	genus	maxillary		right	100	articular surface		
1700	10-Jan-17	VC5	170-175	2	Sebastes (Rockfish)	genus	basibranchial			100	effectively complete		
1701	10-Jan-17	VC5	170-175	1	Hexagrammos, (Greenling)	genus	epihyal			100	fragment		
1702	10-Jan-17	VC5	170-175	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	effectively complete		
1703	10-Jan-17	VC5	170-175	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragment		
1704	10-Jan-17	VC5	170-175	10	Unidentified mammal	unid				100	fragments		
1705	10-Jan-17	VC5	170-175	1	Unidentified mammal	unid				100	fragment		
1706	10-Jan-17	VC5	170-175	50	Unidentified fish	unid				100	fragments		
1707	10-Jan-17	VC5	170-175	3	Unidentified fish	unid				100	fragments		
1708	12-Jan-17	VC5	175-180	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small/medium		100	effectively complete		
1709	12-Jan-17	VC5	175-180	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1710	12-Jan-17	VC5	175-180	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1711	12-Jan-17	VC5	175-180	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	more than half		
1712	12-Jan-17	VC5	175-180	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1713	12-Jan-17	VC5	175-180	18	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1714	12-Jan-17	VC5	175-180	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1715	12-Jan-17	VC5	175-180	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
1716	12-Jan-17	VC5	175-180	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	effectively complete		
1717	12-Jan-17	VC5	175-180	3	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		1 likely 2 pc refit=1
1718	12-Jan-17	VC5	175-180	1	Hexagrammos, (Greenling)	genus	vomer			100	effectively complete		
1719	12-Jan-17	VC5	175-180	1	Hexagrammos, (Greenling)	genus	basioccipital			100	more than half		
1720	12-Jan-17	VC5	175-180	11	Unidentified mammal	unid				100	fragments		
1721	12-Jan-17	VC5	175-180	70	Unidentified fish	unid				100	fragments		
1722	12-Jan-17	VC5	175-180	2	Unidentified fish	unid				100	fragments	2	
1723	12-Jan-17	VC5	180-185	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1724	12-Jan-17	VC5	180-185	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1725	12-Jan-17	VC5	180-185	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		
1726	12-Jan-17	VC5	180-185	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1727	12-Jan-17	VC5	180-185	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1728	12-Jan-17	VC5	180-185	2	Sebastes (Rockfish)	genus	vertebrae			100	effectively complete		
1729	12-Jan-17	VC5	180-185	2	Sebastes (Rockfish)	genus	interhaemal spine			100	effectively complete		
1730	12-Jan-17	VC5	180-185	1	Sebastes (Rockfish)	genus	hypural			100	effectively complete		
1731	12-Jan-17	VC5	180-185	1	Sebastes (Rockfish)	genus	premaxillary			100	fragment		
1732	12-Jan-17	VC5	180-185	1	Sebastes (Rockfish)	genus	gillraker			100	complete		
1733	12-Jan-17	VC5	180-185	1	Sebastes (Rockfish)	genus	basioccipital			100	fragment		
1734	12-Jan-17	VC5	180-185	1	Hexagrammos, (Greenling)	genus	prootic			100	effectively complete		
1735	12-Jan-17	VC5	180-185	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1736	12-Jan-17	VC5	180-185	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragment		
1737	12-Jan-17	VC5	180-185	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		starry flounder type
1738	12-Jan-17	VC5	180-185	1	Squalidae (Dogfish)	genus	vertebra			100	fragment		
1739	12-Jan-17	VC5	180-185	2	Unidentified mammal	unid				100	fragments		
1740	12-Jan-17	VC5	180-185	36	Unidentified fish	unid				100	fragments		
1741	12-Jan-17	VC5	180-185	1	Unidentified fish	unid				100	fragment	1	
1742	12-Jan-17	VC5	185-190	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1743	12-Jan-17	VC5	185-190	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1744	12-Jan-17	VC5	185-190	1	Sebastes (Rockfish)	genus	post tepmoral		right	100	fragment		
1745	12-Jan-17	VC5	185-190	1	Sebastes (Rockfish)	genus	pelvis		right	100	fragment		
1746	12-Jan-17	VC5	185-190	1	Sebastes (Rockfish)	genus	premaxillary		right	100	fragment		
1747	12-Jan-17	VC5	185-190	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1748	12-Jan-17	VC5	185-190	1	Sebastes (Rockfish)	genus	atlas			100	half		
1749	12-Jan-17	VC5	185-190	3	Unidentified mammal	unid				100	fragments		
1750	12-Jan-17	VC5	185-190	35	Unidentified fish	unid				100	fragments		
1751	12-Jan-17	VC5	190-195	13	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1752	12-Jan-17	VC5	190-195	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
1753	12-Jan-17	VC5	190-195	1	Sebastes (Rockfish)	genus	atlas			100	effectively complete		
1754	12-Jan-17	VC5	190-195	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1755	12-Jan-17	VC5	190-195	1	Sebastes (Rockfish)	genus	opisthotic			100	effectively complete		
1756	12-Jan-17	VC5	190-195	1	Sebastes (Rockfish)	genus	hypural			100	effectively complete		
1757	12-Jan-17	VC5	190-195	1	Sebastes (Rockfish)	genus	supracleithrum		right	100	articular surface		
1758	12-Jan-17	VC5	190-195	4	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1759	12-Jan-17	VC5	190-195	1	Hexagrammos, (Greenling)	genus	post tepmoral		right	100	articular surface		
1760	12-Jan-17	VC5	190-195	1	Squalidae (Dogfish)	genus	vertebra			100	half		
1761	12-Jan-17	VC5	190-195	1	Squalidae (Dogfish)	genus	vertebra			100	fragment		
1762	12-Jan-17	VC5	190-195	2	Unidentified mammal	unid				100	fragments		
1763	12-Jan-17	VC5	190-195	66	Unidentified fish	unid				100	fragments		
1764	12-Jan-17	VC5	190-195	1	Pleuronectiformes (flatfish)	order	maxillary			100	fragment		
1765	12-Jan-17	VC5	195-200	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	large		100	effectively complete		looks like sardine-sized
1766	12-Jan-17	VC5	195-200	1	Clupea pallasii, (Pacific herring)	species	articular			100	articular surface		
1767	12-Jan-17	VC5	195-200	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	half		
1768	12-Jan-17	VC5	195-200	12	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1769	12-Jan-17	VC5	195-200	4	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1770	12-Jan-17	VC5	195-200	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
1771	12-Jan-17	VC5	195-200	1	Sebastes (Rockfish)	genus	quadrate		left	100	fragment	1	
1772	12-Jan-17	VC5	195-200	1	Hexagrammos, (Greenling)	genus	radial			100	effectively complete		
1773	12-Jan-17	VC5	195-200	3	Unidentified mammal	unid				100	fragments		
1774	12-Jan-17	VC5	195-200	32	Unidentified fish	unid				100	fragments		
1775	12-Jan-17	VC5	200-205	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
1776	12-Jan-17	VC5	200-205	13	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1777	12-Jan-17	VC5	200-205	1	Sebastes (Rockfish)	genus	basioccipital			100	fragment		
1778	12-Jan-17	VC5	200-205	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1779	12-Jan-17	VC5	200-205	1	Sebastes (Rockfish)	genus	hypural			100	fragment		
1780	12-Jan-17	VC5	200-205	1	Sebastes (Rockfish)	genus	hypohyal			100	fragment		
1781	12-Jan-17	VC5	200-205	1	Sebastes (Rockfish)	genus	ulimate vertebra			100	effectively complete		
1782	12-Jan-17	VC5	200-205	5	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1783	12-Jan-17	VC5	200-205	1	Hexagrammos, (Greenling)	genus	epural/hypural			100	fragment		
1784	12-Jan-17	VC5	200-205	1	Hexagrammos, (Greenling)	genus	epihyal			100	fragment		
1785	12-Jan-17	VC5	200-205	6	Unidentified mammal	unid				100	fragments		
1786	12-Jan-17	VC5	200-205	42	Unidentified fish	unid				100	fragments		
1787	12-Jan-17	VC5	200-205	1	Unidentified fish	unid				100	fragment	1	
1788	12-Jan-17	VC5	200-205	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		
1789	12-Jan-17	VC5	205-208	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
1790	12-Jan-17	VC5	205-208	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1791	12-Jan-17	VC5	205-208	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1792	12-Jan-17	VC5	205-208	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1793	12-Jan-17	VC5	205-208	1	Sebastes (Rockfish)	genus	articular		left	100	articular surface		
1794	12-Jan-17	VC5	205-208	1	Sebastes (Rockfish)	genus	atlas			100	more than half		
1795	12-Jan-17	VC5	205-208	1	Sebastes (Rockfish)	genus	hyomandibular			100	fragment		
1796	12-Jan-17	VC5	205-208	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		
1797	12-Jan-17	VC5	205-208	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1798	12-Jan-17	VC5	205-208	2	Unidentified mammal	unid				100	fragments		
1799	12-Jan-17	VC5	205-208	29	Unidentified fish	unid				100	fragments		
1800	12-Jan-17	VC5	205-208	1	Unidentified fish	unid				100	fragment	1	
1801	12-Jan-17	VC5	208-214	4	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
1802	12-Jan-17	VC5	208-214	2	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1803	12-Jan-17	VC5	208-214	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
1804	12-Jan-17	VC5	208-214	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1805	12-Jan-17	VC5	208-214	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1806	12-Jan-17	VC5	208-214	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1807	12-Jan-17	VC5	208-214	1	Sebastes (Rockfish)	genus	radial			100	effectively complete		
1808	12-Jan-17	VC5	208-214	1	Sebastes (Rockfish)	genus	quadrate			100	fragment		
1809	12-Jan-17	VC5	208-214	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
1810	12-Jan-17	VC5	208-214	2	Unidentified mammal	unid				100	fragments		
1811	12-Jan-17	VC5	208-214	1	Squalidae (Dogfish)	genus	vertebra			100	fragment		
1812	12-Jan-17	VC5	208-214	31	Unidentified fish	unid				100	fragments		
1813	12-Jan-17	VC5	208-214	3	Unidentified fish	unid				100	fragments		
1814	12-Jan-17	VC5	214-220	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1815	12-Jan-17	VC5	214-220	2	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
1816	12-Jan-17	VC5	214-220	14	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1817	12-Jan-17	VC5	214-220	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
1818	12-Jan-17	VC5	214-220	2	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete		
1819	12-Jan-17	VC5	214-220	4	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1820	12-Jan-17	VC5	214-220	2	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
1821	12-Jan-17	VC5	214-220	3	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
1822	12-Jan-17	VC5	214-220	1	Clupea pallasii, (Pacific herring)	species	opisthotic			100	effectively complete		
1823	12-Jan-17	VC5	214-220	1	Clupea pallasii, (Pacific herring)	species	ceratohyal			100	fragment		
1824	12-Jan-17	VC5	214-220	1	Clupea pallasii, (Pacific herring)	species	preorbital			100	fragment		
1825	12-Jan-17	VC5	214-220	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	complete		
1826	12-Jan-17	VC5	214-220	21	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1827	12-Jan-17	VC5	214-220	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
1828	12-Jan-17	VC5	214-220	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1829	12-Jan-17	VC5	214-220	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1830	12-Jan-17	VC5	214-220	1	Sebastes (Rockfish)	genus	premaxillary		left	100	effectively complete		
1831	12-Jan-17	VC5	214-220	1	Sebastes (Rockfish)	genus	premaxillary		left	100	fragment		
1832	12-Jan-17	VC5	214-220	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
1833	12-Jan-17	VC5	214-220	1	Sebastes (Rockfish)	genus	quadrate		left	100	articular surface		
1834	12-Jan-17	VC5	214-220	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1835	12-Jan-17	VC5	214-220	3	Unidentified mammal	unid				100	fragments		
1836	12-Jan-17	VC5	214-220	82	Unidentified fish	unid				100	fragments		
1837	12-Jan-17	VC5	214-220	1	Unidentified fish	unid				100	fragment	1	
1838	12-Jan-17	VC5	214-220	1	Hexagrammos, (Greenling)	genus	retroarticular			100	effectively complete		
1839	12-Jan-17	VC5	214-220	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		
1840	12-Jan-17	VC5	214-220	1	Sebastes (Rockfish)	genus	supraoccipital			100	effectively complete		
1841	13-Jan-17	VC5	220-225	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1842	13-Jan-17	VC5	220-225	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	half		
1843	13-Jan-17	VC5	220-225	10	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1844	13-Jan-17	VC5	220-225	5	Clupea pallasii, (Pacific herring)	species	vertebrae			100	more than half		
1845	13-Jan-17	VC5	220-225	4	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
1846	13-Jan-17	VC5	220-225	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1847	13-Jan-17	VC5	220-225	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	more than half		
1848	13-Jan-17	VC5	220-225	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1849	13-Jan-17	VC5	220-225	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
1850	13-Jan-17	VC5	220-225	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1851	13-Jan-17	VC5	220-225	1	Sebastes (Rockfish)	genus	ulimate vertebra			100	effectively complete		
1852	13-Jan-17	VC5	220-225	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1853	13-Jan-17	VC5	220-225	1	Sebastes (Rockfish)	genus	articular	small	right	100	articular surface		
1854	13-Jan-17	VC5	220-225	1	Sebastes (Rockfish)	genus	hypural			100	effectively complete		
1855	13-Jan-17	VC5	220-225	1	Sebastes (Rockfish)	genus	vertebral arch			100	fragment		
1856	13-Jan-17	VC5	220-225	1	Sebastes (Rockfish)	genus	hyomandibular	small	right	100	fragment		
1857	13-Jan-17	VC5	220-225	1	Hexagrammos, (Greenling)	genus	cleithrum			100	fragment		
1858	13-Jan-17	VC5	220-225	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1859	13-Jan-17	VC5	220-225	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
1860	13-Jan-17	VC5	220-225	1	Hexagrammos, (Greenling)	genus	ulimate vertebra			100	effectively complete		
1861	13-Jan-17	VC5	220-225	1	Sebastes (Rockfish)	genus	hypural			100	effectively complete		
1862	13-Jan-17	VC5	220-225	1	Thaleichthys pacificus (Eulachon)	species	abdominal vertebrae			100	effectively complete		pulled out of <2mm basin of debris
1863	13-Jan-17	VC5	220-225	50	Unidentified fish	unid				100	fragments		
1864	13-Jan-17	VC5	220-225	1	Pleuronectiformes (flatfish)	order	cleithrum			75	fragment		
1865	15-Jan-17	VC5	225-230	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1866	15-Jan-17	VC5	225-230	7	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1867	15-Jan-17	VC5	225-230	2	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1868	15-Jan-17	VC5	225-230	1	Clupea pallasii, (Pacific herring)	species	post tepmoral			100	fragment		
1869	15-Jan-17	VC5	225-230	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1870	15-Jan-17	VC5	225-230	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1871	15-Jan-17	VC5	225-230	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	articular surface		
1872	15-Jan-17	VC5	225-230	1	Sebastes (Rockfish)	genus	interhaemal spine 1 and 3			100	fragment		interhaemal spine 3 is fragmented, interhaemal spine 1 is complete; spine 1 and 3 are connected through articulation
1873	15-Jan-17	VC5	225-230	2	Sebastes (Rockfish)	genus	vertebrae			100	more than half		
1874	15-Jan-17	VC5	225-230	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
1875	15-Jan-17	VC5	225-230	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
1876	15-Jan-17	VC5	225-230	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1877	15-Jan-17	VC5	225-230	1	Sebastes (Rockfish)	genus	supracleithrum		left	100	articular surface		
1878	15-Jan-17	VC5	225-230	2	Sebastes (Rockfish)	genus	maxillary			100	articular surface		likey articulate because no articulation/portion seen twice and same side/relative size
1879	15-Jan-17	VC5	225-230	1	Sebastes (Rockfish)	genus	exoccipital			100	more than half		
1880	15-Jan-17	VC5	225-230	1	Sebastes (Rockfish)	genus	pelvis		right	100	fragment		
1881	15-Jan-17	VC5	225-230	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	effectively complete		
1882	15-Jan-17	VC5	225-230	4	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1883	15-Jan-17	VC5	225-230	1	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	effectively complete		
1884	15-Jan-17	VC5	225-230	1	Hexagrammos, (Greenling)	genus	hypohyal			100	effectively complete		
1885	15-Jan-17	VC5	225-230	1	Hexagrammos, (Greenling)	genus	dentary		left	100	fragment		
1886	15-Jan-17	VC5	225-230	1	Hexagrammos, (Greenling)	genus	radial			100	effectively complete		
1887	15-Jan-17	VC5	225-230	1	Hexagrammos, (Greenling)	genus	premaxillary		left	100	fragment		
1888	15-Jan-17	VC5	225-230	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragment		
1889	15-Jan-17	VC5	225-230	1	Unidentified mammal	unid				100	fragment		artifact; worked mammal bone EjTa-13:134
1890	15-Jan-17	VC5	225-230	1	Unidentified mammal	unid				100	fragment		
1891	15-Jan-17	VC5	225-230	67	Unidentified fish	unid				100	fragments		
1892	15-Jan-17	VC5	230-235	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
1893	15-Jan-17	VC5	230-235	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1894	15-Jan-17	VC5	230-235	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1895	15-Jan-17	VC5	230-235	1	Thaleichthys pacificus (Eulachon)	species	vertebra			100	effectively complete		
1896	15-Jan-17	VC5	230-235	21	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1897	15-Jan-17	VC5	230-235	1	Oncorhynchus (Pacific Salmon)	genus	penultimate vertebra			100	effectively complete		
1898	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	premaxillary		left	100	fragments		3 pc refit
1899	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	exoccipital			100	fragment		
1900	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	hypercoracoid			100	fragment		
1901	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1902	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1903	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	hypohyal A			100	effectively complete		
1904	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	hypohyal B			100	effectively complete		
1905	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	hypural			100	effectively complete		
1906	15-Jan-17	VC5	230-235	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1907	15-Jan-17	VC5	230-235	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete	1	
1908	15-Jan-17	VC5	230-235	1	Hexagrammos, (Greenling)	genus	supracleithrum		right	100	articular surface		
1909	15-Jan-17	VC5	230-235	2	Unidentified mammal	unid				100	fragments		
1910	15-Jan-17	VC5	230-235	2	Unidentified fish	unid				100	fragments	2	
1911	15-Jan-17	VC5	230-235	65	Unidentified fish	unid				100	fragments		
1912	15-Jan-17	VC5	230-235	1	Sebastes (Rockfish)	genus	vomer			100	fragment		
1913	15-Jan-17	VC5	230-235	1	Gadus (Pacific cod and pollock)	genus	vertebra			75	effectively complete		
1914	15-Jan-17	VC5	235-240	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1915	15-Jan-17	VC5	235-240	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1916	15-Jan-17	VC5	235-240	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1917	15-Jan-17	VC5	235-240	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
1918	15-Jan-17	VC5	235-240	1	Oncorhynchus (Pacific Salmon)	genus	tooth			100	effectively complete		
1919	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
1920	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	exoccipital		left	100	effectively complete	1	
1921	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	exoccipital		right	100	effectively complete		
1922	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	vertebral arch			100	fragment		
1923	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	pterotic		right	100	fragment		
1924	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	vomer			100	fragment	1	scorched
1925	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	dentary		left	100	fragment	1	scorched
1926	15-Jan-17	VC5	235-240	1	Sebastes (Rockfish)	genus	hypercoracoid			100	fragment		
1927	15-Jan-17	VC5	235-240	3	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1928	15-Jan-17	VC5	235-240	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete	1	scorched
1929	15-Jan-17	VC5	235-240	1	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	effectively complete	1	calcined
1930	15-Jan-17	VC5	235-240	1	Hexagrammos, (Greenling)	genus	quadrate		left	100	articular surface		
1931	15-Jan-17	VC5	235-240	1	Hexagrammos, (Greenling)	genus	ultimate vertebra			100	effectively complete		
1932	15-Jan-17	VC5	235-240	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	more than half		
1933	15-Jan-17	VC5	235-240	1	Unidentified mammal	unid				100	fragment	1	
1934	15-Jan-17	VC5	235-240	83	Unidentified fish	unid				100	fragments		
1935	15-Jan-17	VC5	235-240	1	Unidentified fish	unid				100	fragment	1	
1936	15-Jan-17	VC5	240-245	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1937	15-Jan-17	VC5	240-245	1	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
1938	15-Jan-17	VC5	240-245	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1939	15-Jan-17	VC5	240-245	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
1940	15-Jan-17	VC5	240-245	1	Clupea pallasii, (Pacific herring)	species	ulimate vertebra			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1941	15-Jan-17	VC5	240-245	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
1942	15-Jan-17	VC5	240-245	1	Clupea pallasii, (Pacific herring)	species	dentary			100	fragment		
1943	15-Jan-17	VC5	240-245	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
1944	15-Jan-17	VC5	240-245	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1945	15-Jan-17	VC5	240-245	2	Hexagrammos, (Greenling)	genus	vertebrae			100	less than half		
1946	15-Jan-17	VC5	240-245	1	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	more than half		
1947	15-Jan-17	VC5	240-245	1	Hexagrammos, (Greenling)	genus	abdominal vertebra			100	effectively complete		
1948	15-Jan-17	VC5	240-245	1	Hexagrammos, (Greenling)	genus	caudal vertebrae			100	effectively complete		
1949	15-Jan-17	VC5	240-245	1	Hexagrammos, (Greenling)	genus	quadrate		right	100	articular surface		
1950	15-Jan-17	VC5	240-245	1	Hexagrammos, (Greenling)	genus	pterotic			100	effectively complete		
1951	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	vomer			100	fragment		
1952	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	quadrate		left	100	articular surface		
1953	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	maxillary		left	100	articular surface		
1954	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
1955	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	hypercoracoid		left	100	fragments		2 pc refit
1956	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
1957	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	pterotic			100	fragment		
1958	15-Jan-17	VC5	240-245	1	Sebastes (Rockfish)	genus	sphenotic			100	fragment		
1959	15-Jan-17	VC5	240-245	1	Pleuronectiformes (flatfish)	order	vertebral process			100	fragments		2 pc refit
1960	15-Jan-17	VC5	240-245	74	Unidentified fish	unid				100	fragments		
1961	19-Jan-17	VC5	265-270	48	Unidentified fish	unid				100	fragments		
1962	19-Jan-17	VC5	245-250	7	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1963	19-Jan-17	VC5	245-250	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	half		
1964	19-Jan-17	VC5	245-250	27	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1965	19-Jan-17	VC5	245-250	2	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		odd looking vertebra
1966	19-Jan-17	VC5	245-250	2	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
1967	19-Jan-17	VC5	245-250	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1968	19-Jan-17	VC5	245-250	2	Hexagrammos, (Greenling)	genus	vertebrae			100	effectively complete		
1969	19-Jan-17	VC5	245-250	10	Unidentified mammal	unid				100	fragments		
1970	19-Jan-17	VC5	245-250	1	Unidentified mammal	unid				100	fragment	1	
1971	19-Jan-17	VC5	245-250	47	Unidentified fish	unid				100	fragments		
1972	19-Jan-17	VC5	250-255	12	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1973	19-Jan-17	VC5	250-255	1	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
1974	19-Jan-17	VC5	250-255	8	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1975	19-Jan-17	VC5	250-255	2	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
1976	19-Jan-17	VC5	250-255	2	Clupea pallasii, (Pacific herring)	species	basioccipital			100	fragments		MNI=2
1977	19-Jan-17	VC5	250-255	1	Clupea pallasii, (Pacific herring)	species	preorbital			100	effectively complete		
1978	19-Jan-17	VC5	250-255	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	effectively complete		
1979	19-Jan-17	VC5	250-255	1	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
1980	19-Jan-17	VC5	250-255	1	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete		
1981	19-Jan-17	VC5	250-255	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
1982	19-Jan-17	VC5	250-255	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
1983	19-Jan-17	VC5	250-255	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
1984	19-Jan-17	VC5	250-255	3	Oncorhynchus (Pacific Salmon)	genus	hypural/epural			100	articular surface		
1985	19-Jan-17	VC5	250-255	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
1986	19-Jan-17	VC5	250-255	1	Sebastes (Rockfish)	genus	vomer			100	less than half		
1987	19-Jan-17	VC5	250-255	1	Hexagrammos, (Greenling)	genus	radial			100	effectively complete		
1988	19-Jan-17	VC5	250-255	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
1989	19-Jan-17	VC5	250-255	2	Unidentified mammal	unid				100	fragments		
1990	19-Jan-17	VC5	250-255	56	Unidentified fish	unid				100	fragments		
1991	19-Jan-17	VC5	250-255	2	Unidentified fish	unid				100	fragments	2	
1992	19-Jan-17	VC5	255-260	14	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
1993	19-Jan-17	VC5	255-260	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
1994	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
1995	19-Jan-17	VC5	255-260	34	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
1996	19-Jan-17	VC5	255-260	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
1997	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
1998	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	basioccipital			100	fragment		
1999	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	maxillary		right	100	articular surface		
2000	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	epiotic			100	effectively complete		
2001	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	articular			100	articular surface		
2002	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	epihyal		right	100	fragment		
2003	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	effectively complete		
2004	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	hyomandibular		left	100	fragment		
2005	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	supra cleithrum			100	effectively complete		
2006	19-Jan-17	VC5	255-260	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	effectively complete		
2007	19-Jan-17	VC5	255-260	6	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
2008	19-Jan-17	VC5	255-260	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2009	19-Jan-17	VC5	255-260	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
2010	19-Jan-17	VC5	255-260	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2011	19-Jan-17	VC5	255-260	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
2012	19-Jan-17	VC5	255-260	1	Sebastes (Rockfish)	genus	atlas			100	more than half		
2013	19-Jan-17	VC5	255-260	1	Sebastes (Rockfish)	genus	vomer			100	fragment		
2014	19-Jan-17	VC5	255-260	1	Sebastes (Rockfish)	genus	articular			100	articular surface		
2015	19-Jan-17	VC5	255-260	1	Sebastes (Rockfish)	genus	operculum			100	articular surface		
2016	19-Jan-17	VC5	255-260	1	Sebastes (Rockfish)	genus	inferior pharyneal			100	effectively complete		
2017	19-Jan-17	VC5	255-260	1	Hexagrammos, (Greenling)	genus	vertebra			100	less than half		
2018	19-Jan-17	VC5	255-260	3	Unidentified mammal	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2019	19-Jan-17	VC5	255-260	82	Unidentified fish	unid				100	fragments		
2020	19-Jan-17	VC5	255-260	1	Unidentified fish	unid				100	fragment	1	
2021	19-Jan-17	VC5	260-265	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2022	19-Jan-17	VC5	260-265	8	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2023	19-Jan-17	VC5	260-265	1	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
2024	19-Jan-17	VC5	260-265	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	effectively complete		
2025	19-Jan-17	VC5	260-265	1	Clupea pallasii, (Pacific herring)	species	ultimate vertebra	small		100	effectively complete		
2026	19-Jan-17	VC5	260-265	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2027	19-Jan-17	VC5	260-265	4	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2028	19-Jan-17	VC5	260-265	3	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragments		
2029	19-Jan-17	VC5	260-265	3	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
2030	19-Jan-17	VC5	260-265	3	Sebastes (Rockfish)	genus	vertebrae			100	effectively complete		
2031	19-Jan-17	VC5	260-265	3	Sebastes (Rockfish)	genus	vertebrae			100	more than half		
2032	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	atlas			100	less than half		
2033	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
2034	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	vertebral arch			100	fragments		3 pc refit
2035	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	palatine		left	100	fragment		
2036	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	supra cleithrum		right	100	effectively complete		
2037	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
2038	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	radial			100	fragment		
2039	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	hypohyal			100	effectively complete		
2040	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	suborbital			100	fragment		
2041	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	inferior pharyneal			100	fragment		
2042	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	premaxillary		right	100	fragment		
2043	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
2044	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	post temporal		right	100	effectively complete		
2045	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	post temporal		left	100	articular surface		
2046	19-Jan-17	VC5	260-265	1	Sebastes (Rockfish)	genus	dentary		left	100	fragment		
2047	19-Jan-17	VC5	260-265	111	Unidentified fish	unid				100	fragments		
2048	19-Jan-17	VC5	265-270	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2049	19-Jan-17	VC5	265-270	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2050	19-Jan-17	VC5	265-270	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	less than half		
2051	19-Jan-17	VC5	265-270	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2052	19-Jan-17	VC5	265-270	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2053	19-Jan-17	VC5	265-270	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
2054	19-Jan-17	VC5	265-270	1	Oncorhynchus (Pacific Salmon)	genus	radial			100	effectively complete		
2055	19-Jan-17	VC5	265-270	1	Oncorhynchus (Pacific Salmon)	genus	radial			100	fragmented		2 pc refit
2056	19-Jan-17	VC5	265-270	1	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
2057	19-Jan-17	VC5	265-270	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2058	19-Jan-17	VC5	265-270	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
2059	19-Jan-17	VC5	265-270	4	Unidentified mammal	unid				100	fragments		
2060	20-Jan-17	VC5	265-270	3	Pleuronectiformes (flatfish)	order	vertebral process			100	fragments		
2061	20-Jan-17	VC5	265-270	1	Hexagrammos, (Greenling)	genus	hypohyal B			100	effectively complete		
2062	20-Jan-17	VC5	265-270	1	Hexagrammos, (Greenling)	genus	opisthotic			100	effectively complete		
2063	20-Jan-17	VC5	270-275	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2064	20-Jan-17	VC5	270-275	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
2065	20-Jan-17	VC5	270-275	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
2066	20-Jan-17	VC5	270-275	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2067	20-Jan-17	VC5	270-275	2	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
2068	20-Jan-17	VC5	270-275	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebrae			100	effectively complete		
2069	20-Jan-17	VC5	270-275	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2070	20-Jan-17	VC5	270-275	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete	1	
2071	20-Jan-17	VC5	270-275	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2072	20-Jan-17	VC5	270-275	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
2073	20-Jan-17	VC5	270-275	1	Hexagrammos, (Greenling)	genus	vertebra			100	more than half		
2074	20-Jan-17	VC5	270-275	1	Hexagrammos, (Greenling)	genus	ultimate vertebra			100	effectively complete		
2075	20-Jan-17	VC5	270-275	1	Sebastes (Rockfish)	genus	epihyal			100	effectively complete		
2076	20-Jan-17	VC5	270-275	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
2077	20-Jan-17	VC5	270-275	1	Unidentified mammal	unid				100	fragments		
2078	20-Jan-17	VC5	270-275	1	Unidentified mammal	unid				100	fragments	1	
2079	20-Jan-17	VC5	270-275	12	Unidentified fish	unid				100	fragments		
2080	20-Jan-17	VC5	270-275	4	Unidentified fish	unid				100	fragments	4	
2081	20-Jan-17	VC5	275-280	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	less than half		
2082	20-Jan-17	VC5	275-280	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2083	20-Jan-17	VC5	275-280	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2084	20-Jan-17	VC5	275-280	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
2085	20-Jan-17	VC5	275-280	1	Hexagrammos, (Greenling)	genus	radial			100	fragment		
2086	20-Jan-17	VC5	275-280	1	Hexagrammos, (Greenling)	genus	parasphenoid			100	fragment		
2087	20-Jan-17	VC5	275-280	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
2088	20-Jan-17	VC5	275-280	5	Unidentified mammal	unid				100	fragments		
2089	20-Jan-17	VC5	275-280	18	Unidentified fish	unid				100	fragments		
2090	20-Jan-17	VC5	275-280	1	Unidentified fish	unid				100	fragment		
2091	20-Jan-17	VC5	280-285	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
2092	20-Jan-17	VC5	280-285	1	Clupea pallasii, (Pacific herring)	species	ceratohyal		left	100	fragment		
2093	20-Jan-17	VC5	280-285	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
2094	20-Jan-17	VC5	280-285	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2095	20-Jan-17	VC5	280-285	1	Hexagrammos, (Greenling)	genus	hypohyal			100	effectively complete		
2096	20-Jan-17	VC5	280-285	9	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2097	20-Jan-17	VC5	300-305	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2098	20-Jan-17	VC5	300-305	1	Clupea pallasii, (Pacific herring)	species	vertebra	small/medium		75	more than half		
2099	20-Jan-17	VC5	300-305	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
2100	20-Jan-17	VC5	300-305	23	Unidentified fish	unid				100	fragments		
2101	20-Jan-17	VC5	300-305	2	Unidentified fish	unid				100	fragments		
2102	20-Jan-17	VC5	305-310	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2103	20-Jan-17	VC5	305-310	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	more than half		
2104	20-Jan-17	VC5	305-310	1	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete		
2105	20-Jan-17	VC5	305-310	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
2106	20-Jan-17	VC5	305-310	1	Hexagrammos, (Greenling)	genus	quadrate		right	100	articular surface		
2107	20-Jan-17	VC5	305-310	1	Unidentified mammal	unid				100	fragment		
2108	20-Jan-17	VC5	305-310	34	Unidentified fish	unid				100	fragments		
2109	20-Jan-17	VC5	305-310	1	Unidentified fish	unid				100	fragment	1	
2110	20-Jan-17	VC5	310-315	1	Unidentified fish	unid				100	fragment		
2111	20-Jan-17	VC5	315-320	1	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2			100	more than half		
2112	20-Jan-17	VC5	315-320	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2113	20-Jan-17	VC5	315-320	1	Hexagrammos, (Greenling)	genus	vertebra			100	effectively complete		
2114	20-Jan-17	VC5	315-320	2	Unidentified fish	unid				100	fragments		
2115	20-Jan-17	VC5	322-329	2	Unidentified fish	unid				100	fragments		
2116	20-Jan-17	VC5	461-470	1	Unidentified fish	unid				100	fragment		
2117	20-Jan-17	VC5	461-470	1	Unidentified fish	unid				100	fragment	1	
2118	23-Jan-17	VC6	30-35	4	Unidentified bone	unid				100	fragments	4	completely calcined and scorched
2119	23-Jan-17	VC6	35-40	2	Unidentified mammal	unid				100	fragments	2	completely calcined and scorched
2120	23-Jan-17	VC6	35-40	3	Unidentified fish	unid				100	fragments	3	completely calcined and scorched
2121	23-Jan-17	VC6	35-40	16	Unidentified bone	unid				100	fragments	16	completely calcined and scorched
2122	23-Jan-17	VC6	50-55	5	Unidentified bone	unid				100	fragments	5	completely calcined and scorched
2123	23-Jan-17	VC6	65-70	4	Unidentified mammal	unid				75	fragments	4	completely calcined
2124	23-Jan-17	VC6	70-75	1	Unidentified bone	unid				75	fragments	1	completely calcined
2125	23-Jan-17	VC6	75-80	5	Unidentified bone	unid				75	fragments	5	completely calcined
2126	23-Jan-17	VC6	75-80	5	Unidentified mammal	unid				75	fragments	5	completely calcined
2127	23-Jan-17	VC6	80-85	5	Unidentified mammal	unid				75	fragments	5	completely calcined
2128	23-Jan-17	VC6	85-90	344	Unidentified fish	unid				75	fragments	344	completely calcined and scorched
2129	23-Jan-17	VC6	85-90	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2130	23-Jan-17	VC6	85-90	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
2131	23-Jan-17	VC6	85-90	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	completely calcined
2132	23-Jan-17	VC6	85-90	2	Pleuronectiformes (flatfish)	order	vertebrae			100	fragments	2	completely calcined
2133	23-Jan-17	VC6	85-90	1	Hemilepidotus (Irish lord)	genus	vertebra			100	less than half	1	completely calcined
2134	23-Jan-17	VC6	85-90	1	Cottidae (Sculpin)	family	cranial fragment			75	fragment	1	completely calcined
2135	23-Jan-17	VC6	85-90	4	Sebastes (Rockfish)	genus	vertebrae			100	more than half	4	completely calcined

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2136	23-Jan-17	VC6	85-90	1	Sebastes (Rockfish)	genus	basioccipital			100	fragment	1	completely calcined
2137	23-Jan-17	VC6	85-90	1	Sebastes (Rockfish)	genus	exoccipital			100	more than half	1	completely calcined
2138	23-Jan-17	VC6	85-90	2	Sebastes (Rockfish)	genus	premaxillary			100	fragments	2	completely calcined, 2 piece refit
2139	23-Jan-17	VC6	85-90	1	Sebastes (Rockfish)	genus	maxillary	small		100	articular surface	1	completely calcined
2140	23-Jan-17	VC6	85-90	1	Sebastes (Rockfish)	genus	maxillary	medium		100	articular surface	1	completely calcined
2141	23-Jan-17	VC6	85-90	1	Sebastes (Rockfish)	genus	vertebral arch			100	articular surface	1	completely calcined
2142	23-Jan-17	VC6	85-90	1	Sebastes (Rockfish)	genus	sphenotic			100	fragment	1	completely calcined
2143	23-Jan-17	VC6	85-90	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment	1	completely calcined
2144	23-Jan-17	VC6	85-90	1	Hexagrammos, (Greenling)	genus	radial			100	effectively complete	1	completely calcined
2145	23-Jan-17	VC6	85-90	1	Hexagrammos, (Greenling)	genus	premaxillary			100	fragment	1	2 pc. Refit, completely calcined
2146	24-Jan-17	VC6	85-90	4	Unidentified mammal	unid				100	fragments	4	completely calcined
2147	24-Jan-17	VC6	90-94	14	Unidentified fish	unid				100	fragments	14	completely calcined and scorched
2148	24-Jan-17	VC6	90-94	5	Unidentified mammal	unid				100	fragments	5	completely calcined and scorched
2149	24-Jan-17	VC6	90-94	3	Unidentified bone	unid				100	fragments	3	completely calcined and scorched
2150	24-Jan-17	VC6	90-94	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2151	24-Jan-17	VC6	94-95	10	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
2152	24-Jan-17	VC6	94-95	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
2153	24-Jan-17	VC6	94-95	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	medium		100	effectively complete		
2154	24-Jan-17	VC6	94-95	1	Clupea pallasii, (Pacific herring)	species	vertebra	medium		100	half		
2155	24-Jan-17	VC6	94-95	1	Clupea pallasii, (Pacific herring)	species	quadrate	medium		100	effectively complete		
2156	24-Jan-17	VC6	94-95	1	Clupea pallasii, (Pacific herring)	species	opisthotic	medium		100	effectively complete		
2157	24-Jan-17	VC6	94-95	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2158	24-Jan-17	VC6	94-95	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2159	24-Jan-17	VC6	94-95	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
2160	24-Jan-17	VC6	94-95	1	Unidentified mammal	unid				100	fragment	1	
2161	24-Jan-17	VC6	94-95	2	Unidentified mammal	unid				100	fragments		
2162	24-Jan-17	VC6	94-95	18	Unidentified fish	unid				100	fragments		
2163	24-Jan-17	VC6	94-95	1	Unidentified fish	unid				100	fragment	1	
2164	24-Jan-17	VC6	95-99	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2165	24-Jan-17	VC6	95-99	5	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2166	24-Jan-17	VC6	95-99	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
2167	24-Jan-17	VC6	95-99	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	medium		100	effectively complete		
2168	24-Jan-17	VC6	95-99	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
2169	24-Jan-17	VC6	95-99	2	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
2170	24-Jan-17	VC6	95-99	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2171	24-Jan-17	VC6	95-99	1	Sebastes (Rockfish)	genus	gillraker	x-small		100	effectively complete		
2172	24-Jan-17	VC6	95-99	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
2173	24-Jan-17	VC6	95-99	2	Unidentified mammal	unid				100	fragments		
2174	24-Jan-17	VC6	95-99	2	Unidentified mammal	unid				100	fragments	2	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2175	24-Jan-17	VC6	95-99	17	Unidentified fish	unid				100	fragments		
2176	24-Jan-17	VC6	95-99	2	Unidentified fish	unid				100	fragments	2	
2177	24-Jan-17	VC6	105-110	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
2178	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra			100	half		
2179	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	medium		100	effectively complete		
2180	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2181	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	prootic/pterotic			100	fragment	1	
2182	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	effectively complete		
2183	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
2184	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	ceratohyal			100	fragment		
2185	24-Jan-17	VC6	105-110	1	Clupea pallasii, (Pacific herring)	species	epiotic	medium		100	effectively complete		
2186	24-Jan-17	VC6	105-110	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2187	24-Jan-17	VC6	105-110	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	2	
2188	24-Jan-17	VC6	105-110	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
2189	24-Jan-17	VC6	105-110	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
2190	24-Jan-17	VC6	105-110	1	Sebastes (Rockfish)	genus	vertebrae	x-small		100	effectively complete		
2191	24-Jan-17	VC6	105-110	6	Unidentified mammal	unid				100	fragments		
2192	24-Jan-17	VC6	105-110	12	Unidentified fish	unid				100	fragments	12	
2193	24-Jan-17	VC6	105-110	2	Unidentified fish	unid				100	fragments		
2194	24-Jan-17	VC6	99-105	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2195	24-Jan-17	VC6	99-105	1	Unidentified fish	unid				100	fragment	1	
2196	26-Jan-17	VC6	110-115	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2197	26-Jan-17	VC6	110-115	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2198	26-Jan-17	VC6	110-115	11	Unidentified fish	unid				100	fragments		
2199	26-Jan-17	VC6	110-115	1	Unidentified fish	unid				100	fragment	1	
2200	26-Jan-17	VC6	115-120	10	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2201	26-Jan-17	VC6	115-120	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2202	26-Jan-17	VC6	115-120	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	medium		100	half		
2203	26-Jan-17	VC6	115-120	13	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2204	26-Jan-17	VC6	115-120	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	half		
2205	26-Jan-17	VC6	115-120	2	Clupea pallasii, (Pacific herring)	species	prootic			100	effectively complete		
2206	26-Jan-17	VC6	115-120	2	Clupea pallasii, (Pacific herring)	species	pterotic			100	effectively complete		
2207	26-Jan-17	VC6	115-120	2	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
2208	26-Jan-17	VC6	115-120	1	Oncorhynchus (Pacific Salmon)	genus	spacer			100	effectively complete		
2209	26-Jan-17	VC6	115-120	1	Hydrolagus colliei (spotted ratfish)	species	tooth	medium	right	100	effectively complete		
2210	26-Jan-17	VC6	115-120	1	Unidentified mammal	unid				100	fragment		artifact, worked bone, EjTa-13:135 #56
2211	26-Jan-17	VC6	115-120	1	Hemilepidotus (Irish lord)	genus	abdominal vertebra			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2212	26-Jan-17	VC6	115-120	1	Hexagrammos, (Greenling)	genus	atlas	small		100	effectively complete		
2213	26-Jan-17	VC6	115-120	2	Hexagrammos, (Greenling)	genus	abdominal vertebrae	small		100	effectively complete		
2214	26-Jan-17	VC6	115-120	5	Hexagrammos, (Greenling)	genus	caudal vertebrae	medium		100	effectively complete		
2215	26-Jan-17	VC6	115-120	2	Hexagrammos, (Greenling)	genus	vomer	medium		100	fragments		
2216	26-Jan-17	VC6	115-120	1	Hexagrammos, (Greenling)	genus	hypohyal-A	medium		100	effectively complete		
2217	26-Jan-17	VC6	115-120	1	Hexagrammos, (Greenling)	genus	dentary			100	fragment		
2218	26-Jan-17	VC6	115-120	1	Pleuronectiformes (flatfish)	order	cleithrum			100	fragment		starry flounder type
2219	26-Jan-17	VC6	115-120	1	Pleuronectiformes (flatfish)	order	abdominal vertebra			100	effectively complete		starry flounder type
2220	26-Jan-17	VC6	115-120	2	Sebastes (Rockfish)	genus	atlas	small		100	effectively complete		
2221	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	atlas	x-small		100	effectively complete		
2222	26-Jan-17	VC6	115-120	4	Sebastes (Rockfish)	genus	abdominal vertebrae	x-small		100	effectively complete		
2223	26-Jan-17	VC6	115-120	3	Sebastes (Rockfish)	genus	caudal vertebrae	small		100	effectively complete		
2224	26-Jan-17	VC6	115-120	6	Sebastes (Rockfish)	genus	caudal vertebrae	x-small		100	effectively complete		
2225	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	basioccipital	small		100	fragment		
2226	26-Jan-17	VC6	115-120	3	Sebastes (Rockfish)	genus	hypural	x-small		100	articular surface		
2227	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	ultimate vertebra	x-small/small		100	effectively complete		
2228	26-Jan-17	VC6	115-120	2	Sebastes (Rockfish)	genus	vertebral arch			100	fragments		
2229	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	hypohyal-A			100	effectively complete		
2230	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	vomer			100	fragment		
2231	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	supercleithrum		left	100	articular surface		
2232	26-Jan-17	VC6	115-120	2	Sebastes (Rockfish)	genus	gillraker			100	fragments		
2233	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	hyomandibular	x-small	left	100	fragment		
2234	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	hyomandibular	x-small	right	100	fragment		
2235	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	hyomandibular	small	left	100	fragment		
2236	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	supercleithrum		right	100	articular surface		
2237	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	epihyal	x-small/small		100	effectively complete		
2238	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	post temporal	medium	left	100	fragment		
2239	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	supraoccipital			100	fragment		
2240	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	cleithrum			100	fragment		
2241	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	frontal			100	fragment		
2242	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	pterotic			100	fragment		
2243	26-Jan-17	VC6	115-120	1	Sebastes (Rockfish)	genus	inferior pharyngeal			100	fragment		
2244	26-Jan-17	VC6	115-120	158	Unidentified fish	unid				100	fragments		
2245	26-Jan-17	VC6	115-120	3	Unidentified fish	unid				100	fragments		
2246	27-Jan-17	VC6	120-125	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2247	27-Jan-17	VC6	120-125	5	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2248	27-Jan-17	VC6	120-125	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
2249	27-Jan-17	VC6	120-125	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2250	27-Jan-17	VC6	120-125	1	Oncorhynchus (Pacific Salmon)	genus	pectoral fin ray			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2251	27-Jan-17	VC6	120-125	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	effectively complete		
2252	27-Jan-17	VC6	120-125	1	Hydrolagus colliei (spotted ratfish)	species	tooth-3	x-large	right	100	complete		
2253	27-Jan-17	VC6	120-125	3	Anoplopoma fimbria (Sablefish)	species	vertebrae	x-small/small		100	effectively complete		
2254	27-Jan-17	VC6	120-125	1	Cottidae (Sculpin)	family	cranial fragment			100	fragment		red irish lord/buffalo sculpin
2255	27-Jan-17	VC6	120-125	3	Unidentified mammal	unid				100	fragments		
2256	27-Jan-17	VC6	120-125	1	Unidentified mammal	unid				75	fragment	1	
2257	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	atlas	x-small		100	effectively complete		
2258	27-Jan-17	VC6	120-125	8	Sebastes (Rockfish)	genus	vertebra	x-small		100	effectively complete		
2259	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	ultimate vertebra			100	effectively complete		
2260	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
2261	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	epihyal			100	effectively complete		
2262	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
2263	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	epural			100	effectively complete		
2264	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
2265	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	quadrate		right	100	articular surface		
2266	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	hyomandibular	x-small	left	100	fragment		
2267	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	pelvis	small	left	100	fragment		
2268	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	pelvis	small	right	100	fragment		
2269	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	pelvis	medium	right	100	fragment		
2270	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	lacrimal			100	fragment		
2271	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	prefrontal			100	fragment		
2272	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	parietal			100	fragment		
2273	27-Jan-17	VC6	120-125	1	Sebastes (Rockfish)	genus	vertebral arch			100	fragment		
2274	27-Jan-17	VC6	120-125	5	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
2275	27-Jan-17	VC6	120-125	2	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	more than half		
2276	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	fragment		
2277	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	basioccipital			100	effectively complete		
2278	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	atlas			100	effectively complete		
2279	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	vomer			100	effectively complete		
2280	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	radius			100	effectively complete		
2281	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	hyomandibular		left	100	fragment		
2282	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	supercleithrum		right	100	articular surface		
2283	27-Jan-17	VC6	120-125	1	Hexagrammos, (Greenling)	genus	pelvis			100	fragment		
2284	27-Jan-17	VC6	120-125	126	Unidentified fish	unid				100	fragments		
2285	27-Jan-17	VC6	120-125	2	Unidentified fish	unid				100	fragments		
2286	27-Jan-17	VC6	125-130	9	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2287	27-Jan-17	VC6	125-130	8	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2288	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2289	27-Jan-17	VC6	125-130	2	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
2290	27-Jan-17	VC6	125-130	5	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
2291	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	prootic/pterotic	small		100	fragment		
2292	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	post cleithrum	small		100	effectively complete		
2293	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	effectively complete		
2294	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	basioccipital			100	articular surface		
2295	27-Jan-17	VC6	125-130	2	Clupea pallasii, (Pacific herring)	species	quadrate			100	fragments		
2296	27-Jan-17	VC6	125-130	2	Clupea pallasii, (Pacific herring)	species	exoccipital			100	effectively complete		
2297	27-Jan-17	VC6	125-130	2	Clupea pallasii, (Pacific herring)	species	operculum	small		100	articular surface		
2298	27-Jan-17	VC6	125-130	2	Clupea pallasii, (Pacific herring)	species	operculum	small		100	articular surface		
2299	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	ethmoid	small		100	fragment		
2300	27-Jan-17	VC6	125-130	3	Clupea pallasii, (Pacific herring)	species	sphenotic	small		100	effectively complete		
2301	27-Jan-17	VC6	125-130	2	Clupea pallasii, (Pacific herring)	species	articular	medium		100	articular surface		
2302	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	preorbital	medium	left	100	fragment		
2303	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	alisphenoid	small		100	effectively complete		
2304	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	alisphenoid			100	fragment		
2305	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	maxillary		right	100	fragment		
2306	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	epihyal		right	100	fragment		
2307	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	opisthotic			100	effectively complete		
2308	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	dentary			100	fragment		
2309	27-Jan-17	VC6	125-130	2	Clupea pallasii, (Pacific herring)	species	hyomandibular		right	100	fragments		
2310	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	mesopterygoid			100	fragment		
2311	27-Jan-17	VC6	125-130	1	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragment		
2312	27-Jan-17	VC6	125-130	4	Clupea pallasii, (Pacific herring)	species	frontal			100	fragments		
2313	27-Jan-17	VC6	125-130	1	Unidentified mammal	unid				100	fragment		artifact, small, worked bone point, EjTa13-136 #57
2314	27-Jan-17	VC6	125-130	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebrae			100	complete		measured
2315	27-Jan-17	VC6	125-130	3	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	effectively complete		measured
2316	27-Jan-17	VC6	125-130	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	less than half		
2317	27-Jan-17	VC6	125-130	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2318	27-Jan-17	VC6	125-130	2	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	effectively complete		
2319	27-Jan-17	VC6	125-130	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	complete		
2320	27-Jan-17	VC6	125-130	1	Anoplopoma fimbria (Sablefish)	species	atlas			100	effectively complete		
2321	27-Jan-17	VC6	125-130	25	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
2322	27-Jan-17	VC6	125-130	1	Anoplopoma fimbria (Sablefish)	species	ultimate vertebra			100	more than half		
2323	27-Jan-17	VC6	125-130	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	more than half		
2324	27-Jan-17	VC6	125-130	4	Hexagrammos, (Greenling)	genus	vertebrae	small		100	effectively complete		
2325	27-Jan-17	VC6	125-130	1	Hexagrammos, (Greenling)	genus	dentary		left	100	fragment		
2326	27-Jan-17	VC6	125-130	1	Hexagrammos, (Greenling)	genus	pelvis		right	100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2327	27-Jan-17	VC6	125-130	1	Hemilepidotus (Irish lord)	genus	dentary		left	100	fragment		
2328	27-Jan-17	VC6	125-130	1	Hemilepidotus (Irish lord)	genus	pterygoid		left	100	effectively complete		
2329	27-Jan-17	VC6	125-130	1	Hemilepidotus (Irish lord)	genus	post temporal		left	100	complete		
2330	27-Jan-17	VC6	125-130	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		
2331	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	altas	small		100	effectively complete		
2332	27-Jan-17	VC6	125-130	4	Sebastes (Rockfish)	genus	abdominal vertebrae	small		100	effectively complete		
2333	27-Jan-17	VC6	125-130	11	Sebastes (Rockfish)	genus	caudal vertebrae	small		100	effectively complete		
2334	27-Jan-17	VC6	125-130	4	Sebastes (Rockfish)	genus	caudal vertebrae	small		100	more than half		
2335	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	urohyal			100	effectively complete		
2336	27-Jan-17	VC6	125-130	2	Sebastes (Rockfish)	genus	hyomandibular	small	left	100	fragments		
2337	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	hyomandibular	small	right	100	fragment		
2338	27-Jan-17	VC6	125-130	2	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
2339	27-Jan-17	VC6	125-130	3	Sebastes (Rockfish)	genus	radial			100	fragments		
2340	27-Jan-17	VC6	125-130	6	Sebastes (Rockfish)	genus	premaxillary	small	right	100	fragments		
2341	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	premaxillary	small	left	100	fragment		
2342	27-Jan-17	VC6	125-130	2	Sebastes (Rockfish)	genus	pelvis	small	left	100	articular surface		
2343	27-Jan-17	VC6	125-130	3	Sebastes (Rockfish)	genus	pelvis	small	right	100	articular surface		
2344	27-Jan-17	VC6	125-130	2	Sebastes (Rockfish)	genus	dentary	small	right	100	fragments		
2345	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	epihyal			100	fragment		
2346	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	hypural			100	fragment		
2347	27-Jan-17	VC6	125-130	2	Sebastes (Rockfish)	genus	epural			100	effectively complete		
2348	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	epural/hypural			100	effectively complete		
2349	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	quadrate	small	right	100	articular surface		
2350	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	hypohyal-A			100	fragment		
2351	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	basioccipital			100	fragment		
2352	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	articular			100	fragment		
2353	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	suborbital			100	fragment		
2354	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	maxillary		left	100	articular surface		
2355	27-Jan-17	VC6	125-130	2	Sebastes (Rockfish)	genus	maxillary		right	100	articular surface		
2356	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	parietal		left	100	fragment		
2357	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	exoccipital			100	fragment		
2358	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	supercleithrum		right	100	articular surface		
2359	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	palatine		right	100	fragment		
2360	27-Jan-17	VC6	125-130	2	Sebastes (Rockfish)	genus	epiotic			100	fragments		
2361	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	maxillary		right	100	fragment		medial fragment
2362	27-Jan-17	VC6	125-130	1	Sebastes (Rockfish)	genus	parietal			100	fragment		
2363	27-Jan-17	VC6	125-130	5	Unidentified mammal	unid				100	fragments		
2364	27-Jan-17	VC6	125-130	352	Unidentified fish	unid				100	fragments		
2365	27-Jan-17	VC6	125-130	1	Unidentified fish	unid				100	fragment	1	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2366	27-Jan-17	VC6	130-135	6	Clupea pallasii, (Pacific herring)	species	vertebra 1/2			100	effectively complete		
2367	27-Jan-17	VC6	130-135	43	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
2368	27-Jan-17	VC6	130-135	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae			100	effectively complete		
2369	27-Jan-17	VC6	130-135	46	Clupea pallasii, (Pacific herring)	species	caudal vertebrae			100	effectively complete		
2370	27-Jan-17	VC6	130-135	4	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half		
2371	27-Jan-17	VC6	130-135	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	half	2	
2372	27-Jan-17	VC6	130-135	6	Clupea pallasii, (Pacific herring)	species	articular		right	100	articular surface		
2373	27-Jan-17	VC6	130-135	7	Clupea pallasii, (Pacific herring)	species	articular		left	100	articular surface		
2374	27-Jan-17	VC6	130-135	16	Clupea pallasii, (Pacific herring)	species	sphenotic			100	effectively complete		
2375	27-Jan-17	VC6	130-135	4	Clupea pallasii, (Pacific herring)	species	epiotic			100	effectively complete		
2376	27-Jan-17	VC6	130-135	2	Clupea pallasii, (Pacific herring)	species	quadrate		right	100	effectively complete		
2377	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	quadrate		left	100	effectively complete		
2378	27-Jan-17	VC6	130-135	10	Clupea pallasii, (Pacific herring)	species	opisthotic			100	effectively complete		
2379	27-Jan-17	VC6	130-135	2	Clupea pallasii, (Pacific herring)	species	operculum	small	right	100	articular surface		
2380	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	operculum	small	left	100	articular surface		
2381	27-Jan-17	VC6	130-135	2	Clupea pallasii, (Pacific herring)	species	operculum	medium	right	100	articular surface		
2382	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	operculum	medium	left	100	articular surface		
2383	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	effectively complete		
2384	27-Jan-17	VC6	130-135	2	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	fragments		
2385	27-Jan-17	VC6	130-135	5	Clupea pallasii, (Pacific herring)	species	ethmoid			100	fragments		
2386	27-Jan-17	VC6	130-135	7	Clupea pallasii, (Pacific herring)	species	supraoccipital	small		100	fragments		
2387	27-Jan-17	VC6	130-135	18	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
2388	27-Jan-17	VC6	130-135	17	Clupea pallasii, (Pacific herring)	species	preorbital	small	right	100	effectively complete		
2389	27-Jan-17	VC6	130-135	13	Clupea pallasii, (Pacific herring)	species	dentary	small		100	fragments		
2390	27-Jan-17	VC6	130-135	11	Clupea pallasii, (Pacific herring)	species	exoccipital	small		100	effectively complete		
2391	27-Jan-17	VC6	130-135	5	Clupea pallasii, (Pacific herring)	species	opisthotic			100	fragments		
2392	27-Jan-17	VC6	130-135	5	Clupea pallasii, (Pacific herring)	species	hypohyal	small		100	effectively complete		
2393	27-Jan-17	VC6	130-135	3	Clupea pallasii, (Pacific herring)	species	post temporal	small		100	effectively complete		
2394	27-Jan-17	VC6	130-135	2	Clupea pallasii, (Pacific herring)	species	frontal	small		100	fragment		
2395	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	epihyal	small		100	effectively complete		2 pc refit
2396	27-Jan-17	VC6	130-135	6	Clupea pallasii, (Pacific herring)	species	ceratohyal	small	right	100	fragments		
2397	27-Jan-17	VC6	130-135	5	Clupea pallasii, (Pacific herring)	species	ceratohyal	small	left	100	fragments		
2398	27-Jan-17	VC6	130-135	4	Clupea pallasii, (Pacific herring)	species	hyomandibular	small	left	100	fragments		
2399	27-Jan-17	VC6	130-135	2	Clupea pallasii, (Pacific herring)	species	hyomandibular	small	right	100	fragment		
2400	27-Jan-17	VC6	130-135	8	Clupea pallasii, (Pacific herring)	species	maxillary	small	right	100	fragments		
2401	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	maxillary	small	left	100	fragments		
2402	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	mesopterygoid	small	left	100	fragment		
2403	27-Jan-17	VC6	130-135	1	Clupea pallasii, (Pacific herring)	species	mesopterygoid	small	right	100	fragment		
2404	29-Jan-17	VC6	130-135	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebrae			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2405	29-Jan-17	VC6	130-135	2	Oncorhynchus (Pacific Salmon)	genus	caudal vertebrae			100	half		different halves
2406	29-Jan-17	VC6	130-135	15	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2407	29-Jan-17	VC6	130-135	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2408	29-Jan-17	VC6	130-135	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	fragment		
2409	29-Jan-17	VC6	130-135	1	Squalidae (Dogfish)	genus	vertebrae			100	complete		
2410	29-Jan-17	VC6	130-135	1	Squalidae (Dogfish)	genus	vertebrae			100	half		
2411	29-Jan-17	VC6	130-135	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
2412	29-Jan-17	VC6	130-135	1	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
2413	29-Jan-17	VC6	130-135	1	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	less than half		
2414	29-Jan-17	VC6	130-135	1	Hexagrammos, (Greenling)	genus	abdominal vertebrae	medium		100	effectively complete		
2415	29-Jan-17	VC6	130-135	2	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
2416	29-Jan-17	VC6	130-135	1	Hexagrammos, (Greenling)	genus	supracleithrum	medium	right	100	articular surface		
2417	29-Jan-17	VC6	130-135	1	Pleuronectiformes (flatfish)	order	exoccipital			75	effectively complete		in poor condition
2418	29-Jan-17	VC6	130-135	1	Pleuronectiformes (flatfish)	order	vertebrae			75	effectively complete		in poor condition
2419	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	atlas	small		100	more than half		
2420	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	abdominal vertebrae	x-small		100	effectively complete		
2421	29-Jan-17	VC6	130-135	3	Sebastes (Rockfish)	genus	vertebrae	small		100	effectively complete		
2422	29-Jan-17	VC6	130-135	4	Sebastes (Rockfish)	genus	exoccipital			100	effectively complete		
2423	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	palatine		right	100	fragment		
2424	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	hypocorocoid	x-small	right	100	fragment		
2425	29-Jan-17	VC6	130-135	2	Sebastes (Rockfish)	genus	epihyal			100	effectively complete		
2426	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	gillraker			100	complete		
2427	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	dentary	small/medium	left	100	more than half		
2428	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	pelvis	small	right	100	articular surface		
2429	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	premaxillary		left	100	fragment		
2430	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	post temporal	small/medium	left	100	articular surface		
2431	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	retroarticular			100	effectively complete		
2432	29-Jan-17	VC6	130-135	1	Sebastes (Rockfish)	genus	hypercoracoid	small	left	100	fragment		
2433	29-Jan-17	VC6	130-135	388	Unidentified fish	unid				100	fragments		possibly contains lingcod premaxillary- too fragmented
2434	29-Jan-17	VC6	135-140	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2435	29-Jan-17	VC6	135-140	1	Clupea pallasii, (Pacific herring)	species	frontal	small		100	fragment		
2436	29-Jan-17	VC6	135-140	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	articular surface		
2437	29-Jan-17	VC6	135-140	1	Clupea pallasii, (Pacific herring)	species	quadrate	small	right	100	articular surface		
2438	29-Jan-17	VC6	135-140	2	Clupea pallasii, (Pacific herring)	species	dentary	small		100	fragments		
2439	29-Jan-17	VC6	135-140	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2440	29-Jan-17	VC6	135-140	1	Sebastes (Rockfish)	genus	hypohyal-A			100	effectively complete		
2441	29-Jan-17	VC6	135-140	1	Sebastes (Rockfish)	genus	hypohyal-B			100	effectively complete		
2442	29-Jan-17	VC6	135-140	1	Sebastes (Rockfish)	genus	radial			100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2443	29-Jan-17	VC6	135-140	1	Sebastes (Rockfish)	genus	epihyal	x-small		100	articular surface		
2444	29-Jan-17	VC6	135-140	2	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
2445	29-Jan-17	VC6	135-140	1	Hexagrammos, (Greenling)	genus	articular		left	100	articular surface		
2446	29-Jan-17	VC6	135-140	1	Hexagrammos, (Greenling)	genus	exoccipital			100	effectively complete		
2447	29-Jan-17	VC6	135-140	1	Hexagrammos, (Greenling)	genus	radial			100	effectively complete		
2448	29-Jan-17	VC6	135-140	1	Hydrolagus colliei (spotted ratfish)	species	tooth-2	x-large	left	100	fragment		
2449	29-Jan-17	VC6	135-140	3	Hydrolagus colliei (spotted ratfish)	species	tooth			100	fragments		
2450	29-Jan-17	VC6	135-140	35	Unidentified fish	unid				100	fragments		
2451	29-Jan-17	VC6	135-140	3	Unidentified fish	unid				100	fragments	3	
2452	29-Jan-17	VC6	140-145	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2453	29-Jan-17	VC6	140-145	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2454	29-Jan-17	VC6	140-145	2	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
2455	29-Jan-17	VC6	140-145	1	Clupea pallasii, (Pacific herring)	species	sphenotic	small		100	effectively complete		
2456	29-Jan-17	VC6	140-145	1	Clupea pallasii, (Pacific herring)	species	sphenotic	small		100	effectively complete		
2457	29-Jan-17	VC6	140-145	2	Clupea pallasii, (Pacific herring)	species	post temporal			100	fragments		
2458	29-Jan-17	VC6	140-145	1	Clupea pallasii, (Pacific herring)	species	articular	small		100	articular surface		
2459	29-Jan-17	VC6	140-145	1	Clupea pallasii, (Pacific herring)	species	frontal			100	fragment		
2460	29-Jan-17	VC6	140-145	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	complete		
2461	29-Jan-17	VC6	140-145	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	effectively complete		
2462	29-Jan-17	VC6	140-145	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	less than half		
2463	29-Jan-17	VC6	140-145	25	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2464	29-Jan-17	VC6	140-145	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	less than half		
2465	29-Jan-17	VC6	140-145	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2466	29-Jan-17	VC6	140-145	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	effectively complete		
2467	29-Jan-17	VC6	140-145	1	Oncorhynchus (Pacific Salmon)	genus	spacer			100	effectively complete		
2468	29-Jan-17	VC6	140-145	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
2469	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	atlas	small		100	effectively complete		
2470	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	atlas	x-small		100	effectively complete		
2471	29-Jan-17	VC6	140-145	2	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
2472	29-Jan-17	VC6	140-145	2	Sebastes (Rockfish)	genus	vertebrae	small		100	more than half		
2473	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	basioccipital			100	fragment		
2474	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	supracleithrum	small	right	100	more than half		
2475	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	vertebral arch			100	fragment		
2476	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	vomer			100	effectively complete		
2477	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	hypercoracoid	small/medium	right	100	fragment		
2478	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	post temporal	small	left	100	articular surface		
2479	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	suborbital			100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2480	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	hypural	x-small		100	effectively complete		
2481	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	palatine	x-small	right	100	fragment		
2482	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	hyomandibular	small	right	100	more than half		
2483	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	exoccipital	small		100	effectively complete		
2484	29-Jan-17	VC6	140-145	2	Sebastes (Rockfish)	genus	premaxillary	small	right	100	fragments		
2485	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	premaxillary	small	left	100	fragment		
2486	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	epiotic	small	left	100	effectively complete		
2487	29-Jan-17	VC6	140-145	1	Sebastes (Rockfish)	genus	epiotic	small	right	100	effectively complete		
2488	29-Jan-17	VC6	140-145	2	Sebastes (Rockfish)	genus	vomer	x-small		100	fragments		
2489	29-Jan-17	VC6	140-145	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
2490	29-Jan-17	VC6	140-145	1	Squalidae (Dogfish)	genus	tooth			100	effectively complete		
2491	29-Jan-17	VC6	140-145	1	Unidentified mammal	unid				100	fragment		
2492	29-Jan-17	VC6	140-145	5	Unidentified mammal	unid				100	fragments		bone chips; flaked
2493	29-Jan-17	VC6	140-145	3	Pleuronectiformes (flatfish)	order	vertebrae			100	effectively complete		starry flounder/rock/english sole
2494	29-Jan-17	VC6	140-145	74	Unidentified fish	unid				100	fragments		
2495	29-Jan-17	VC6	140-145	1	Unidentified fish	unid				100	fragment	1	
2496	29-Jan-17	VC6	145-150	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2497	29-Jan-17	VC6	145-150	1	Clupea pallasii, (Pacific herring)	species	opisthotic	small		100	effectively complete		
2498	29-Jan-17	VC6	145-150	19	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2499	29-Jan-17	VC6	145-150	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
2500	29-Jan-17	VC6	145-150	2	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	more than half		
2501	29-Jan-17	VC6	145-150	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	less than half		
2502	29-Jan-17	VC6	145-150	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2503	29-Jan-17	VC6	145-150	5	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	articular surface		
2504	29-Jan-17	VC6	145-150	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2505	29-Jan-17	VC6	145-150	2	Unidentified mammal	unid				100	fragments	2	
2506	29-Jan-17	VC6	145-150	5	Sebastes (Rockfish)	genus	abdominal vertebrae	small		100	more than half		
2507	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	abdominal vertebra			100	fragment		
2508	29-Jan-17	VC6	145-150	2	Sebastes (Rockfish)	genus	caudal vertebrae	small/medium		100	effectively complete		
2509	29-Jan-17	VC6	145-150	2	Sebastes (Rockfish)	genus	caudal vertebra	small		100	effectively complete		
2510	29-Jan-17	VC6	145-150	3	Sebastes (Rockfish)	genus	exoccipital	small		100	effectively complete		
2511	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	ultimate vertebra	small		100	effectively complete		
2512	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	pelvis	small	left	100	articular surface		
2513	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	hyomandibular	small	left	100	fragment		
2514	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	premaxillary	small	right	100	effectively complete		
2515	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	supracleithrum	small	left	100	articular surface		
2516	29-Jan-17	VC6	145-150	2	Sebastes (Rockfish)	genus	palatine	small	right	100	fragments		
2517	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	hypural	small		100	effectively complete		
2518	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	epihyal	small	left	100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2519	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	epihyal	small	right	100	articular surface		
2520	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	hypocorocoid	small	left	100	fragment		
2521	29-Jan-17	VC6	145-150	2	Sebastes (Rockfish)	genus	maxillary	small		100	fragments		
2522	29-Jan-17	VC6	145-150	1	Sebastes (Rockfish)	genus	parietal			100	fragment		
2523	29-Jan-17	VC6	145-150	159	Unidentified fish	unid				100	fragments		1 unid'ed element epiotic
2524	29-Jan-17	VC6	145-150	2	Unidentified fish	unid				100	fragments	2	
2525	31-Jan-17	VC6	150-155	7	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2526	31-Jan-17	VC6	150-155	10	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2527	31-Jan-17	VC6	150-155	3	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		possible cut mark? On one half
2528	31-Jan-17	VC6	150-155	1	Clupea pallasii, (Pacific herring)	species	epihyal	small	left	100	effectively complete		
2529	31-Jan-17	VC6	150-155	1	Clupea pallasii, (Pacific herring)	species	maxillary	small	left	100	fragment		
2530	31-Jan-17	VC6	150-155	1	Clupea pallasii, (Pacific herring)	species	exoccipital	small		100	effectively complete		
2531	31-Jan-17	VC6	150-155	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
2532	31-Jan-17	VC6	150-155	1	Oncorhynchus (Pacific Salmon)	genus	atlas			100	half		
2533	31-Jan-17	VC6	150-155	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	complete		
2534	31-Jan-17	VC6	150-155	5	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2535	31-Jan-17	VC6	150-155	5	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2536	31-Jan-17	VC6	150-155	2	Oncorhynchus (Pacific Salmon)	genus	tooth			75	complete		tooth and associated sockets of unknown element
2537	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	abdominal vertebra			100	fragment	1	
2538	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
2539	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	vertebra	small		100	more than half		
2540	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	vertebra			100	half		
2541	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	maxillary	small	left	100	fragment		
2542	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	hypercoracoid	small	right	100	more than half		
2543	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	hypercoracoid	small	left	100	fragment		
2544	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	hypohyal-A	small	right	100	effectively complete		
2545	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	post temporal	small	left	100	articular surface		
2546	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	dentary	small	left	100	fragment		
2547	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	quadrate	small	left	100	more than half		
2548	31-Jan-17	VC6	150-155	1	Sebastes (Rockfish)	genus	parasphenoid			100	fragment		
2549	31-Jan-17	VC6	150-155	2	Unidentified mammal	unid				100	fragments		
2550	31-Jan-17	VC6	150-155	1	Hexagrammos, (Greenling)	genus	abdominal vertebra	small/medium		100	effectively complete		
2551	31-Jan-17	VC6	150-155	1	Hydrolagus colliei (spotted ratfish)	species	spine			100	fragment		
2552	31-Jan-17	VC6	150-155	2	Unidentified fish	unid				100	fragments		cut marks; spine, vertebral process likely rockfish
2553	31-Jan-17	VC6	150-155	82	Unidentified fish	unid				100	fragments		
2554	31-Jan-17	VC6	150-155	3	Unidentified fish	unid				100	fragments	3	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2555	31-Jan-17	VC6	155-160	24	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2556	31-Jan-17	VC6	155-160	35	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2557	31-Jan-17	VC6	155-160	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete	1	
2558	31-Jan-17	VC6	155-160	2	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
2559	31-Jan-17	VC6	155-160	2	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	more than half		
2560	31-Jan-17	VC6	155-160	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
2561	31-Jan-17	VC6	155-160	1	Clupea pallasii, (Pacific herring)	species	exoccipital	small		100	effectively complete		
2562	31-Jan-17	VC6	155-160	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	more than half		
2563	31-Jan-17	VC6	155-160	3	Clupea pallasii, (Pacific herring)	species	sphenotic	small		100	effectively complete		2 from the same side=MNI of 2
2564	31-Jan-17	VC6	155-160	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
2565	31-Jan-17	VC6	155-160	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	more than half		
2566	31-Jan-17	VC6	155-160	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2567	31-Jan-17	VC6	155-160	5	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2568	31-Jan-17	VC6	155-160	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2569	31-Jan-17	VC6	155-160	3	Sebastes (Rockfish)	genus	vertebrae	small		100	effectively complete		
2570	31-Jan-17	VC6	155-160	2	Sebastes (Rockfish)	genus	vertebrae	small		100	more than half		
2571	31-Jan-17	VC6	155-160	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
2572	31-Jan-17	VC6	155-160	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	fragment		
2573	31-Jan-17	VC6	155-160	2	Sebastes (Rockfish)	genus	interhaemal spine	small		100	fragments		
2574	31-Jan-17	VC6	155-160	1	Sebastes (Rockfish)	genus	supracleithrum	small	left	100	articular surface		
2575	31-Jan-17	VC6	155-160	3	Squalidae (Dogfish)	genus	vertebrae			100	half		
2576	31-Jan-17	VC6	155-160	1	Squalidae (Dogfish)	genus	vertebra			100	fragment		
2577	31-Jan-17	VC6	155-160	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		starry flounder type
2578	31-Jan-17	VC6	155-160	77	Unidentified fish	unid				100	fragments		
2579	31-Jan-17	VC6	155-160	1	Unidentified fish	unid				100	fragment	1	
2580	31-Jan-17	VC6	160-165	25	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2581	31-Jan-17	VC6	160-165	37	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2582	31-Jan-17	VC6	160-165	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	more than half		
2583	31-Jan-17	VC6	160-165	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	less than half		
2584	31-Jan-17	VC6	160-165	2	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
2585	31-Jan-17	VC6	160-165	2	Clupea pallasii, (Pacific herring)	species	epural/hypural	small		100	effectively complete		
2586	31-Jan-17	VC6	160-165	2	Clupea pallasii, (Pacific herring)	species	dentary	small		100	fragments		same side = MNI of 2
2587	31-Jan-17	VC6	160-165	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete	1	
2588	31-Jan-17	VC6	160-165	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
2589	31-Jan-17	VC6	160-165	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	effectively complete		
2590	31-Jan-17	VC6	160-165	1	Clupea pallasii, (Pacific herring)	species	hypercoracoid	small		100	fragment		
2591	31-Jan-17	VC6	160-165	2	Clupea pallasii, (Pacific herring)	species	pterotic/prootic			100	fragments		
2592	31-Jan-17	VC6	160-165	8	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2593	31-Jan-17	VC6	160-165	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2594	31-Jan-17	VC6	160-165	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2595	31-Jan-17	VC6	160-165	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	effectively complete		
2596	31-Jan-17	VC6	160-165	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	less than half		
2597	31-Jan-17	VC6	160-165	1	Sebastes (Rockfish)	genus	vertebra	small		100	more than half		
2598	31-Jan-17	VC6	160-165	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
2599	31-Jan-17	VC6	160-165	1	Sebastes (Rockfish)	genus	hypohyal-A	small		100	effectively complete		
2600	31-Jan-17	VC6	160-165	1	Sebastes (Rockfish)	genus	exoccipital	small		100	effectively complete		
2601	31-Jan-17	VC6	160-165	1	Sebastes (Rockfish)	genus	epiotic	small		100	fragment		
2602	31-Jan-17	VC6	160-165	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
2603	31-Jan-17	VC6	160-165	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
2604	31-Jan-17	VC6	160-165	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		starry flounder type
2605	31-Jan-17	VC6	160-165	1	Pleuronectiformes (flatfish)	order	vertebra			100	more than half		starry flounder type
2606	31-Jan-17	VC6	160-165	1	Pleuronectiformes (flatfish)	order	hypercoracoid			100	fragment		starry flounder type
2607	31-Jan-17	VC6	160-165	1	Lepidopsetta bilineata (Rock Sole)	species	pterygoid			100	effectively complete		
2608	31-Jan-17	VC6	160-165	1	Lepidopsetta bilineata (Rock Sole)	species	post temporal			100	effectively complete		
2609	31-Jan-17	VC6	160-165	1	Lepidopsetta bilineata (Rock Sole)	species	quadrate			100	effectively complete		
2610	31-Jan-17	VC6	160-165	82	Unidentified fish	unid				100	fragments		
2611	31-Jan-17	VC6	160-165	1	Unidentified fish	unid				100	fragment	1	
2612	31-Jan-17	VC6	165-170	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2613	31-Jan-17	VC6	165-170	1	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
2614	31-Jan-17	VC6	165-170	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2615	31-Jan-17	VC6	165-170	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2616	31-Jan-17	VC6	165-170	1	Oncorhynchus (Pacific Salmon)	genus	tooth			100	effectively complete		
2617	31-Jan-17	VC6	165-170	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
2618	31-Jan-17	VC6	165-170	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	fragment		
2619	31-Jan-17	VC6	165-170	1	Sebastes (Rockfish)	genus	ultimate vertebra	small		100	effectively complete		
2620	31-Jan-17	VC6	165-170	1	Sebastes (Rockfish)	genus	spacer	small		100	effectively complete		
2621	31-Jan-17	VC6	165-170	1	Sebastes (Rockfish)	genus	pelvis	small	right	100	articular surface		
2622	31-Jan-17	VC6	165-170	1	Sebastes (Rockfish)	genus	premaxillary	small	right	100	fragment		
2623	31-Jan-17	VC6	165-170	1	Sebastes (Rockfish)	genus	epihyal	small	left	100	articular surface		
2624	31-Jan-17	VC6	165-170	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
2625	31-Jan-17	VC6	165-170	1	Hexagrammos, (Greenling)	genus	suborbital-2			100	effectively complete		
2626	31-Jan-17	VC6	165-170	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		starry flounder type
2627	31-Jan-17	VC6	165-170	1	Hemilepidotus (Irish lord)	genus	gillraker			100	effectively complete		
2628	31-Jan-17	VC6	165-170	75	Unidentified fish	unid				100	fragments		
2629	31-Jan-17	VC6	165-170	1	Unidentified mammal	unid				100	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2630	01-Feb-17	VC6	170-175	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2631	01-Feb-17	VC6	170-175	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2632	01-Feb-17	VC6	170-175	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2633	01-Feb-17	VC6	170-175	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2634	01-Feb-17	VC6	170-175	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
2635	01-Feb-17	VC6	170-175	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
2636	01-Feb-17	VC6	170-175	2	Sebastes (Rockfish)	genus	hypercoracoid	small		100	fragments		
2637	01-Feb-17	VC6	170-175	1	Sebastes (Rockfish)	genus	premaxillary	small		100	fragment		
2638	01-Feb-17	VC6	170-175	1	Sebastes (Rockfish)	genus	hypohyal-A	small		100	fragment		
2639	01-Feb-17	VC6	170-175	1	Hexagrammos, (Greenling)	genus	pterygoid	medium		100	effectively complete		
2640	01-Feb-17	VC6	170-175	1	Unidentified mammal	unid				100	fragment		artifact, worked/modified bone, EjTa13:137, #58
2641	01-Feb-17	VC6	170-175	35	Unidentified fish	unid				100	fragments		
2642	01-Feb-17	VC6	175-180	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2643	01-Feb-17	VC6	175-180	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2644	01-Feb-17	VC6	175-180	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		
2645	01-Feb-17	VC6	175-180	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
2646	01-Feb-17	VC6	175-180	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	less than half		
2647	01-Feb-17	VC6	175-180	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2648	01-Feb-17	VC6	175-180	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2649	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	more than half		
2650	01-Feb-17	VC6	175-180	3	Sebastes (Rockfish)	genus	vertebrae	small		100	effectively complete		
2651	01-Feb-17	VC6	175-180	2	Sebastes (Rockfish)	genus	vertebrae	small		100	less than half		
2652	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	post temporal	small	right	100	more than half		
2653	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	pterygoid	small	left	100	half		
2654	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	spacer			100	effectively complete		
2655	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	hypural			100	effectively complete		
2656	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	palatine	small	right	100	fragment		
2657	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	epiotic			100	fragment		
2658	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	pterotic			100	effectively complete		
2659	01-Feb-17	VC6	175-180	1	Sebastes (Rockfish)	genus	suborbital			100	fragment		
2660	01-Feb-17	VC6	175-180	1	Pleuronectiformes (flatfish)	order	vertebra			100	half		starry flounder type
2661	01-Feb-17	VC6	175-180	1	Unidentified mammal	unid				100	fragment		
2662	01-Feb-17	VC6	175-180	58	Unidentified fish	unid				100	fragments		
2663	01-Feb-17	VC6	175-180	1	Unidentified fish	unid				100	fragment	1	
2664	01-Feb-17	VC6	180-185	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
2665	01-Feb-17	VC6	180-185	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2666	01-Feb-17	VC6	180-185	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2667	01-Feb-17	VC6	180-185	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2668	01-Feb-17	VC6	180-185	3	Sebastes (Rockfish)	genus	vertebrae	small/medium		100	effectively complete		
2669	01-Feb-17	VC6	180-185	2	Sebastes (Rockfish)	genus	vertebrae	small		100	more than half		
2670	01-Feb-17	VC6	180-185	2	Sebastes (Rockfish)	genus	palatine	small	left	100	more than half		
2671	01-Feb-17	VC6	180-185	2	Sebastes (Rockfish)	genus	premaxillary	small	right	100	more than half		
2672	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	exoccipital	small	right	100	effectively complete		
2673	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	exoccipital	small	left	100	effectively complete		
2674	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	pterygoid	small	right	100	effectively complete		
2675	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	epihyal	small	left	100	articular surface		
2676	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	hypural	small		100	articular surface		
2677	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	retroarticular	small	right	100	effectively complete		
2678	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	vomer	small		100	fragment		
2679	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	epiotic	small		100	fragment		
2680	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	vertebral process	small/medium		100	effectively complete		
2681	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	vertebral arch	small		100	fragment		
2682	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	post temporal	small	left	100	articular surface		
2683	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	hypocorocoid	small	right	100	articular surface		
2684	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	quadrate	small	left	100	effectively complete		
2685	01-Feb-17	VC6	180-185	1	Sebastes (Rockfish)	genus	opisthotic	small	right	100	effectively complete		
2686	01-Feb-17	VC6	180-185	4	Hexagrammos, (Greenling)	genus	vertebrae	small/medium		100	effectively complete		
2687	01-Feb-17	VC6	180-185	1	Enophrys bison (Buffalo sculpin)	species	scoot			100	fragment		
2688	01-Feb-17	VC6	180-185	98	Unidentified fish	unid				100	fragments		
2689	01-Feb-17	VC6	180-185	1	Unidentified fish	unid				100	fragment		
2690	01-Feb-17	VC6	185-190	6	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2691	01-Feb-17	VC6	185-190	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
2692	01-Feb-17	VC6	185-190	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2693	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	vertebra	small/medium		100	effectively complete		
2694	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	vertebra	small/medium		100	half		
2695	01-Feb-17	VC6	185-190	3	Sebastes (Rockfish)	genus	vertebrae	small		100	more than half		
2696	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	effectively complete		
2697	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	fragment		
2698	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	quadrate	small	right	100	effectively complete		
2699	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	epihyal	small	right	100	effectively complete		
2700	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	articular	small	left	100	articular surface		
2701	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	dentary	small	left	100	more than half		
2702	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	maxillary	small	left	100	fragment		
2703	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	hypohyal-B	small		100	effectively complete		
2704	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	post temporal	small	left	100	effectively complete		
2705	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	premaxillary	small	right	100	fragment		
2706	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	hypocorocoid	small	left	75	fragment		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2707	01-Feb-17	VC6	185-190	1	Sebastes (Rockfish)	genus	exoccipital	small		100	effectively complete		
2708	01-Feb-17	VC6	185-190	2	Sebastes (Rockfish)	genus	pterygoid	small	left	100	effectively complete		
2709	01-Feb-17	VC6	185-190	5	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
2710	01-Feb-17	VC6	185-190	1	Hexagrammos, (Greenling)	genus	hypohyal-B			100	effectively complete		
2711	01-Feb-17	VC6	185-190	69	Unidentified fish	unid				100	fragments		
2712	01-Feb-17	VC6	190-195	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2713	01-Feb-17	VC6	190-195	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2714	01-Feb-17	VC6	190-195	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small/medium		100	effectively complete		
2715	01-Feb-17	VC6	190-195	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2716	01-Feb-17	VC6	190-195	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2717	01-Feb-17	VC6	190-195	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2718	01-Feb-17	VC6	190-195	2	Sebastes (Rockfish)	genus	vertebrae			100	effectively complete		
2719	01-Feb-17	VC6	190-195	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	more than half		
2720	01-Feb-17	VC6	190-195	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	fragment		
2721	01-Feb-17	VC6	190-195	1	Sebastes (Rockfish)	genus	hypural-3	small		100	articular surface	1	
2722	01-Feb-17	VC6	190-195	1	Sebastes (Rockfish)	genus	hypural-2	small		100	effectively complete		
2723	01-Feb-17	VC6	190-195	3	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
2724	01-Feb-17	VC6	190-195	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	more than half		
2725	01-Feb-17	VC6	190-195	1	Hydrolagus colliei (spotted ratfish)	species	tooth-2	large	left	100	fragment		
2726	01-Feb-17	VC6	190-195	56	Unidentified fish	unid				100	fragments		
2727	01-Feb-17	VC6	190-195	1	Unidentified fish	unid				100	fragment	1	
2728	01-Feb-17	VC6	195-200	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2729	01-Feb-17	VC6	195-200	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2730	01-Feb-17	VC6	195-200	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
2731	01-Feb-17	VC6	195-200	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
2732	01-Feb-17	VC6	195-200	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2733	01-Feb-17	VC6	195-200	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
2734	01-Feb-17	VC6	195-200	1	Sebastes (Rockfish)	genus	vertebral arch	small		100	fragment		
2735	01-Feb-17	VC6	195-200	1	Sebastes (Rockfish)	genus	pelvis	small	right	100	articular surface	1	
2736	01-Feb-17	VC6	195-200	1	Sebastes (Rockfish)	genus	hypural-3	small		100	effectively complete		
2737	01-Feb-17	VC6	195-200	1	Sebastes (Rockfish)	genus	parasphenoid	small		100	fragment		
2738	01-Feb-17	VC6	195-200	28	Unidentified fish	unid				100	fragments		
2739	01-Feb-17	VC6	195-200	1	Unidentified fish	unid				100	fragment	1	
2740	01-Feb-17	VC6	200-205	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2741	01-Feb-17	VC6	200-205	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2742	01-Feb-17	VC6	200-205	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
2743	01-Feb-17	VC6	200-205	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
2744	01-Feb-17	VC6	200-205	8	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2745	01-Feb-17	VC6	200-205	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2746	01-Feb-17	VC6	200-205	3	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
2747	01-Feb-17	VC6	200-205	2	Sebastes (Rockfish)	genus	vertebrae	small		100	half		
2748	01-Feb-17	VC6	200-205	1	Sebastes (Rockfish)	genus	atlas	small		100	fragment		
2749	01-Feb-17	VC6	200-205	1	Sebastes (Rockfish)	genus	ultimate vertebra	small		100	effectively complete		
2750	01-Feb-17	VC6	200-205	1	Sebastes (Rockfish)	genus	dentary	small	right	100	fragment		
2751	01-Feb-17	VC6	200-205	1	Sebastes (Rockfish)	genus	quadrate	small	left	100	articular surface		
2752	01-Feb-17	VC6	200-205	1	Sebastes (Rockfish)	genus	spacer	small		100	effectively complete		
2753	01-Feb-17	VC6	200-205	1	Sebastes (Rockfish)	genus	epiotic	small		100	effectively complete		
2754	01-Feb-17	VC6	200-205	4	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
2755	01-Feb-17	VC6	200-205	1	Hexagrammos, (Greenling)	genus	post temporal	medium	right	100	articular surface		
2756	01-Feb-17	VC6	200-205	1	Hexagrammos, (Greenling)	genus	hypohyal-B	medium		100	effectively complete		
2757	01-Feb-17	VC6	200-205	1	Hemilepidotus (Irish lord)	genus	dentary		right	100	fragment		
2758	01-Feb-17	VC6	200-205	1	Gadus (Pacific cod and pollock)	genus	palatine			75	fragment		
2759	01-Feb-17	VC6	200-205	4	Unidentified mammal	unid				100	fragments		
2760	01-Feb-17	VC6	200-205	29	Unidentified fish	unid				100	fragments		
2761	01-Feb-17	VC6	205-210	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
2762	01-Feb-17	VC6	205-210	16	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2763	01-Feb-17	VC6	205-210	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2764	01-Feb-17	VC6	205-210	2	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid			100	fragments		
2765	01-Feb-17	VC6	205-210	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
2766	01-Feb-17	VC6	205-210	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	effectively complete		
2767	01-Feb-17	VC6	205-210	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
2768	01-Feb-17	VC6	205-210	1	Sebastes (Rockfish)	genus	vomer	small		100	effectively complete		
2769	01-Feb-17	VC6	205-210	1	Sebastes (Rockfish)	genus	parasphenoid	small		100	fragment		
2770	01-Feb-17	VC6	205-210	1	Sebastes (Rockfish)	genus	quadrate	small	left	100	complete		
2771	01-Feb-17	VC6	205-210	1	Sebastes (Rockfish)	genus	hypural-2	small		100	effectively complete		
2772	01-Feb-17	VC6	205-210	2	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
2773	01-Feb-17	VC6	205-210	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	half		
2774	01-Feb-17	VC6	205-210	1	Sebastes (Rockfish)	genus	hypohyal-B	x-small		100	effectively complete		
2775	01-Feb-17	VC6	205-210	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		starry flounder type
2776	01-Feb-17	VC6	205-210	1	Hydrolagus colliei (spotted ratfish)	species	tooth-2	large	left	100	fragment		
2777	01-Feb-17	VC6	205-210	1	Squalidae (Dogfish)	genus	vertebra			100	fragment	1	
2778	01-Feb-17	VC6	205-210	49	Unidentified fish	unid				100	fragments		
2779	02-Feb-17	VC6	210-215	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2780	02-Feb-17	VC6	210-215	13	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2781	02-Feb-17	VC6	210-215	1	Oncorhynchus (Pacific Salmon)	genus	epural/hypural			100	fragment		
2782	02-Feb-17	VC6	210-215	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2783	02-Feb-17	VC6	210-215	1	Sebastes (Rockfish)	genus	premaxillary	small	right	100	more than half		
2784	02-Feb-17	VC6	210-215	1	Sebastes (Rockfish)	genus	supracleithrum	small	right	100	articular surface		
2785	02-Feb-17	VC6	210-215	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
2786	02-Feb-17	VC6	210-215	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
2787	02-Feb-17	VC6	210-215	1	Hexagrammos, (Greenling)	genus	vertebra			100	less than half		
2788	02-Feb-17	VC6	210-215	1	Hexagrammos, (Greenling)	genus	hypohyal-B	small/medium		100	effectively complete		
2789	02-Feb-17	VC6	210-215	1	Hexagrammos, (Greenling)	genus	hyomandibular		left	100	fragment		
2790	02-Feb-17	VC6	210-215	2	Unidentified mammal	unid				100	fragments		incl. juvenile rib epiphysis (likely otter/seal/dog sized)
2791	02-Feb-17	VC6	210-215	28	Unidentified fish	unid				100	fragments		
2792	02-Feb-17	VC6	210-215	1	Unidentified mammal	unid				100	fragment		possible bone debitage
2793	02-Feb-17	VC6	215-220	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2794	02-Feb-17	VC6	215-220	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
2795	02-Feb-17	VC6	215-220	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2796	02-Feb-17	VC6	215-220	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half	1	
2797	02-Feb-17	VC6	215-220	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2798	02-Feb-17	VC6	215-220	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
2799	02-Feb-17	VC6	215-220	1	Hexagrammos, (Greenling)	genus	vertebral arch			100	fragment		
2800	02-Feb-17	VC6	215-220	1	Unidentified mammal	unid				100	fragment		
2801	02-Feb-17	VC6	215-220	25	Unidentified fish	unid				100	fragments		
2802	02-Feb-17	VC6	215-220	2	Sebastes (Rockfish)	genus	vertebral arch			100	fragments		
2803	02-Feb-17	VC6	220-225	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	medium		100	effectively complete		
2804	02-Feb-17	VC6	220-225	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half	1	
2805	02-Feb-17	VC6	220-225	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
2806	02-Feb-17	VC6	220-225	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
2807	02-Feb-17	VC6	220-225	1	Sebastes (Rockfish)	genus	retroarticular	small	left	100	effectively complete	1	
2808	02-Feb-17	VC6	220-225	1	Sebastes (Rockfish)	genus	ceratohyal	small	left	100	fragment		
2809	02-Feb-17	VC6	220-225	1	Sebastes (Rockfish)	genus	supracleithrum	small	left	100	articular surface		
2810	02-Feb-17	VC6	220-225	1	Sebastes (Rockfish)	genus	premaxillary	small	right	100	fragment		
2811	02-Feb-17	VC6	220-225	1	Hexagrammos, (Greenling)	genus	epihyal	medium		100	effectively complete		
2812	02-Feb-17	VC6	220-225	1	Pleuronectiformes (flatfish)	order	cleithrum			100	fragments		2 pc. Refit
2813	02-Feb-17	VC6	220-225	1	Unidentified mammal	unid				100	fragment	1	artifact, worked/modified bone, EjTa13:138, #59
2814	02-Feb-17	VC6	220-225	14	Unidentified fish	unid				100	fragments		
2815	02-Feb-17	VC6	220-225	2	Unidentified fish	unid				100	fragments	2	
2816	02-Feb-17	VC6	225-230	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2817	02-Feb-17	VC6	225-230	4	Unidentified mammal	unid				100	fragments		
2818	02-Feb-17	VC6	225-230	1	Unidentified fish	unid				100	fragment		
2819	02-Feb-17	VC6	230-235	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2820	02-Feb-17	VC6	230-235	5	Unidentified fish	unid				100	fragments		
2821	02-Feb-17	VC6	235-240	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2822	02-Feb-17	VC6	235-240	1	Unidentified fish	unid				100	fragment		
2823	02-Feb-17	VC6	240-245	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2824	02-Feb-17	VC6	240-245	3	Unidentified fish	unid				100	fragments		
2825	02-Feb-17	VC6	245-248.5	1	Unidentified fish	unid				100	fragment		
2826	02-Feb-17	VC3	15-20	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2827	02-Feb-17	VC3	15-20	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
2828	02-Feb-17	VC3	15-20	1	Unidentified mammal	unid				100	fragment		
2829	02-Feb-17	VC3	20-25	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2830	02-Feb-17	VC3	20-25	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	effectively complete		
2831	02-Feb-17	VC3	20-25	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
2832	02-Feb-17	VC3	20-25	14	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2833	02-Feb-17	VC3	20-25	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
2834	02-Feb-17	VC3	20-25	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	fragment		
2835	02-Feb-17	VC3	20-25	1	Unidentified mammal	unid				100	fragment		
2836	02-Feb-17	VC3	20-25	7	Unidentified fish	unid				100	fragments		
2837	02-Feb-17	VC3	25-30	3	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
2838	02-Feb-17	VC3	25-30	36	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2839	02-Feb-17	VC3	25-30	10	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	half		
2840	02-Feb-17	VC3	25-30	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
2841	02-Feb-17	VC3	25-30	13	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2842	02-Feb-17	VC3	25-30	7	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
2843	02-Feb-17	VC3	25-30	7	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
2844	02-Feb-17	VC3	25-30	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	medium		100	more than half		
2845	02-Feb-17	VC3	25-30	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
2846	02-Feb-17	VC3	25-30	1	Clupea pallasii, (Pacific herring)	species	exoccipital	small		100	effectively complete		
2847	02-Feb-17	VC3	25-30	1	Clupea pallasii, (Pacific herring)	species	quadrate	medium	right	100	more than half		
2848	02-Feb-17	VC3	25-30	3	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebrae			100	effectively complete		
2849	02-Feb-17	VC3	25-30	11	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2850	02-Feb-17	VC3	25-30	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2851	02-Feb-17	VC3	25-30	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
2852	02-Feb-17	VC3	25-30	1	Oncorhynchus (Pacific Salmon)	genus	abdominal vertebra			100	more than half		
2853	02-Feb-17	VC3	25-30	1	Clupea pallasii, (Pacific herring)	species	dentary	medium		100	fragment		
2854	02-Feb-17	VC3	25-30	22	Unidentified fish	unid				100	fragments		
2855	02-Feb-17	VC3	25-30	1	Unidentified fish	unid				100	fragment		
2856	02-Feb-17	VC3	30-35	11	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2857	02-Feb-17	VC3	30-35	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
2858	02-Feb-17	VC3	30-35	12	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2859	02-Feb-17	VC3	30-35	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
2860	02-Feb-17	VC3	30-35	7	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
2861	02-Feb-17	VC3	30-35	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
2862	02-Feb-17	VC3	30-35	1	Clupea pallasii, (Pacific herring)	species	prootic			100	fragment		
2863	02-Feb-17	VC3	30-35	2	Clupea pallasii, (Pacific herring)	species	ultimate vertebra			100	fragments		likely the same element, doesn't refit
2864	02-Feb-17	VC3	30-35	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		starry flounder type
2865	02-Feb-17	VC3	30-35	9	Unidentified fish	unid				100	fragments		
2866	02-Feb-17	VC3	30-35	3	Unidentified fish	unid				100	fragments	3	
2867	02-Feb-17	VC3	35-40	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	effectively complete		
2868	02-Feb-17	VC3	35-40	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	2	
2869	02-Feb-17	VC3	35-40	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	more than half		
2870	02-Feb-17	VC3	35-40	5	Unidentified fish	unid				100	fragments		
2871	02-Feb-17	VC3	40-45	4	Unidentified mammal	unid				100	fragments	4	
2872	02-Feb-17	VC3	45-50	7	Unidentified mammal	unid				100	fragments	7	
2873	02-Feb-17	VC3	50-55	3	Unidentified mammal	unid				100	fragments	3	
2874	06-Feb-17	VC3	55-60	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	fragment		
2875	06-Feb-17	VC3	55-60	2	Unidentified mammal	unid				100	fragments	2	
2876	06-Feb-17	VC3	55-60	1	Sebastes (Rockfish)	genus	maxillary	small	right	100	fragment		
2877	06-Feb-17	VC3	60-65	1	Pleuronectiformes (flatfish)	order	atlas			100	effectively complete		starry flounder type
2878	06-Feb-17	VC3	60-65	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
2879	06-Feb-17	VC3	65-70	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	more than half		
2880	06-Feb-17	VC3	65-70	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2881	06-Feb-17	VC3	65-70	3	Sebastes (Rockfish)	genus	exoccipital	small		100	effectively complete		
2882	06-Feb-17	VC3	65-70	6	Unidentified fish	unid				100	fragments		
2883	06-Feb-17	VC3	65-70	2	Unidentified fish	unid				100	fragments	2	
2884	06-Feb-17	VC3	65-70	2	Unidentified mammal	unid				100	fragments	2	
2885	06-Feb-17	VC3	65-70	1	Small Unidentified Mammal	unid				100	more than half		body of a caudal vertebra
2886	06-Feb-17	VC3	70-75	2	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
2887	06-Feb-17	VC3	70-75	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2888	06-Feb-17	VC3	70-75	1	Oncorhynchus (Pacific Salmon)	genus	hypural 7-1/2			100	effectively complete		
2889	06-Feb-17	VC3	70-75	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete		
2890	06-Feb-17	VC3	70-75	1	Pleuronectiformes (flatfish)	order	abdominal vertebra			100	effectively complete		
2891	06-Feb-17	VC3	70-75	1	Pleuronectiformes (flatfish)	order	vertebra			100	fragment	1	
2892	06-Feb-17	VC3	70-75	1	Unidentified fish	unid				100	fragment		
2893	06-Feb-17	VC3	70-75	4	Unidentified fish	unid				100	fragments	4	
2894	06-Feb-17	VC3	80-84	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2895	06-Feb-17	VC3	80-84	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
2896	06-Feb-17	VC3	80-84	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		
2897	06-Feb-17	VC3	80-84	3	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2898	06-Feb-17	VC3	80-84	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2899	06-Feb-17	VC3	80-84	14	Unidentified mammal	unid				100	fragments		
2900	06-Feb-17	VC3	80-84	1	Unidentified mammal	unid	tooth			100	fragment		
2901	06-Feb-17	VC3	80-84	7	Unidentified fish	unid				100	fragments		
2902	06-Feb-17	VC3	80-84	1	Unidentified fish	unid				100	fragment	1	
2903	06-Feb-17	VC3	84-92	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	medium		100	effectively complete		
2904	06-Feb-17	VC3	84-92	1	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	more than half		
2905	06-Feb-17	VC3	84-92	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	more than half		
2906	06-Feb-17	VC3	84-92	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	2	
2907	06-Feb-17	VC3	84-92	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete	1	
2908	06-Feb-17	VC3	84-92	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
2909	06-Feb-17	VC3	84-92	1	Oncorhynchus (Pacific Salmon)	genus	spacer			100	effectively complete		
2910	06-Feb-17	VC3	84-92	1	Sebastes (Rockfish)	genus	atlas			100	more than half		
2911	06-Feb-17	VC3	84-92	1	Sebastes (Rockfish)	genus	gillraker			100	articular surface		
2912	06-Feb-17	VC3	84-92	5	Unidentified mammal	unid				100	fragments		
2913	06-Feb-17	VC3	84-92	3	Unidentified mammal	unid				100	fragments	3	
2914	06-Feb-17	VC3	84-92	24	Unidentified fish	unid				100	fragments		
2915	06-Feb-17	VC3	84-92	1	Unidentified fish	unid				100	fragment	1	
2916	06-Feb-17	VC3	92-96.5	1	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2917	06-Feb-17	VC3	92-96.5	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
2918	06-Feb-17	VC3	92-96.5	1	Sebastes (Rockfish)	genus	post temporal	small	left	100	articular surface	1	
2919	06-Feb-17	VC3	92-96.5	1	Hexagrammos, (Greenling)	genus	vertebra			100	less than half		
2920	06-Feb-17	VC3	92-96.5	2	Unidentified mammal	unid				100	fragments		
2921	06-Feb-17	VC3	92-96.5	1	Unidentified mammal	unid				100	fragment	1	
2922	06-Feb-17	VC3	92-96.5	11	Unidentified fish	unid				100	fragments		
2923	06-Feb-17	VC3	92-96.5	2	Unidentified fish	unid				100	fragments	2	
2924	06-Feb-17	VC3	96.5-100	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
2925	06-Feb-17	VC3	96.5-100	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
2926	06-Feb-17	VC3	96.5-100	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
2927	06-Feb-17	VC3	96.5-100	1	Sebastes (Rockfish)	genus	vertebral process	medium		100	effectively complete		
2928	06-Feb-17	VC3	96.5-100	1	Sebastes (Rockfish)	genus	radial	small		100	more than half		
2929	06-Feb-17	VC3	96.5-100	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
2930	06-Feb-17	VC3	96.5-100	1	Anoplopoma fimbria (Sablefish)	species	vertebra	small		100	effectively complete		
2931	06-Feb-17	VC3	96.5-100	1	Pleuronectiformes (flatfish)	order	articular		right	100	fragment		
2932	06-Feb-17	VC3	96.5-100	3	Unidentified mammal	unid				100	fragments	3	
2933	06-Feb-17	VC3	96.5-100	1	Unidentified mammal	unid				100	fragments		
2934	06-Feb-17	VC3	96.5-100	18	Unidentified fish	unid				100	fragments		
2935	06-Feb-17	VC3	96.5-100	2	Unidentified fish	unid				100	fragments	2	
2936	06-Feb-17	VC3	100-105	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2937	06-Feb-17	VC3	100-105	1	Clupea pallasii, (Pacific herring)	species	prootic/pterotic			100	fragments	1	4 pc. From likely the same element
2938	06-Feb-17	VC3	100-105	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
2939	06-Feb-17	VC3	100-105	1	Sebastes (Rockfish)	genus	dentary	small	left	75	fragment		
2940	06-Feb-17	VC3	100-105	1	Sebastes (Rockfish)	genus	supracleithrum	small	left	100	more than half		
2941	06-Feb-17	VC3	100-105	1	Sebastes (Rockfish)	genus	vertebral process			100	effectively complete		
2942	06-Feb-17	VC3	100-105	2	Unidentified mammal	unid				100	fragments	2	
2943	06-Feb-17	VC3	100-105	8	Unidentified fish	unid				100	fragments		
2944	06-Feb-17	VC3	100-105	1	Unidentified fish	unid				100	fragment	1	
2945	06-Feb-17	VC3	100-105	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
2946	06-Feb-17	VC3	105-110	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	fragment		
2947	06-Feb-17	VC3	105-110	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
2948	06-Feb-17	VC3	105-110	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
2949	06-Feb-17	VC3	105-110	1	Unidentified mammal	unid				100	fragments		
2950	06-Feb-17	VC3	105-110	13	Unidentified fish	unid				100	fragments		
2951	06-Feb-17	VC3	105-110	7	Unidentified fish	unid				100	fragments	7	
2952	06-Feb-17	VC3	105-110	1	Hexagrammos, (Greenling)	genus	dentary			100	fragment		
2953	06-Feb-17	VC3	105-110	1	Hexagrammos, (Greenling)	genus	parasphenoid			100	fragment	1	
2954	07-Feb-17	VC3	110-116.5	15	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2955	07-Feb-17	VC3	110-116.5	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half		
2956	07-Feb-17	VC3	110-116.5	4	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
2957	07-Feb-17	VC3	110-116.5	3	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
2958	07-Feb-17	VC3	110-116.5	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	articular surface		
2959	07-Feb-17	VC3	110-116.5	1	Clupea pallasii, (Pacific herring)	species	ptergoid	small		100	effectively complete		
2960	07-Feb-17	VC3	110-116.5	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	half		
2961	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	vertebra	small		100	less than half		
2962	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	atlas	small		100	less than half		
2963	07-Feb-17	VC3	110-116.5	2	Sebastes (Rockfish)	genus	interhaemal spine	small		100	fragments		
2964	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	basioccipital	small		100	more than half		
2965	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	hypocoracoid	small	right	100	articular surface		
2966	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	radial	small		100	half		
2967	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	vertebral process	small		100	effectively complete		
2968	07-Feb-17	VC3	110-116.5	2	Sebastes (Rockfish)	genus	dentary	small	right	100	fragments		
2969	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	dentary	small	left	100	fragment		
2970	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	maxillary	small	left	100	fragment		
2971	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	spacer	small		100	fragment		
2972	07-Feb-17	VC3	110-116.5	1	Sebastes (Rockfish)	genus	hypural 3	small		100	effectively complete		
2973	07-Feb-17	VC3	110-116.5	113	Unidentified fish	unid				100	fragments		
2974	07-Feb-17	VC3	110-116.5	2	Unidentified fish	unid				100	fragments	2	
2975	07-Feb-17	VC3	116.5-120	7	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
2976	07-Feb-17	VC3	116.5-120	1	Clupea pallasii, (Pacific herring)	species	dentary	small	left	100	articular surface		
2977	07-Feb-17	VC3	116.5-120	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
2978	07-Feb-17	VC3	116.5-120	4	Unidentified fish	unid				100	fragments		
2979	07-Feb-17	VC3	116.5-120	3	Unidentified fish	unid				100	fragments	3	
2980	07-Feb-17	VC3	120-125	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
2981	07-Feb-17	VC3	120-125	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	less than half		
2982	07-Feb-17	VC3	120-125	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
2983	07-Feb-17	VC3	120-125	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	half		
2984	07-Feb-17	VC3	120-125	2	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
2985	07-Feb-17	VC3	120-125	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	more than half	1	
2986	07-Feb-17	VC3	120-125	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface		
2987	07-Feb-17	VC3	120-125	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	articular surface	1	
2988	07-Feb-17	VC3	120-125	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
2989	07-Feb-17	VC3	120-125	1	Sebastes (Rockfish)	genus	basioccipital	small		100	articular surface		
2990	07-Feb-17	VC3	120-125	1	Sebastes (Rockfish)	genus	hyomandibular	small	right	100	more than half		
2991	07-Feb-17	VC3	120-125	1	Sebastes (Rockfish)	genus	pelvis	small	right	100	articular surface		
2992	07-Feb-17	VC3	120-125	1	Sebastes (Rockfish)	genus	supracleithrum	small	right	100	more than half		
2993	07-Feb-17	VC3	120-125	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
2994	07-Feb-17	VC3	120-125	1	Sebastes (Rockfish)	genus	vertebra	small		100	less than half		
2995	07-Feb-17	VC3	120-125	3	Sebastes (Rockfish)	genus	dentary	small	left	100	fragments	3	2 pc. Refit
2996	07-Feb-17	VC3	120-125	2	Sebastes (Rockfish)	genus	dentary	small	left	100	fragments		2 pc. Refit
2997	07-Feb-17	VC3	120-125	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
2998	07-Feb-17	VC3	120-125	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete	1	
2999	07-Feb-17	VC3	120-125	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	more than half		
3000	07-Feb-17	VC3	120-125	1	Unidentified mammal	unid				100	fragment		
3001	07-Feb-17	VC3	120-125	51	Unidentified fish	unid				100	fragments		
3002	07-Feb-17	VC3	120-125	22	Unidentified fish	unid				100	fragments		
3003	07-Feb-17	VC3	125-130	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
3004	07-Feb-17	VC3	125-130	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
3005	07-Feb-17	VC3	125-130	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
3006	07-Feb-17	VC3	125-130	1	Sebastes (Rockfish)	genus	vertebra	small		100	less than half		
3007	07-Feb-17	VC3	125-130	1	Sebastes (Rockfish)	genus	vertebra	small		100	half		
3008	07-Feb-17	VC3	125-130	1	Sebastes (Rockfish)	genus	exoccipital	small		100	more than half	1	
3009	07-Feb-17	VC3	125-130	1	Sebastes (Rockfish)	genus	post temporal	small		100	articular surface		
3010	07-Feb-17	VC3	125-130	1	Sebastes (Rockfish)	genus	premaxillary	small		100	fragment		
3011	07-Feb-17	VC3	125-130	1	Hexagrammos, (Greenling)	genus	atlas	small		100	effectively complete		
3012	07-Feb-17	VC3	125-130	3	Unidentified mammal	unid				100	fragments	3	
3013	07-Feb-17	VC3	125-130	42	Unidentified fish	unid				100	fragments		
3014	07-Feb-17	VC3	125-130	4	Unidentified fish	unid				100	fragments	4	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3015	07-Feb-17	VC3	130-135	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3016	07-Feb-17	VC3	130-135	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
3017	07-Feb-17	VC3	130-135	3	Clupea pallasii, (Pacific herring)	species	vertebrae			100	fragments		
3018	07-Feb-17	VC3	130-135	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3019	07-Feb-17	VC3	130-135	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3020	07-Feb-17	VC3	130-135	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
3021	07-Feb-17	VC3	130-135	1	Sebastes (Rockfish)	genus	suborbital 2/3			100	effectively complete		
3022	07-Feb-17	VC3	130-135	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
3023	07-Feb-17	VC3	130-135	30	Unidentified fish	unid				100	fragments		
3024	07-Feb-17	VC3	130-135	4	Unidentified fish	unid				100	fragments	4	
3025	07-Feb-17	VC3	135-140	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
3026	07-Feb-17	VC3	135-140	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
3027	07-Feb-17	VC3	135-140	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3028	07-Feb-17	VC3	135-140	1	Sebastes (Rockfish)	genus	opisthotic			100	fragment		
3029	07-Feb-17	VC3	135-140	2	Unidentified fish	unid				100	fragments		
3030	08-Feb-17	VC7	5-10	1	Unidentified fish	unid				100	fragment	1	
3031	08-Feb-17	VC7	10-15	1	Sebastes (Rockfish)	genus	alisphenoid	medium/large		100	effectively complete		
3032	08-Feb-17	VC7	10-15	1	Unidentified fish	unid				100	fragment		
3033	08-Feb-17	VC7	10-15	2	Unidentified fish	unid				100	fragments	2	
3034	08-Feb-17	VC7	15-20	1	Unidentified mammal	unid				100	fragments	1	
3035	08-Feb-17	VC7	15-20	8	Unidentified fish	unid				100	fragments		1 pc. Refits with pc. In next section
3036	09-Feb-17	VC7	20-25	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
3037	09-Feb-17	VC7	20-25	1	Unidentified fish	unid				100	fragment		spine (likely rockfisk) w/butchery marks; refit with spine in previous section
3038	09-Feb-17	VC7	20-25	2	Unidentified fish	unid				100	fragments	2	
3039	09-Feb-17	VC7	20-25	6	Unidentified fish	unid				100	fragments		
3040	09-Feb-17	VC7	25-30	10	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3041	09-Feb-17	VC7	25-30	8	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3042	09-Feb-17	VC7	25-30	3	Clupea pallasii, (Pacific herring)	species	vertebrae			100	less than half		
3043	09-Feb-17	VC7	25-30	1	Clupea pallasii, (Pacific herring)	species	vertebral process			100	effectively complete		
3044	09-Feb-17	VC7	25-30	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	medium		100	effectively complete		
3045	09-Feb-17	VC7	25-30	2	Clupea pallasii, (Pacific herring)	species	caudal vertebra	medium		100	effectively complete		
3046	09-Feb-17	VC7	25-30	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	3	
3047	09-Feb-17	VC7	25-30	2	Sebastes (Rockfish)	genus	gillrakers			100	effectively complete	2	
3048	09-Feb-17	VC7	25-30	1	Sebastes (Rockfish)	genus	gillraker			100	more than half	1	
3049	09-Feb-17	VC7	25-30	2	Unidentified mammal	unid				100	fragments		
3050	09-Feb-17	VC7	25-30	2	Unidentified mammal	unid				100	fragments	2	
3051	09-Feb-17	VC7	25-30	10	Unidentified fish	unid				100	fragments		
3052	09-Feb-17	VC7	25-30	8	Unidentified fish	unid				100	fragments	8	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3053	09-Feb-17	VC7	30-34.5	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3054	09-Feb-17	VC7	30-34.5	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete	1	
3055	09-Feb-17	VC7	30-34.5	1	Pleuronectiformes (flatfish)	order	vertebra			100	effectively complete	1	
3056	09-Feb-17	VC7	30-34.5	1	Pleuronectiformes (flatfish)	order	vertebra			100	half	1	
3057	09-Feb-17	VC7	30-34.5	1	Pleuronectiformes (flatfish)	order	quadrate			75	articular surface	1	
3058	09-Feb-17	VC7	30-34.5	5	Unidentified mammal	unid				100	fragments	5	
3059	09-Feb-17	VC7	30-34.5	18	Unidentified fish	unid				100	fragments	18	
3060	09-Feb-17	VC7	30-34.5	1	Unidentified fish	unid				100	fragment		
3061	09-Feb-17	VC7	34.5-40	1	Unidentified mammal	unid				100	fragment	1	
3062	09-Feb-17	VC7	40-45	7	Unidentified fish	unid				100	fragments	7	
3063	09-Feb-17	VC7	40-45	1	Unidentified fish	unid				100	fragments		
3064	09-Feb-17	VC7	40-45	1	Unidentified mammal	unid				100	fragment	1	
3065	09-Feb-17	VC7	45-50	7	Unidentified fish	unid				100	fragments		
3066	09-Feb-17	VC7	45-50	1	Unidentified fish	unid				100	fragment	1	
3067	09-Feb-17	VC7	45-50	2	Unidentified mammal	unid				100	fragments		
3068	09-Feb-17	VC7	50-55	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3069	09-Feb-17	VC7	50-55	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragments		
3070	09-Feb-17	VC7	50-55	2	Unidentified mammal	unid				100	fragments		
3071	09-Feb-17	VC7	50-55	1	Unidentified mammal	unid				100	fragment	1	
3072	09-Feb-17	VC7	50-55	3	Unidentified fish	unid				100	fragments		
3073	09-Feb-17	VC7	50-55	3	Unidentified fish	unid				100	fragments	3	
3074	09-Feb-17	VC7	50-55	1	Thaleichthys pacificus (Eulachon)	species	operculum			100	articular surface		
3075	09-Feb-17	VC7	55-60	40	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3076	09-Feb-17	VC7	55-60	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	less than half		
3077	09-Feb-17	VC7	55-60	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
3078	09-Feb-17	VC7	55-60	2	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	effectively complete		
3079	09-Feb-17	VC7	55-60	35	Unidentified fish	unid				100	fragments		
3080	10-Feb-17	VC7	60-65	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3081	10-Feb-17	VC7	60-65	1	Unidentified mammal	unid				100	fragments		
3082	10-Feb-17	VC7	60-65	5	Unidentified fish	unid				100	fragments		
3083	10-Feb-17	VC7	65-70	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3084	10-Feb-17	VC7	65-70	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragment		
3085	10-Feb-17	VC7	70-75	9	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3086	10-Feb-17	VC7	70-75	10	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3087	10-Feb-17	VC7	70-75	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
3088	10-Feb-17	VC7	70-75	1	Clupea pallasii, (Pacific herring)	species	supraoccipital			100	fragment		
3089	10-Feb-17	VC7	70-75	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3090	10-Feb-17	VC7	70-75	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments	2	

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3091	10-Feb-17	VC7	70-75	4	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	fragments		
3092	10-Feb-17	VC7	70-75	1	Anoplopoma fimbria (Sablefish)	species	vertebra			75	fragment		
3093	10-Feb-17	VC7	70-75	6	Unidentified mammal	unid				100	fragments		
3094	10-Feb-17	VC7	70-75	2	Unidentified mammal	unid				100	fragments	2	
3095	10-Feb-17	VC7	70-75	4	Unidentified fish	unid				100	fragments		
3096	10-Feb-17	VC7	70-75	2	Unidentified fish	unid				100	fragments	2	
3097	10-Feb-17	VC7	75-80	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3098	10-Feb-17	VC7	75-80	1	Clupea pallasii, (Pacific herring)	species	hypural			100	effectively complete		
3099	10-Feb-17	VC7	75-80	3	Unidentified mammal	unid				100	fragments		
3100	10-Feb-17	VC7	75-80	2	Unidentified fish	unid				100	fragments		
3101	10-Feb-17	VC7	75-80	3	Unidentified fish	unid				100	fragments	3	
3102	10-Feb-17	VC7	80-85	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3103	10-Feb-17	VC7	80-85	3	Unidentified fish	unid				100	fragments		
3104	10-Feb-17	VC7	80-85	1	Unidentified fish	unid				100	fragment	1	
3105	10-Feb-17	VC7	85-90	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
3106	10-Feb-17	VC7	85-90	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3107	10-Feb-17	VC7	85-90	1	Clupea pallasii, (Pacific herring)	species	post cleithrum			100	effectively complete		
3108	10-Feb-17	VC7	85-90	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	effectively complete		
3109	10-Feb-17	VC7	85-90	16	Unidentified fish	unid				100	fragments		
3110	10-Feb-17	VC7	85-90	28	Unidentified mammal	unid				100	fragments		
3111	10-Feb-17	VC7	85-90	1	Unidentified mammal	unid				100	fragment	1	
3112	10-Feb-17	VC7	90-95	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3113	10-Feb-17	VC7	90-95	5	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
3114	10-Feb-17	VC7	90-95	5	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3115	10-Feb-17	VC7	90-95	2	Clupea pallasii, (Pacific herring)	species	interoperculum	small		100	fragments		
3116	10-Feb-17	VC7	90-95	2	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
3117	10-Feb-17	VC7	90-95	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	effectively complete		
3118	10-Feb-17	VC7	90-95	1	Clupea pallasii, (Pacific herring)	species	opisthotic	small		100	effectively complete		
3119	10-Feb-17	VC7	90-95	1	Clupea pallasii, (Pacific herring)	species	epihyal	small		100	effectively complete		
3120	10-Feb-17	VC7	90-95	1	Clupea pallasii, (Pacific herring)	species	epiotic	small		100	effectively complete		
3121	10-Feb-17	VC7	90-95	1	Clupea pallasii, (Pacific herring)	species	hypohyal	small		100	effectively complete		
3122	10-Feb-17	VC7	90-95	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
3123	10-Feb-17	VC7	90-95	1	Clupea pallasii, (Pacific herring)	species	hypercoracoid	small	right	100	half		
3124	10-Feb-17	VC7	90-95	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3125	10-Feb-17	VC7	90-95	6	Unidentified mammal	unid				100	fragments		
3126	10-Feb-17	VC7	90-95	5	Unidentified mammal	unid				100	fragments	5	
3127	10-Feb-17	VC7	90-95	12	Unidentified fish	unid				100	fragments		
3128	10-Feb-17	VC7	95-100	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3129	10-Feb-17	VC7	95-100	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3130	10-Feb-17	VC7	95-100	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
3131	10-Feb-17	VC7	95-100	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	articular surface		
3132	10-Feb-17	VC7	95-100	1	Clupea pallasii, (Pacific herring)	species	operculum	small	left	100	effectively complete		
3133	10-Feb-17	VC7	95-100	1	Clupea pallasii, (Pacific herring)	species	supraoccipital	small		100	fragment		
3134	10-Feb-17	VC7	95-100	1	Clupea pallasii, (Pacific herring)	species	post temporal	small		100	more than half		
3135	10-Feb-17	VC7	95-100	1	Clupea pallasii, (Pacific herring)	species	parasphenoid	small		100	fragment		
3136	10-Feb-17	VC7	95-100	1	Clupea pallasii, (Pacific herring)	species	epiotic	small		100	effectively complete		
3137	10-Feb-17	VC7	95-100	1	Oncorhynchus (Pacific Salmon)	genus	caudal bone plate			100	articular surface		
3138	10-Feb-17	VC7	95-100	1	Oncorhynchus (Pacific Salmon)	genus	hypural 7			100	effectively complete		
3139	10-Feb-17	VC7	95-100	1	Sebastes (Rockfish)	genus	interhaemal spine-2	medium		100	articular surface		
3140	10-Feb-17	VC7	95-100	8	Unidentified mammal	unid				100	fragments		
3141	10-Feb-17	VC7	95-100	12	Unidentified fish	unid				100	fragments		
3142	10-Feb-17	VC7	100-105	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	half		
3143	10-Feb-17	VC7	100-105	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3144	10-Feb-17	VC7	100-105	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	half		
3145	10-Feb-17	VC7	100-105	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
3146	10-Feb-17	VC7	100-105	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3147	10-Feb-17	VC7	100-105	1	Unidentified mammal	unid				100	fragment		
3148	10-Feb-17	VC7	100-105	5	Unidentified fish	unid				100	fragments		
3149	10-Feb-17	VC7	105-110	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
3150	10-Feb-17	VC7	105-110	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3151	10-Feb-17	VC7	105-110	8	Unidentified fish	unid				100	fragments		
3152	10-Feb-17	VC7	105-110	1	Hexagrammos, (Greenling)	genus	radial	medium/large		100	effectively complete		
3153	10-Feb-17	VC7	105-110	1	Sebastes (Rockfish)	genus	epihyal			75	articular surface		
3154	10-Feb-17	VC7	110-115	1	Sebastes (Rockfish)	genus	hyomandibular	small/medium	right	100	fragment		
3155	10-Feb-17	VC7	110-115	25	Unidentified fish	unid				100	fragments		lacey, flatfish-like cranial piece
3156	10-Feb-17	VC7	115-120	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3157	10-Feb-17	VC7	115-120	1	Unidentified fish	unid				100	fragment		
3158	13-Feb-17	VC7	120-125	9	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3159	13-Feb-17	VC7	120-125	1	Sebastes (Rockfish)	genus	vertebra		small	100	effectively complete		
3160	13-Feb-17	VC7	120-125	1	Sebastes (Rockfish)	genus	gillraker			100	effectively complete		
3161	13-Feb-17	VC7	120-125	21	Unidentified fish	unid				100	fragments		
3162	13-Feb-17	VC7	120-125	1	Gadus (Pacific cod and pollock)	genus	pharyngobranchial			100	effectively complete		
3163	13-Feb-17	VC7	125-130	2	Clupea pallasii, (Pacific herring)	species	vertebrae			100	more than half		
3164	13-Feb-17	VC7	125-130	2	Unidentified mammal	unid				100	fragment		includes small mammal carpal or tarsal
3165	13-Feb-17	VC7	125-130	1	Engraulis mordax (N. anchovy)	species	exoccipital			100	effectively complete		
3166	13-Feb-17	VC7	125-130	11	Unidentified fish	unid				100	fragments		
3167	13-Feb-17	VC7	130-135	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3168	13-Feb-17	VC7	130-135	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
3169	13-Feb-17	VC7	130-135	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
3170	13-Feb-17	VC7	130-135	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3171	13-Feb-17	VC7	130-135	1	Unidentified mammal	unid				100	fragment		
3172	13-Feb-17	VC7	130-135	12	Unidentified fish	unid				100	fragments		
3173	13-Feb-17	VC7	130-135	1	Unidentified fish	unid				100	fragment	1	
3174	20-Feb-17	VC7	135-140	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3175	20-Feb-17	VC7	135-140	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3176	20-Feb-17	VC7	135-140	2	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
3177	20-Feb-17	VC7	135-140	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	articular surface		
3178	20-Feb-17	VC7	135-140	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3179	20-Feb-17	VC7	135-140	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
3180	20-Feb-17	VC7	135-140	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3181	20-Feb-17	VC7	135-140	1	Oncorhynchus (Pacific Salmon)	genus	orbital			100	effectively complete		
3182	20-Feb-17	VC7	135-140	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
3183	20-Feb-17	VC7	135-140	1	Sebastes (Rockfish)	genus	palatine	small	right	100	fragment		
3184	20-Feb-17	VC7	135-140	1	Sebastes (Rockfish)	genus	parasphenoid	small		100	fragment		
3185	20-Feb-17	VC7	135-140	1	Sebastes (Rockfish)	genus	hypercoracoid	small	right	100	fragment		
3186	20-Feb-17	VC7	135-140	1	Sebastes (Rockfish)	genus	radial	small		100	more than half		
3187	20-Feb-17	VC7	135-140	1	Sebastes (Rockfish)	genus	epihyal	medium		100	articular surface		
3188	20-Feb-17	VC7	135-140	3	Engraulis mordax (N. anchovy)	species	vertebrae	medium/large		100	effectively complete		
3189	20-Feb-17	VC7	135-140	1	Hexagrammos, (Greenling)	genus	vertebra	small/medium		100	effectively complete		
3190	20-Feb-17	VC7	135-140	38	Unidentified fish	unid				100	fragments		
3191	20-Feb-17	VC7	135-140	3	Unidentified fish	unid				100	fragments	3	
3192	20-Feb-17	VC7	140-145	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete		
3193	20-Feb-17	VC7	140-145	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	less than half		
3194	20-Feb-17	VC7	140-145	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	fragment		
3195	20-Feb-17	VC7	140-145	1	Sebastes (Rockfish)	genus	caudal vertebra	small		100	effectively complete		
3196	20-Feb-17	VC7	140-145	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	more than half		
3197	20-Feb-17	VC7	140-145	2	Sebastes (Rockfish)	genus	vertebrae	small		100	less than half		
3198	20-Feb-17	VC7	140-145	2	Sebastes (Rockfish)	genus	ceratohyal	small	left	100	fragments		
3199	20-Feb-17	VC7	140-145	2	Sebastes (Rockfish)	genus	parasphenoid	small		100	fragments		
3200	20-Feb-17	VC7	140-145	1	Sebastes (Rockfish)	genus	pelvis	small	left	100	articular surface		
3201	20-Feb-17	VC7	140-145	1	Sebastes (Rockfish)	genus	dentary	small	right	100	fragment		
3202	20-Feb-17	VC7	140-145	1	Sebastes (Rockfish)	genus	hypocoracoid	small	left	100	fragment		
3203	20-Feb-17	VC7	140-145	1	Sebastes (Rockfish)	genus	epihyal	small		100	articular surface		
3204	20-Feb-17	VC7	140-145	1	Hexagrammos, (Greenling)	genus	caudal vertebra	medium		100	effectively complete		
3205	20-Feb-17	VC7	140-145	1	Hexagrammos, (Greenling)	genus	vertebra			100	fragment		
3206	20-Feb-17	VC7	140-145	3	Squalidae (Dogfish)	genus	vertebrae			100	half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3207	20-Feb-17	VC7	140-145	1	Unidentified mammal	unid				100	fragment		
3208	20-Feb-17	VC7	140-145	77	Unidentified fish	unid				100	fragments		
3209	20-Feb-17	VC7	140-145	1	Pleuronectiformes (flatfish)	order	interhaemal spine-1			100	effectively complete		
3210	20-Feb-17	VC7	145-150	4	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3211	20-Feb-17	VC7	145-150	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
3212	20-Feb-17	VC7	145-150	2	Sebastes (Rockfish)	genus	caudal vertebrae	small		100	effectively complete		
3213	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	caudal vertebra	x-small		100	effectively complete		
3214	20-Feb-17	VC7	145-150	2	Sebastes (Rockfish)	genus	caudal vertebrae	small		100	more than half		
3215	20-Feb-17	VC7	145-150	2	Sebastes (Rockfish)	genus	exoccipital	small	right	100	effectively complete		
3216	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	gillraker	small		100	complete		
3217	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	pelvis	small	left	100	articular surface		
3218	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	epiotic	small	left	100	fragment		
3219	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	hypocoracoid	small		100	fragment		
3220	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	supracleithrum	small	left	100	articular surface		
3221	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	supracleithrum	small	right	100	articular surface		
3222	20-Feb-17	VC7	145-150	1	Sebastes (Rockfish)	genus	vomer	small		100	effectively complete		
3223	20-Feb-17	VC7	145-150	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
3224	20-Feb-17	VC7	145-150	1	Engraulis mordax (N. anchovy)	species	vertebra	medium/large		100	effectively complete		
3225	20-Feb-17	VC7	145-150	98	Unidentified fish	unid				100	fragments		
3226	20-Feb-17	VC7	150-155	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae	small		100	fragments		
3227	20-Feb-17	VC7	150-155	1	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid	x-small		100	fragment		
3228	20-Feb-17	VC7	150-155	2	Sebastes (Rockfish)	genus	vertebrae	small		100	more than half		
3229	20-Feb-17	VC7	150-155	1	Sebastes (Rockfish)	genus	vertebra	small		100	more than half		
3230	20-Feb-17	VC7	150-155	1	Sebastes (Rockfish)	genus	exoccipital	small	right	100	effectively complete		
3231	20-Feb-17	VC7	150-155	1	Sebastes (Rockfish)	genus	exoccipital	small	right	100	effectively complete		
3232	20-Feb-17	VC7	150-155	1	Sebastes (Rockfish)	genus	parasphenoid	small		100	fragment		
3233	20-Feb-17	VC7	150-155	1	Sebastes (Rockfish)	genus	hypocoracoid	small	left	100	articular surface		
3234	20-Feb-17	VC7	150-155	1	Hexagrammos, (Greenling)	genus	vertebra	small/medium		100	effectively complete		
3235	20-Feb-17	VC7	150-155	2	Engraulis mordax (N. anchovy)	species	vertebra 1/2	medium/large		100	effectively complete		
3236	20-Feb-17	VC7	150-155	10	Engraulis mordax (N. anchovy)	species	vertebrae	medium/large		100	effectively complete		
3237	20-Feb-17	VC7	150-155	2	Engraulis mordax (N. anchovy)	species	exoccipital	medium/large		100	effectively complete		
3238	20-Feb-17	VC7	150-155	1	Engraulis mordax (N. anchovy)	species	hypural	medium/large		100	effectively complete		
3239	20-Feb-17	VC7	150-155	7	Unidentified mammal	unid				100	fragments		
3240	20-Feb-17	VC7	150-155	80	Unidentified fish	unid				100	fragments		
3241	20-Feb-17	VC7	150-155	1	Unidentified fish	unid				100	fragment	1	
3242	20-Feb-17	VC7	155-160	8	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3243	20-Feb-17	VC7	155-160	1	Clupea pallasii, (Pacific herring)	species	opisthotic	small		100	effectively complete		
3244	20-Feb-17	VC7	155-160	3	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3245	20-Feb-17	VC7	155-160	2	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3246	20-Feb-17	VC7	155-160	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	effectively complete		
3247	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	caudal vertebra	small		100	effectively complete		
3248	20-Feb-17	VC7	155-160	2	Sebastes (Rockfish)	genus	caudal vertebrae	small		100	more than half		
3249	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	ultimate vertebra	small		100	effectively complete		
3250	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	radius	small		100	effectively complete		
3251	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	vertebral arch	small		100	more than half		
3252	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	quadrate	small	left	100	effectively complete		
3253	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	exoccipital	small	right	100	effectively complete		
3254	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	hypercoracoid	small		100	fragment		
3255	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	inferior pharyngeal	small		100	fragment		
3256	20-Feb-17	VC7	155-160	1	Sebastes (Rockfish)	genus	operculum	small	left	100	articular surface		
3257	20-Feb-17	VC7	155-160	1	Hexagrammos, (Greenling)	genus	abdominal vertebra	medium		100	effectively complete		
3258	20-Feb-17	VC7	155-160	8	Hexagrammos, (Greenling)	genus	caudal vertebrae	medium		100	effectively complete		
3259	20-Feb-17	VC7	155-160	1	Hexagrammos, (Greenling)	genus	hyomandibular	medium	left	100	effectively complete		
3260	20-Feb-17	VC7	155-160	1	Engraulis mordax (N. anchovy)	species	vertebra	large		100	effectively complete		
3261	20-Feb-17	VC7	155-160	1	Engraulis mordax (N. anchovy)	species	vertebra	medium/large		100	effectively complete		
3262	20-Feb-17	VC7	155-160	1	Engraulis mordax (N. anchovy)	species	operculum			100	effectively complete		
3263	20-Feb-17	VC7	155-160	2	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	more than half		
3264	20-Feb-17	VC7	155-160	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	less than half		
3265	20-Feb-17	VC7	155-160	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragment		
3266	20-Feb-17	VC7	155-160	1	Anoplopoma fimbria (Sablefish)	species	hypural			100	effectively complete		
3267	20-Feb-17	VC7	155-160	1	Anoplopoma fimbria (Sablefish)	species	maxillary			75	fragment		
3268	20-Feb-17	VC7	155-160	2	Gadus (Pacific cod and pollock)	genus	vertebrae			100	effectively complete		
3269	20-Feb-17	VC7	155-160	2	Gadus (Pacific cod and pollock)	genus	maxillary			100	fragments		does not refit but likely from the same element
3270	20-Feb-17	VC7	155-160	1	Squalidae (Dogfish)	genus	vertebra			100	half		
3271	20-Feb-17	VC7	155-160	76	Unidentified fish	unid				100	fragments		
3272	20-Feb-17	VC7	160-165	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3273	20-Feb-17	VC7	160-165	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	less than half		
3274	20-Feb-17	VC7	160-165	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
3275	20-Feb-17	VC7	160-165	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
3276	20-Feb-17	VC7	160-165	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
3277	20-Feb-17	VC7	160-165	10	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3278	20-Feb-17	VC7	160-165	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
3279	20-Feb-17	VC7	160-165	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3280	20-Feb-17	VC7	160-165	1	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid			100	fragment		
3281	20-Feb-17	VC7	160-165	1	Sebastes (Rockfish)	genus	atlas	small		100	effectively complete		
3282	20-Feb-17	VC7	160-165	1	Sebastes (Rockfish)	genus	abdominal vertebra	small		100	more than half		
3283	20-Feb-17	VC7	160-165	1	Sebastes (Rockfish)	genus	radius	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3284	20-Feb-17	VC7	160-165	1	Sebastes (Rockfish)	genus	gillraker	small		100	complete		
3285	20-Feb-17	VC7	160-165	1	Sebastes (Rockfish)	genus	hypural	small		100	effectively complete		
3286	20-Feb-17	VC7	160-165	1	Hexagrammos, (Greenling)	genus	vertebra	medium		100	effectively complete		
3287	20-Feb-17	VC7	160-165	51	Unidentified fish	unid				100	fragments		
3288	20-Feb-17	VC7	160-165	1	Unidentified fish	unid				100	fragment	1	
3289	20-Feb-17	VC7	165-170	1	Clupea pallasii, (Pacific herring)	species	basioccipital	small		100	articular surface		
3290	20-Feb-17	VC7	165-170	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3291	20-Feb-17	VC7	165-170	5	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3292	20-Feb-17	VC7	165-170	3	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
3293	20-Feb-17	VC7	165-170	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
3294	20-Feb-17	VC7	165-170	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	medium		100	effectively complete		
3295	20-Feb-17	VC7	165-170	1	Clupea pallasii, (Pacific herring)	species	vertebra	medium		100	half		
3296	20-Feb-17	VC7	165-170	1	Clupea pallasii, (Pacific herring)	species	ceratohyal	small		100	fragment		
3297	20-Feb-17	VC7	165-170	1	Clupea pallasii, (Pacific herring)	species	cleithrum	small		100	fragment		
3298	20-Feb-17	VC7	165-170	2	Oncorhynchus (Pacific Salmon)	genus	caudal vertebrae			100	effectively complete		
3299	20-Feb-17	VC7	165-170	1	Oncorhynchus (Pacific Salmon)	genus	caudal vertebra			100	more than half		
3300	20-Feb-17	VC7	165-170	53	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3301	20-Feb-17	VC7	165-170	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
3302	20-Feb-17	VC7	165-170	15	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3303	20-Feb-17	VC7	165-170	3	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	effectively complete		
3304	20-Feb-17	VC7	165-170	1	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid			100	fragment		
3305	20-Feb-17	VC7	165-170	1	Oncorhynchus (Pacific Salmon)	genus	gillraker			100	fragment		
3306	20-Feb-17	VC7	165-170	1	Sebastes (Rockfish)	genus	vertebra	small		100	less than half		
3307	20-Feb-17	VC7	165-170	1	Sebastes (Rockfish)	genus	pelvis	small	right	100	effectively complete		
3308	20-Feb-17	VC7	165-170	1	Sebastes (Rockfish)	genus	retroarticular	x-small	right	100	complete		
3309	20-Feb-17	VC7	165-170	1	Sebastes (Rockfish)	genus	hypohyal-A	small		100	effectively complete		
3310	20-Feb-17	VC7	165-170	1	Sebastes (Rockfish)	genus	hypohyal-B	small		100	effectively complete		
3311	20-Feb-17	VC7	165-170	1	Sebastes (Rockfish)	genus	hypohyal-B	x-small		100	more than half		
3312	20-Feb-17	VC7	165-170	3	Hexagrammos, (Greenling)	genus	vertebrae	medium		100	effectively complete		
3313	20-Feb-17	VC7	165-170	2	Hexagrammos, (Greenling)	genus	vertebrae	small		100	effectively complete		
3314	20-Feb-17	VC7	165-170	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	fragment		
3315	20-Feb-17	VC7	165-170	1	Hexagrammos, (Greenling)	genus	premaxillary	medium	right	100	fragment		
3316	20-Feb-17	VC7	165-170	1	Hexagrammos, (Greenling)	genus	hyomandibular	medium	right	100	fragment		
3317	20-Feb-17	VC7	165-170	1	Hexagrammos, (Greenling)	genus	articular	medium	right	100	articular surface		
3318	20-Feb-17	VC7	165-170	1	Hexagrammos, (Greenling)	genus	retroarticular	medium	right	100	effectively complete		
3319	20-Feb-17	VC7	165-170	3	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
3320	20-Feb-17	VC7	165-170	8	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments		
3321	20-Feb-17	VC7	165-170	1	Podicipedidae (grebe)	family	radius			100	fragment		
3322	20-Feb-17	VC7	165-170	124	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3323	20-Feb-17	VC7	165-170	1	Unidentified fish	unid				100	fragment	1	
3324	20-Feb-17	VC7	170-175	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3325	20-Feb-17	VC7	170-175	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	more than half		
3326	20-Feb-17	VC7	170-175	12	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3327	20-Feb-17	VC7	170-175	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	more than half		
3328	20-Feb-17	VC7	170-175	1	Clupea pallasii, (Pacific herring)	species	vertebra 1/2	small		100	effectively complete		
3329	20-Feb-17	VC7	170-175	1	Clupea pallasii, (Pacific herring)	species	caudal vertebra	small		100	effectively complete	1	
3330	20-Feb-17	VC7	170-175	2	Clupea pallasii, (Pacific herring)	species	dentary	small	left	100	fragments		
3331	20-Feb-17	VC7	170-175	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	medium		100	effectively complete		
3332	20-Feb-17	VC7	170-175	1	Clupea pallasii, (Pacific herring)	species	vertebra	medium		100	half		
3333	20-Feb-17	VC7	170-175	17	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3334	20-Feb-17	VC7	170-175	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment	1	
3335	20-Feb-17	VC7	170-175	3	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3336	20-Feb-17	VC7	170-175	1	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	fragment		
3337	20-Feb-17	VC7	170-175	1	Oncorhynchus (Pacific Salmon)	genus	hypercoracoid			100	fragment		
3338	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	caudal vertebrae	small		100	effectively complete		
3339	20-Feb-17	VC7	170-175	3	Sebastes (Rockfish)	genus	caudal vertebra	small		100	more than half		
3340	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	caudal vertebra	x-small		100	less than half		
3341	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	spacer	small		100	effectively complete		
3342	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	hyomandibular	small		100	fragment		
3343	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	maxillary	small		100	articular surface		
3344	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	dentary	small		100	fragment		
3345	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	interhaemal spine-1	small		100	fragment		
3346	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	interhaemal spine-2	small		100	effectively complete		
3347	20-Feb-17	VC7	170-175	1	Sebastes (Rockfish)	genus	pharyngeobranchial	small		100	fragment		
3348	20-Feb-17	VC7	170-175	3	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	effectively complete		
3349	20-Feb-17	VC7	170-175	5	Anoplopoma fimbria (Sablefish)	species	vertebrae			100	fragments		
3350	20-Feb-17	VC7	170-175	1	Anoplopoma fimbria (Sablefish)	species	pterotic			100	effectively complete		
3351	20-Feb-17	VC7	170-175	2	Unidentified mammal	unid				100	fragments		
3352	20-Feb-17	VC7	170-175	1	Unidentified mammal	unid				100	fragments	1	
3353	20-Feb-17	VC7	170-175	75	Unidentified fish	unid				100	fragments		
3354	20-Feb-17	VC7	170-175	9	Unidentified fish	unid				100	fragments	9	
3355	21-Feb-17	VC7	175-180	8	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3356	21-Feb-17	VC7	175-180	6	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3357	21-Feb-17	VC7	175-180	4	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	half		
3358	21-Feb-17	VC7	175-180	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	more than half		
3359	21-Feb-17	VC7	175-180	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	less than half		
3360	21-Feb-17	VC7	175-180	2	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
3361	21-Feb-17	VC7	175-180	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3362	21-Feb-17	VC7	175-180	1	Clupea pallasii, (Pacific herring)	species	maxillary	small	right	100	fragment		
3363	21-Feb-17	VC7	175-180	7	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3364	21-Feb-17	VC7	175-180	1	Oncorhynchus (Pacific Salmon)	genus	palatine			100	fragment		
3365	21-Feb-17	VC7	175-180	1	Oncorhynchus (Pacific Salmon)	genus	parapophasis			100	effectively complete		
3366	21-Feb-17	VC7	175-180	1	Oncorhynchus (Pacific Salmon)	genus	interopercle			100	effectively complete		
3367	21-Feb-17	VC7	175-180	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
3368	21-Feb-17	VC7	175-180	1	Oncorhynchus (Pacific Salmon)	genus	branchial			100	effectively complete		
3369	21-Feb-17	VC7	175-180	1	Oncorhynchus (Pacific Salmon)	genus	dentary			100	fragment		2 pc. Refit
3370	21-Feb-17	VC7	175-180	1	Sebastes (Rockfish)	genus	caudal vertebra			100	effectively complete		
3371	21-Feb-17	VC7	175-180	1	Sebastes (Rockfish)	genus	abdominal vertebra			100	more than half		
3372	21-Feb-17	VC7	175-180	2	Sebastes (Rockfish)	genus	caudal vertebrae			100	less than half		
3373	21-Feb-17	VC7	175-180	1	Sebastes (Rockfish)	genus	gillraker			100	complete		
3374	21-Feb-17	VC7	175-180	1	Sebastes (Rockfish)	genus	hypohyal-A		left	100	effectively complete		
3375	21-Feb-17	VC7	175-180	1	Sebastes (Rockfish)	genus	epihyal		left	100	articular surface		
3376	21-Feb-17	VC7	175-180	1	Sebastes (Rockfish)	genus	operculum		right	100	articular surface		
3377	21-Feb-17	VC7	175-180	1	Anoplopoma fimbria (Sablefish)	species	vertebra			100	effectively complete		
3378	21-Feb-17	VC7	175-180	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
3379	21-Feb-17	VC7	175-180	1	Unidentified mammal	unid				100	fragment		
3380	21-Feb-17	VC7	175-180	1	Unidentified mammal	unid				100	fragment	1	
3381	21-Feb-17	VC7	175-180	44	Unidentified fish	unid				100	fragments		
3382	21-Feb-17	VC7	175-180	1	Unidentified fish	unid				100	fragment	1	
3383	21-Feb-17	VC7	180-187	20	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3384	21-Feb-17	VC7	180-187	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	half		
3385	21-Feb-17	VC7	180-187	13	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3386	21-Feb-17	VC7	180-187	3	Clupea pallasii, (Pacific herring)	species	vertebrae	small		100	less than half		
3387	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	half	1	
3388	21-Feb-17	VC7	180-187	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium/large		100	effectively complete		
3389	21-Feb-17	VC7	180-187	2	Clupea pallasii, (Pacific herring)	species	prootic	medium/large		100	effectively complete		
3390	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	prootic	medium/large		100	half		
3391	21-Feb-17	VC7	180-187	3	Clupea pallasii, (Pacific herring)	species	vertebrae 1/2	small		100	effectively complete		
3392	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	supracleithrum	small		100	fragment		
3393	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	ceratohyal	small		100	fragment		
3394	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	hypercoracoid	small		100	fragment		
3395	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	ultimate vertebra	small		100	articular surface		
3396	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	effectively complete		
3397	21-Feb-17	VC7	180-187	1	Clupea pallasii, (Pacific herring)	species	pterotic	small		100	half		
3398	21-Feb-17	VC7	180-187	2	Oncorhynchus (Pacific Salmon)	genus	vertebrae			100	fragments		
3399	21-Feb-17	VC7	180-187	2	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	effectively complete		
3400	21-Feb-17	VC7	180-187	1	Sebastes (Rockfish)	genus	caudal vertebra	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3401	21-Feb-17	VC7	180-187	1	Sebastes (Rockfish)	genus	pelvis	small	right	100	fragments		2 pc. Refit
3402	21-Feb-17	VC7	180-187	1	Sebastes (Rockfish)	genus	parasphenoid	small		100	fragment		
3403	21-Feb-17	VC7	180-187	1	Hexagrammos, (Greenling)	genus	pelvis	small	right	100	fragment		
3404	21-Feb-17	VC7	180-187	3	Anoplopoma fimbria (Sablefish)	species	vertebra			100	fragments		
3405	21-Feb-17	VC7	180-187	1	Pleuronectiformes (flatfish)	order	vertebra			100	less than half		starry flounder type
3406	21-Feb-17	VC7	180-187	1	Pleuronectiformes (flatfish)	order	branchial			100	complete		starry flounder type
3407	21-Feb-17	VC7	180-187	1	Pleuronectiformes (flatfish)	order	palatine			100	more than half		starry flounder type
3408	21-Feb-17	VC7	180-187	1	Unidentified mammal	unid				100	fragment		
3409	21-Feb-17	VC7	180-187	3	Unidentified mammal	unid				100	fragments	3	
3410	21-Feb-17	VC7	180-187	1	Tamiasciurus douglasii (Douglas Squirrel)	species	caudal bone			100	effectively complete		
3411	21-Feb-17	VC7	180-187	87	Unidentified fish	unid				100	fragments		
3412	21-Feb-17	VC7	180-187	3	Unidentified fish	unid				100	fragments	3	
3413	21-Feb-17	VC7	187-189	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3414	21-Feb-17	VC7	187-189	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	medium		100	more than half		
3415	21-Feb-17	VC7	187-189	1	Clupea pallasii, (Pacific herring)	species	prootic	small		100	effectively complete		
3416	21-Feb-17	VC7	187-189	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	effectively complete		
3417	21-Feb-17	VC7	187-189	1	Clupea pallasii, (Pacific herring)	species	maxillary	small		100	fragment		
3418	21-Feb-17	VC7	187-189	1	Sebastes (Rockfish)	genus	vertebral arch	small		100	more than half		
3419	21-Feb-17	VC7	187-189	1	Sebastes (Rockfish)	genus	pterotic	small/medium	right	100	effectively complete		
3420	21-Feb-17	VC7	187-189	1	Unidentified mammal	unid				100	fragments		
3421	21-Feb-17	VC7	187-189	14	Unidentified fish	unid				100	fragments		
3422	21-Feb-17	VC7	187-189	3	Unidentified fish	unid				100	fragments	3	
3423	21-Feb-17	VC7	189-191	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebra	small		100	effectively complete		
3424	21-Feb-17	VC7	189-191	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	less than half		
3425	21-Feb-17	VC7	189-191	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3426	21-Feb-17	VC7	189-191	1	Sebastes (Rockfish)	genus	vertebral arch	small		100	fragment		
3427	21-Feb-17	VC7	189-191	10	Unidentified fish	unid				100	fragments		
3428	21-Feb-17	VC7	189-191	4	Unidentified fish	unid				100	fragments	4	
3429	21-Feb-17	VC7	315-318	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3430	21-Feb-17	VC7	315-318	1	Squalidae (Dogfish)	genus	vertebra			100	half		
3431	21-Feb-17	VC7	315-318	2	Squalidae (Dogfish)	genus	vertebrae			100	fragments		
3432	21-Feb-17	VC7	315-318	1	Unidentified mammal	unid				100	fragment	1	
3433	27-Nov-15	VC1	5-10	1	Unidentified fish	unid				100	fragments	1	
3434	27-Nov-15	VC1	5-10	1	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	small		100	fragments	1	
3435	27-Nov-15	VC1	5-10	2	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragments		
3436	06-Nov-15	VC1	10-15	4	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3437	06-Nov-15	VC1	10-15	1	Engraulis mordax (N. anchovy)	species	vertebra			100	effectively complete		
3438	06-Nov-15	VC1	10-15	2	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3439	06-Nov-15	VC1	10-15	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
3440	06-Nov-15	VC1	10-15	5	Unidentified fish	unid				100	fragments		
3441	06-Nov-15	VC1	10-15	1	Unidentified mammal	unid	Cancellous bone			100	fragment		
3442	06-Nov-15	VC1	15-20	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3443	06-Nov-15	VC1	15-20	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
3444	06-Nov-15	VC1	15-20	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
3445	06-Nov-15	VC1	15-20	4	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments	4	
3446	06-Nov-15	VC1	15-20	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
3447	06-Nov-15	VC1	15-20	1	Sebastes (Rockfish)	genus	interhyal	small		100	complete		
3448	06-Nov-15	VC1	15-20	1	Unidentified bird	unid	Cortical bone,long bone			100	fragment		
3449	06-Nov-15	VC1	15-20	11	Unidentified fish	unid				100	fragments		
3450	09-Nov-15	VC1	20-25	4	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	medium		100	effectively complete		
3451	09-Nov-15	VC1	20-25	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
3452	09-Nov-15	VC1	20-25	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebral fragments	medium		100	fragments		
3453	09-Nov-15	VC1	20-25	1	Clupea pallasii, (Pacific herring)	species	vertebral fragment	medium		100	fragments		
3454	09-Nov-15	VC1	20-25	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	half		
3455	09-Nov-15	VC1	20-25	1	Clupea pallasii, (Pacific herring)	species	operclum	medium	Right	100	articular surface		
3456	09-Nov-15	VC1	20-25	1	Sebastes (Rockfish)	genus	Pterygiophorsis			100	complete		
3457	09-Nov-15	VC1	20-25	1	Unidentified bird	unid	Cortical bone			50	fragment		
3458	09-Nov-15	VC1	20-25	8	Unidentified fish	unid				100	fragments	8	
3459	09-Nov-15	VC1	25-30	4	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	medium		100	effectively complete		
3460	09-Nov-15	VC1	25-30	5	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
3461	09-Nov-15	VC1	25-30	1	Clupea pallasii, (Pacific herring)	species	dentary	medium	Left	100	fragment		
3462	09-Nov-15	VC1	25-30	1	Clupea pallasii, (Pacific herring)	species	Mespterygoid	medium	Right	100	effectively complete		
3463	09-Nov-15	VC1	25-30	3	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3464	09-Nov-15	VC1	25-30	1	Sebastes (Rockfish)	genus	vertebra	small		100	effectively complete		
3465	09-Nov-15	VC1	25-30	1	Sebastes (Rockfish)	genus	vertebral fragment	medium		50	half		
3466	09-Nov-15	VC1	25-30	13	Unidentified fish	unid				100	fragments		
3467	09-Nov-15	VC1	30-35	4	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	small/medium		100	effectively complete		
3468	09-Nov-15	VC1	30-35	1	Engraulis mordax (N. anchovy)	species	vertebra			100	effectively complete		
3469	09-Nov-15	VC1	30-35	3	Unidentified fish	unid				100	fragments		
3470	10-Nov-15	VC1	35-40	1	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	small		100	effectively complete		
3471	10-Nov-15	VC1	35-40	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3472	10-Nov-15	VC1	35-40	1	Clupea pallasii, (Pacific herring)	species	vertebra	small		100	half		
3473	10-Nov-15	VC1	35-40	1	Hexagrammos, (Greenling)	genus	vertebra			100	half		
3474	10-Nov-15	VC1	35-40	1	Oncorhynchus (Pacific Salmon)	genus	vertebra			100	fragment		
3475	10-Nov-15	VC1	35-40	7	Unidentified fish	unid				100	fragments		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3476	10-Nov-15	VC1	35-40	1	Unidentified mammal	unid				50	fragment		
3477	10-Nov-15	VC1	40-45	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	effectively complete		
3478	10-Nov-15	VC1	40-45	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebral fragments	small/medium		100	half		
3479	10-Nov-15	VC1	40-45	1	Clupea pallasii, (Pacific herring)	species	vertebra	small/medium		100	fragment		
3480	10-Nov-15	VC1	40-45	2	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3481	10-Nov-15	VC1	40-45	1	Sebastes (Rockfish)	genus	dentary	small	Right	75	fragment		
3482	10-Nov-15	VC1	40-45	11	Unidentified fish	unid				100	fragments		
3483	10-Nov-15	VC1	45-50	2	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	small		100	effectively complete		
3484	10-Nov-15	VC1	45-50	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3485	10-Nov-15	VC1	45-50	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebral fragment	small		100	half		
3486	10-Nov-15	VC1	45-50	10	Unidentified fish	unid				100	fragments		
3487	10-Nov-15	VC1	45-50	2	Unidentified mammal	unid				100	fragment		
3488	10-Nov-15	VC1	50-55	1	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	small		100	effectively complete		
3489	10-Nov-15	VC1	50-55	1	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	medium		100	effectively complete		
3490	10-Nov-15	VC1	50-55	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
3491	10-Nov-15	VC1	50-55	1	Clupea pallasii, (Pacific herring)	species	prootic	medium		100	half		
3492	10-Nov-15	VC1	50-55	2	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3493	10-Nov-15	VC1	50-55	1	Oncorhynchus (Pacific Salmon)	genus	radial			100	complete		
3494	10-Nov-15	VC1	50-55	1	Oncorhynchus (Pacific Salmon)	genus	expanded neutral spine			100	effectively complete		
3495	10-Nov-15	VC1	50-55	18	Unidentified fish	unid				100	fragments		
3496	10-Nov-15	VC1	50-55	5	Unidentified mammal	unid	Cortical bone			100	fragments		
3497	10-Nov-15	VC1	55-60	3	Clupea pallasii, (Pacific herring)	species	vertebra, caudal	small		100	effectively complete		
3498	10-Nov-15	VC1	55-60	1	Hexagrammos, (Greenling)	genus	dentary		Right	75	fragment		
3499	10-Nov-15	VC1	55-60	2	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3500	10-Nov-15	VC1	55-60	1	Oncorhynchus (Pacific Salmon)	genus	epural			100	effectively complete		
3501	10-Nov-15	VC1	55-60	1	Sebastes (Rockfish)	genus	inferior pharyngeal plate		left	75	fragment		
3502	10-Nov-15	VC1	55-60	1	Sebastes (Rockfish)	genus	gill raker			100	articular surface		
3503	10-Nov-15	VC1	55-60	9	Unidentified fish	unid				100	fragments		
3504	10-Nov-15	VC1	55-60	6	Unidentified mammal	unid				100	fragments		Cortical bone; cancellous bone
3505	10-Nov-15	VC1	60-65	1	Cottidae (Sculpin)	family	cranial fragment			100	fragment		red irish lord ?
3506	10-Nov-15	VC1	60-65	4	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3507	10-Nov-15	VC1	60-65	10	Unidentified fish	unid				100	fragments		
3508	10-Nov-15	VC1	60-65	4	Unidentified mammal	unid				100	fragments		Cortical bone; cancellous bone
3509	10-Nov-15	VC1	65-70	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebral fragment			100	half		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3510	10-Nov-15	VC1	65-70	1	Hexagrammos, (Greenling)	genus	vertebra	small		100	effectively complete		
3511	10-Nov-15	VC1	65-70	17	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3512	10-Nov-15	VC1	65-70	1	Oncorhynchus (Pacific Salmon)	genus	parapophysis			100	effectively complete		
3513	10-Nov-15	VC1	65-70	1	Oncorhynchus (Pacific Salmon)	genus	epural			100	effectively complete		
3514	10-Nov-15	VC1	65-70	3	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	fragments		
3515	10-Nov-15	VC1	65-70	40	Unidentified fish	unid				100	fragments		
3516	10-Nov-15	VC1	70-75	3	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3517	10-Nov-15	VC1	70-75	1	Soricidae, (Shrew)	family	mandible			100	fragment		
3518	10-Nov-15	VC1	70-75	14	Unidentified fish	unid				100	fragments		
3519	10-Nov-15	VC1	75-80	1	Clupea pallasii, (Pacific herring)	species	vertebra	medium		100	half		
3520	10-Nov-15	VC1	75-80	3	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3521	10-Nov-15	VC1	75-80	1	Squalidae (Dogfish)	genus	tooth			100	half		
3522	10-Nov-15	VC1	75-80	10	Unidentified fish	unid				100	fragments		
3523	10-Nov-15	VC1	80-85	2	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3524	10-Nov-15	VC1	80-85	1	Oncorhynchus (Pacific Salmon)	genus	vertebral process			100	fragment		
3525	10-Nov-15	VC1	80-85	73	Unidentified fish	unid				100	fragments		highly fragmented/degraded
3526	10-Nov-15	VC1	85-90	6	Unidentified fish	unid				100	fragments		highly fragmented/degraded
3527	13-Nov-15	VC1	90-95	1	Clupea pallasii, (Pacific herring)	species	postcleithrum	medium		100	half		
3528	13-Nov-15	VC1	90-95	2	Clupea pallasii, (Pacific herring)	species	sphenotic			100	half		
3529	13-Nov-15	VC1	90-95	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
3530	13-Nov-15	VC1	90-95	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3531	13-Nov-15	VC1	90-95	3	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
3532	13-Nov-15	VC1	90-95	1	Hexagrammos, (Greenling)	genus	exoccipital			100	articular surface		
3533	13-Nov-15	VC1	90-95	4	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3534	13-Nov-15	VC1	90-95	1	Oncorhynchus (Pacific Salmon)	genus	vertebral processes			100	effectively complete		
3535	13-Nov-15	VC1	90-95	2	Sebastes (Rockfish)	genus	vertebra			100	effectively complete		
3536	13-Nov-15	VC1	90-95	1	Sebastes (Rockfish)	genus	dentary			100	fragment		
3537	13-Nov-15	VC1	90-95	1	Squalidae (Dogfish)	genus	vertebra			100	effectively complete		
3538	13-Nov-15	VC1	90-95	22	Unidentified fish	unid				100	fragments		
3539	13-Nov-15	VC1	90-95	8	Unidentified mammal	unid	Cortical bone; cancellous bone			100	fragments		
3540	13-Nov-15	VC1	95-100	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	effectively complete		
3541	13-Nov-15	VC1	95-100	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small		100	effectively complete		
3542	13-Nov-15	VC1	95-100	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
3543	13-Nov-15	VC1	95-100	2	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3544	13-Nov-15	VC1	95-100	16	Unidentified fish	unid				100	fragments	Y	
3545	13-Nov-15	VC1	100-105	1	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragment		
3546	13-Nov-15	VC1	100-105	46	Unidentified fish	unid				100	fragments		
3547	13-Nov-15	VC1	105-110	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3548	13-Nov-15	VC1	105-110	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
3549	13-Nov-15	VC1	105-110	1	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragment		
3550	13-Nov-15	VC1	105-110	19	Unidentified fish	unid				100	fragments		
3551	18-Nov-15	VC1	110-115	2	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
3552	18-Nov-15	VC1	110-115	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3553	18-Nov-15	VC1	110-115	1	Oncorhynchus (Pacific Salmon)	genus	precaudal vertebrae			100	effectively complete		
3554	18-Nov-15	VC1	110-115	1	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragment		
3555	18-Nov-15	VC1	110-115	1	Oncorhynchus (Pacific Salmon)	genus	expanded neutral spine			100	effectively complete		
3556	18-Nov-15	VC1	110-115	6	Unidentified fish	unid				100	fragments		
3557	18-Nov-15	VC1	110-115	1	Unidentified mammal	unid	Cortical bone,long bone			75	fragment		
3558	13-Nov-15	VC1	115-120	1	Clupea pallasii, (Pacific herring)	species	prootic			100	half		
3559	13-Nov-15	VC1	115-120	1	Clupea pallasii, (Pacific herring)	species	sphenotic			100	half		
3560	13-Nov-15	VC1	115-120	1	Clupea pallasii, (Pacific herring)	species	dentary			100	fragment		
3561	13-Nov-15	VC1	115-120	2	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small		100	effectively complete		
3562	13-Nov-15	VC1	115-120	1	Clupea pallasii, (Pacific herring)	species	vertebra			100	half		
3563	13-Nov-15	VC1	115-120	1	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragment	1	
3564	13-Nov-15	VC1	115-120	1	Sebastes (Rockfish)	genus	preorbital	small	right	100	complete		
3565	13-Nov-15	VC1	115-120	40	Unidentified fish	unid				100	fragments	Y	
3566	18-Nov-15	VC1	120-125	11	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	small/medium		100	effectively complete		
3567	18-Nov-15	VC1	120-125	8	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	small/medium		100	effectively complete		
3568	18-Nov-15	VC1	120-125	3	Clupea pallasii, (Pacific herring)	species	vertebral fragments			100	fragments		
3569	18-Nov-15	VC1	120-125	1	Hexagrammidae	family	gill raker			50	effectively complete		
3570	18-Nov-15	VC1	120-125	2	Hexagrammos, (Greenling)	genus	vertebra			100	half		
3571	18-Nov-15	VC1	120-125	3	Hippoglossus stenolepis (Pacific halibut)	species	vertebral fragments			50	fragments		
3572	18-Nov-15	VC1	120-125	3	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragments		
3573	18-Nov-15	VC1	120-125	2	Oncorhynchus (Pacific Salmon)	genus	expanded neutral spine			100	effectively complete		
3574	18-Nov-15	VC1	120-125	1	Oncorhynchus (Pacific Salmon)	genus	radial			100	effectively complete		
3575	18-Nov-15	VC1	120-125	27	Unidentified fish	unid				100	fragments		
3576	18-Nov-15	VC1	120-125	2	Unidentified mammal	unid				100	fragments		
3577	17-Nov-15	VC1	125-131.5	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
3578	17-Nov-15	VC1	125-131.5	4	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
3579	17-Nov-15	VC1	125-131.5	3	Clupea pallasii, (Pacific herring)	species	abdominal vertebral fragment	medium		100	half		
3580	17-Nov-15	VC1	125-131.5	4	Clupea pallasii, (Pacific herring)	species	vertebral fragments	medium		100	half		
3581	17-Nov-15	VC1	125-131.5	1	Clupea pallasii, (Pacific herring)	species	sphenotic	medium	left	100	effectively complete		

Temp no.	ID Date	VC test	5 cm core section	No.	Taxa	Category	Element	Size	Side	Confid (%)	Condition	Burn. (no.)	Comments
3582	17-Nov-15	VC1	125-131.5	1	Clupea pallasii, (Pacific herring)	species	angular	medium	left	100	articular surface		
3583	17-Nov-15	VC1	125-131.5	1	Hemilepidotus (Irish lord)	genus	cranial fragment			75	fragment		
3584	17-Nov-15	VC1	125-131.5	2	Unidentified bird	unid				75	fragments		
3585	17-Nov-15	VC1	125-131.5	40	Unidentified fish	unid				100	fragments		
3586	17-Nov-15	VC1	131.5-136.5	7	Clupea pallasii, (Pacific herring)	species	caudal vertebrae	medium		100	effectively complete		
3587	17-Nov-15	VC1	131.5-136.5	6	Clupea pallasii, (Pacific herring)	species	abdominal vertebrae	medium		100	effectively complete		
3588	17-Nov-15	VC1	131.5-136.5	1	Clupea pallasii, (Pacific herring)	species	abdominal vertebral fragment	medium		100	half		
3589	17-Nov-15	VC1	131.5-136.5	3	Oncorhynchus (Pacific Salmon)	genus	vertebral fragments			100	fragments		
3590	17-Nov-15	VC1	131.5-136.5	1	Oncorhynchus (Pacific Salmon)	genus	expanded neutral spine			100	half		
3591	17-Nov-15	VC1	131.5-136.5	1	Sebastes (Rockfish)	genus	radial			75	fragment		
3592	17-Nov-15	VC1	131.5-136.5	1	Squalidae (Dogfish)	genus	vertebral fragment			50	fragment		
3593	17-Nov-15	VC1	131.5-136.5	3	Unidentified bird	unid	long bone fragments, cortical			75	fragments		
3594	17-Nov-15	VC1	131.5-136.5	65	Unidentified fish	unid				100	fragments		
3595	17-Nov-15	VC1	136.5-141.5	1	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragment		
3596	17-Nov-15	VC1	136.5-141.5	2	Unidentified fish	unid				100	fragments		
3597	10-Nov-15	VC1	40-45	1	Oncorhynchus (Pacific Salmon)	genus	vertebral fragment			100	fragments	1	
3598	10-Nov-15	VC1	45-50	1	Unidentified fish	unid				100	fragments	1	
3599	10-Nov-15	VC1	55-60	2	Unidentified mammal	unid				100	fragments	2	Cortical bone; cancellous bone
3600	10-Nov-15	VC1	70-75	3	Unidentified fish	unid				100	fragments	3	
3601	10-Nov-15	VC1	75-80	1	Unidentified fish	unid				100	fragments	1	
3602	13-Nov-15	VC1	90-95	2	Unidentified fish	unid				100	fragments	2	
3603	13-Nov-15	VC1	100-105	1	Unidentified fish	unid				100	fragments	1	
3604	17-Nov-15	VC1	131.5-136.5	1	Unidentified fish	unid				100	fragments	1	
3605	17-Nov-15	VC1	136.5-141.5	1	Unidentified fish	unid				100	fragments	1	

Appendix B

Faunal Identification Spreadsheet (1mm)

ID date	5 cm core section	No.	Taxa	Specimen	Size	Confidence (%)	Condition
06-Nov-15	5-10	3	Clupea pallasii (Herring)	abdominal vertebrae	small	100	effectively complete
06-Nov-15	5-10	3	Clupea pallasii (Herring)	vertebral fragments	small	100	fragments
06-Nov-15	5-10	2	Oncorhynchus (Pacific Salmon)	vertebral fragments		100	fragments
06-Nov-15	5-10	18	Unidentified Fish				fragments
06-Nov-15	10-15	2	Clupea pallasii (Herring)	vertebra, caudal	small	100	effectively complete
06-Nov-15	10-15	6	Clupea pallasii (Herring)	vertebral fragments	small	50	fragments
06-Nov-15	10-15	9	Oncorhynchus (Pacific Salmon)	vertebral fragments		100	fragments
06-Nov-15	10-15	121	Unidentified Fish				fragments
10-Nov-15	65-70	37	Oncorhynchus (Pacific Salmon)	vertebral fragments		100	fragments
10-Nov-15	65-70	1	Oncorhynchus (Pacific Salmon)	tooth		100	partial
10-Nov-15	65-70	1	Oncorhynchus (Pacific Salmon)	gill raker		50	articular surface
10-Nov-15	65-70	315	Unidentified Fish			100	fragments
10-Nov-15	65-70	1	Oncorhynchus (Pacific Salmon)	vertebral process		100	fragment
13-Nov-15	90-95	3	Clupea pallasii (Herring)	abdominal vertebral fragment	small	100	partial
13-Nov-15	90-95	2	Clupea pallasii (Herring)	caudal vertebrae	small	75	partial
13-Nov-15	90-95	3	Clupea pallasii (Herring)	vertebral fragment	small	75	fragments
13-Nov-15	90-95	1	Cottoidea, sculpin	cranial fragment		100	fragment
13-Nov-15	90-95	1	Oncorhynchus (Pacific Salmon)	tooth		75	effectively complete
13-Nov-15	90-95	1	Oncorhynchus (Pacific Salmon)	gill raker		100	articular surface
13-Nov-15	90-95	1	Oncorhynchus (Pacific Salmon)	expanded neutral spine		75	partial
13-Nov-15	90-95	11	Oncorhynchus (Pacific Salmon)	vertebral fragments		100	fragments
13-Nov-15	90-95	1	Sebastes (Rockfish)	pterygiophorsis		100	complete
13-Nov-15	90-95	1	Thaleichthys pacificus, eulachon	vertebra		100	partial
13-Nov-15	90-95	266	Unidentified Fish			100	fragments
18-Nov-15	110-115	1	Clupea pallasii (Herring)	abdominal vertebrae	small	100	effectively complete
18-Nov-15	110-115	1	Clupea pallasii (Herring)	abdominal vertebral fragment	small	100	partial
18-Nov-15	110-115	5	Clupea pallasii (Herring)	vertebral fragments	small	75	fragments
18-Nov-15	110-115	2	Oncorhynchus (Pacific Salmon)	vertebral fragments		100	fragments
18-Nov-15	110-115	1	Oncorhynchus (Pacific Salmon)	parapophysis		100	effectively complete
18-Nov-15	110-115	1	Oncorhynchus (Pacific Salmon)	expanded neutral spine		100	effectively complete
18-Nov-15	110-115	2	Squalidae (Dogfish)	vertebral fragments		75	fragments
18-Nov-15	110-115	68	Unidentified Fish			100	fragments

ID date	5 cm core section	No.	Taxa	Specimen	Size	Confidence (%)	Condition
13-Nov-15	131.5-136.5	4	Clupea pallasii (Herring)	abdominal vertebrae	small	100	effectively complete
13-Nov-15	131.5-136.5	1	Clupea pallasii (Herring)	caudal vertebrae	small	100	effectively complete
13-Nov-15	131.5-136.5	8	Clupea pallasii (Herring)	vertebral fragments	small	100	fragments
13-Nov-15	131.5-136.5	1	Clupea pallasii (Herring)	dentary		100	articular surface
13-Nov-15	131.5-136.5	1	Clupea pallasii (Herring)	sphenotic		100	partial
13-Nov-15	131.5-136.5	1	Clupea pallasii (Herring)	gill raker		100	complete
17-Nov-15	131.5-136.5	1	Clupea pallasii (Herring)	first pectoral fin ray		100	articular surface
17-Nov-15	131.5-136.5	1	Clupea pallasii (Herring)	unknown		100	articular surface
17-Nov-15	131.5-136.5	1	Hemilepidotus hemilepidotus (red irish lord)	"scoot"		100	effectively complete
13-Nov-15	131.5-136.5	6	Oncorhynchus (Pacific Salmon)	vertebral fragments		100	fragments
13-Nov-15	131.5-136.5	1	Oncorhynchus (Pacific Salmon)	parapophysis		100	effectively complete
13-Nov-15	131.5-136.5	2	Oncorhynchus (Pacific Salmon)	vertebral processes		100	articular surface
13-Nov-15	131.5-136.5	1	Thaleichthys pacificus, eulachon	vertebra		100	effectively complete
17-Nov-15	131.5-136.5	1	Thaleichthys pacificus, eulachon	operclum		100	articular surface
13-Nov-15	131.5-136.5	293	Unidentified Fish			75	fragments

Appendix C

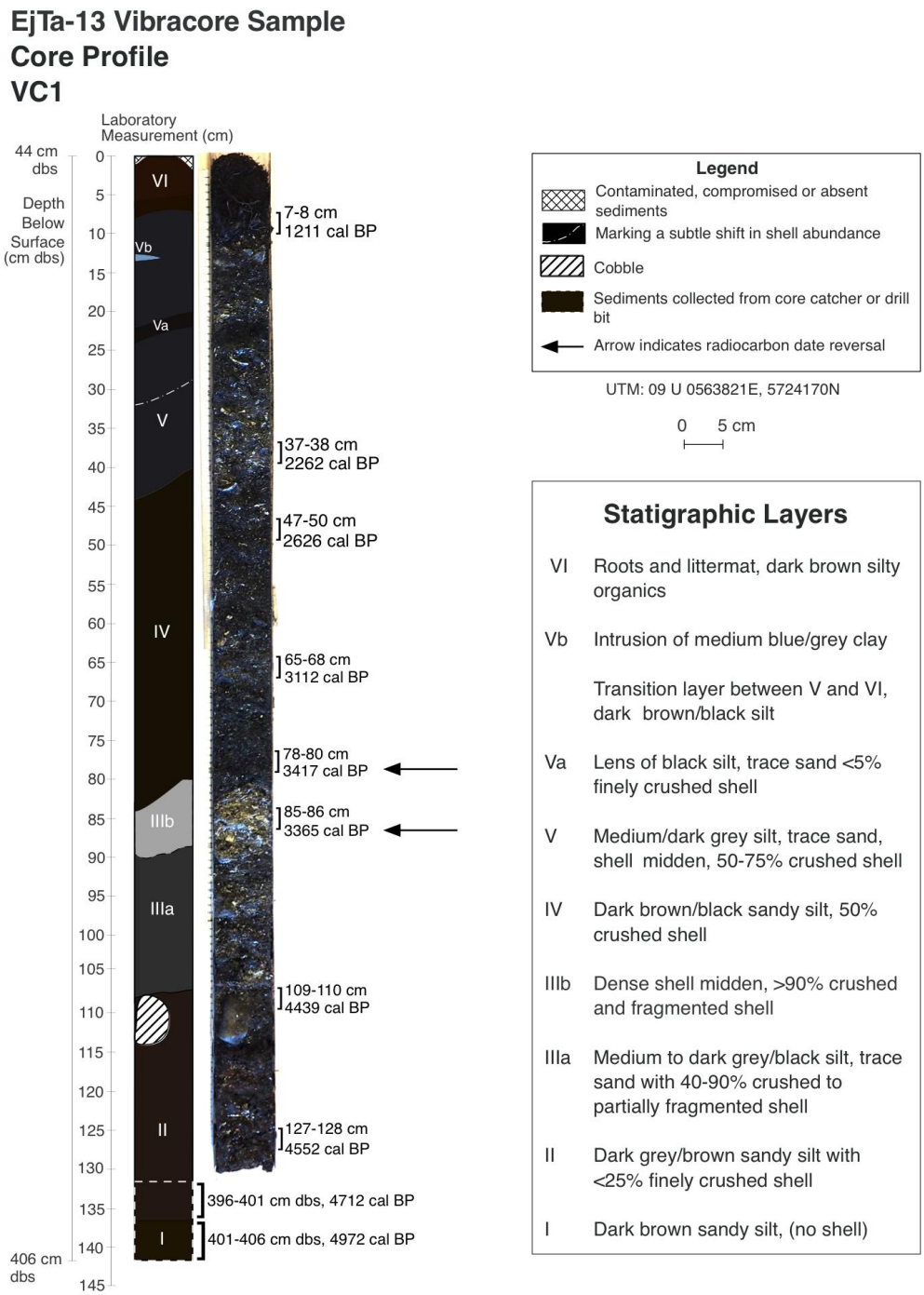
Measured Salmon Vertebrae

Date	Vibracore Test	Element	Type (II/III)	Laboratory Depth (cm)	Length	Height	Transverse Diameter	Comments
2015	VC1	caudal	III	110-115	6.16	6.2	6.91	
2016	VC2	abdominal	II	215-220	4.91	6.36	6.97	
2016	VC2	abdominal	II	90-95	5.37	7.33	7.72	more complete vertebra of 90-95
2016	VC2	abdominal	II	95-100	5.74	8.23	9.48	
2016	VC2	abdominal	II	90-95	5.8	6.91	7.64	less complete vertebra of 90-95
2016	VC2	caudal	III	85-90	6.78	7.71	8.86	
2016	VC2	caudal	III	125-130	6.32-6.93	8.6	9.74	Length=one side>other
2016	VC3	abdominal	II	20-25	6.02	7.3	7.94	slightly damaged
2016	VC3	abdominal	II	20-25	6.12	6.89	7.78	damaged
2016	VC3	abdominal	II	25-30	6.24	7.22	8.44	
2016	VC3	abdominal	II	25-30	6.43	7.58	8.82	
2016	VC3	abdominal	II	25-30	6.6	7.59	8.96	
2016	VC4	abdominal	II	135-140	3.95	5.43	5.73	
2016	VC4	abdominal	II	125-130	4.73	6.33	7.02	
2016	VC4	abdominal	II	110-115	4.89	5.95	6.66	
2016	VC4	caudal	III	30-35	4.9	6.76	7.28	
2016	VC4	caudal	III	275-280	5.11	6.32	6.66	
2016	VC4	abdominal	II	225-230	5.18	6.41	7.42	
2016	VC4	caudal	III	215-220	5.32	6.33	6.97	
2016	VC4	caudal	III	25-30	5.56	7.16	8.12	

2016	VC4	caudal	III	30-35	5.6	7.61	9.32	
2016	VC4	abdominal	II	255-260	5.69	8.18	9.63	
2016	VC4	caudal	III	230-235	6.32	8.81	10.27	2: medium
2016	VC4	abdominal	II	275-280	6.83	7.86	8.84	
2016	VC4	caudal	III	230-235	8.22	9.15	10.41	1:slightly damaged; largest
2016	VC4	caudal	III	230-235	9.97	9.04	10.04	3: smallest
2016	VC4	caudal	III	220-225	na	8.22	na	incomplete
2016	VC5	abdominal	II	214-220	5.34	5.9	6.84	
2016	VC5	abdominal	II	220-225	7.07	na	10.02	damaged
2016	VC5	caudal	III	270-275	7.45	9.69	11.02	slightly damaged
2016	VC6	caudal	III	145-150	4.95	6.87	na	damaged
2016	VC6	abdominal	II	150-155	5.08	5.58	6.76	slightly damaged
2016	VC6	abdominal	II	140-145	5.18	6.67	7.32	damaged; does not impede measurement
2016	VC6	caudal	III	180-185	5.23	6.36	7.12	
2016	VC6	abdominal	II	140-145	5.63	6.67	7.36	
2016	VC6	caudal	III	175-180	5.78	7.89	8.6	
2016	VC6	caudal	III	130-135	6.16	7.07	8.53	
2016	VC6	caudal	III	125-130	6.29	7.56	8.09	
2016	VC6	caudal	III	125-130	6.35	7.45	7.87	
2016	VC6	caudal	III	125-130	6.56	7.59	8.16	
2016	VC6	abdominal	II	125-130	6.9	8.7	9.95	
2016	VC7	caudal	III	85-90	6.12	7.46	8.07	
2016	VC7	abdominal	II	165-170	6.48	8.21	8.77	
2016	VC7	abdominal	II	165-170	6.71	8.41	8.9	
2016	VC7	caudal	III	55-60	7.6	9.33	11.14	slightly damaged

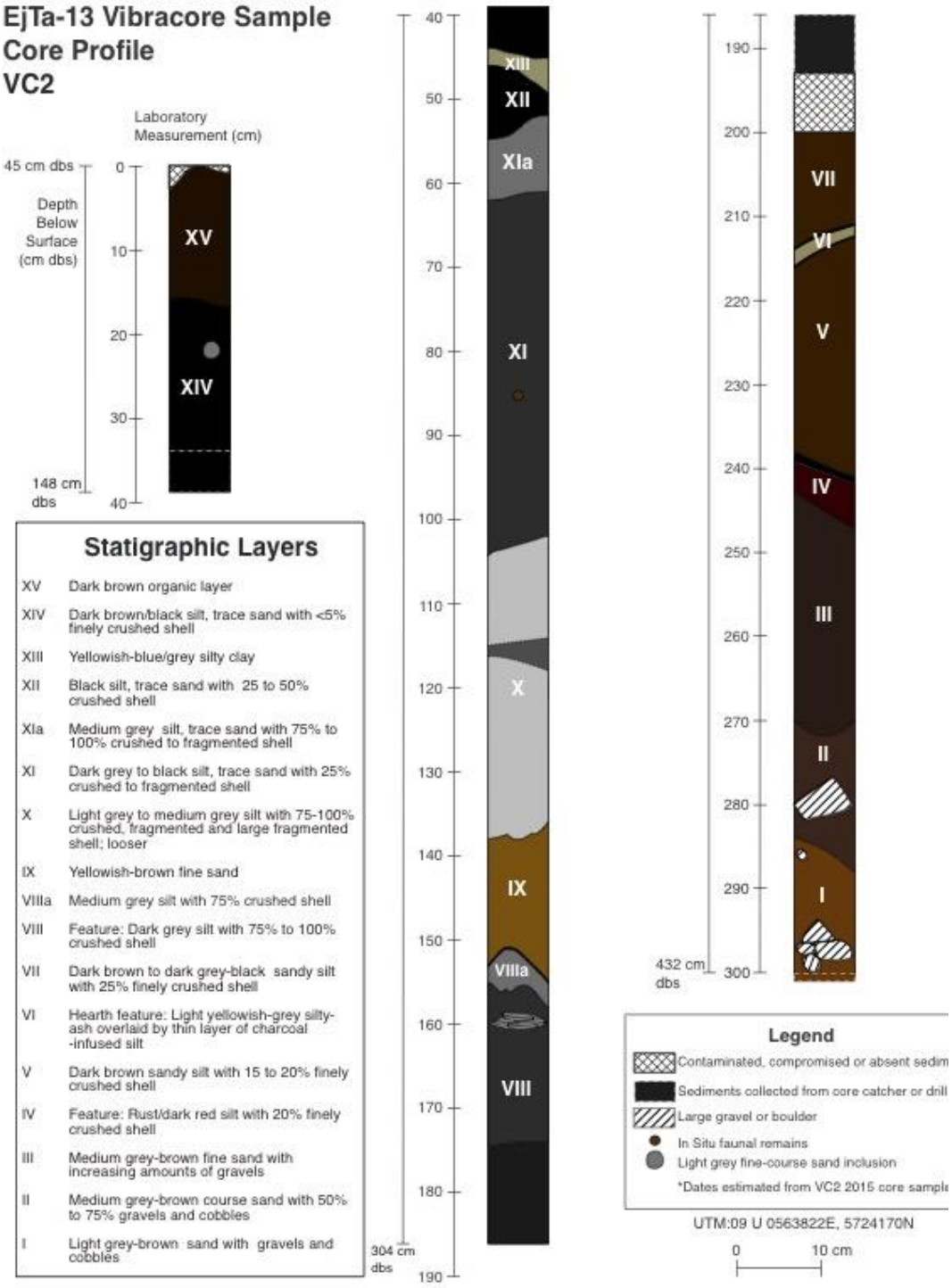
Appendix D

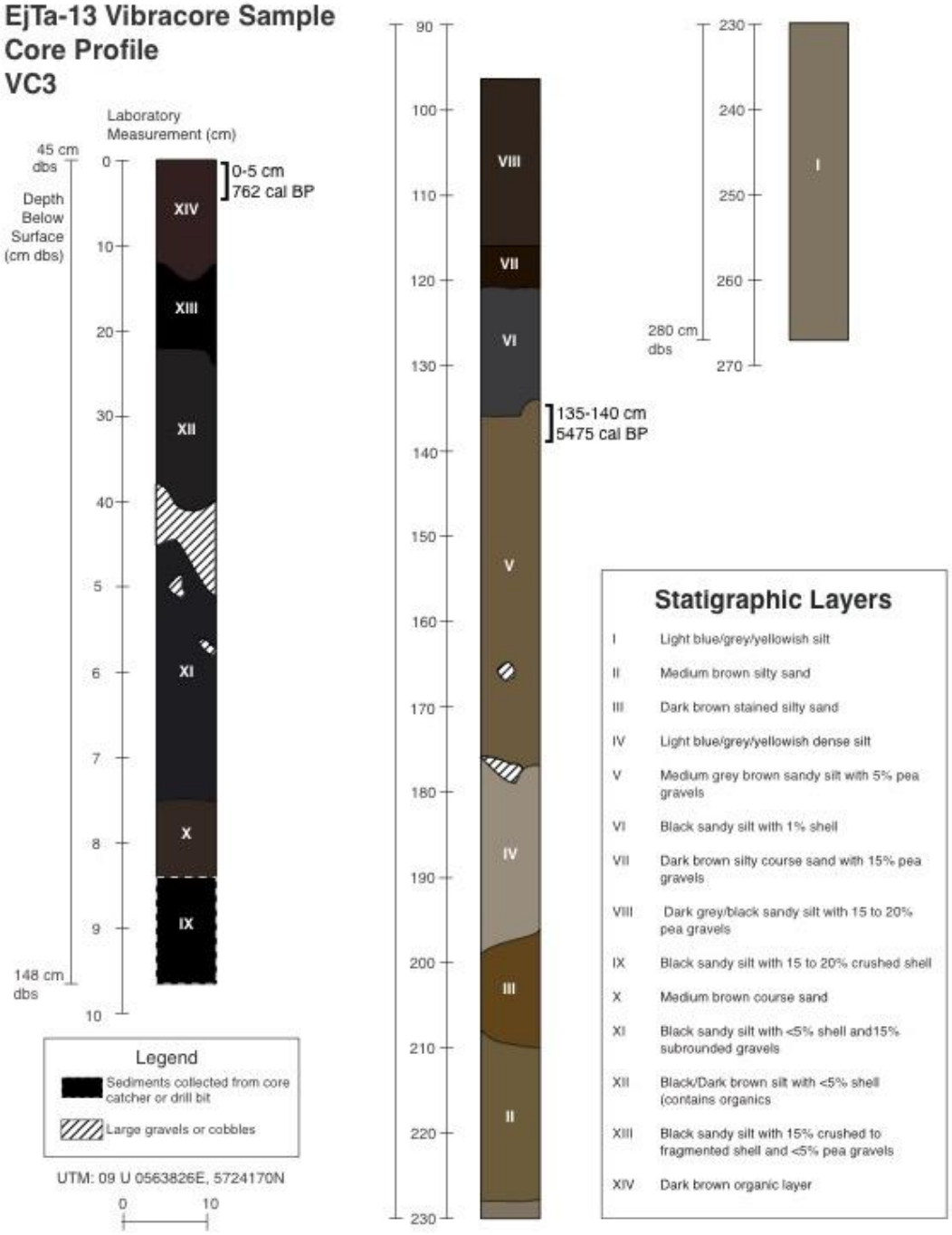
Individual Vibracore Sample Profiles

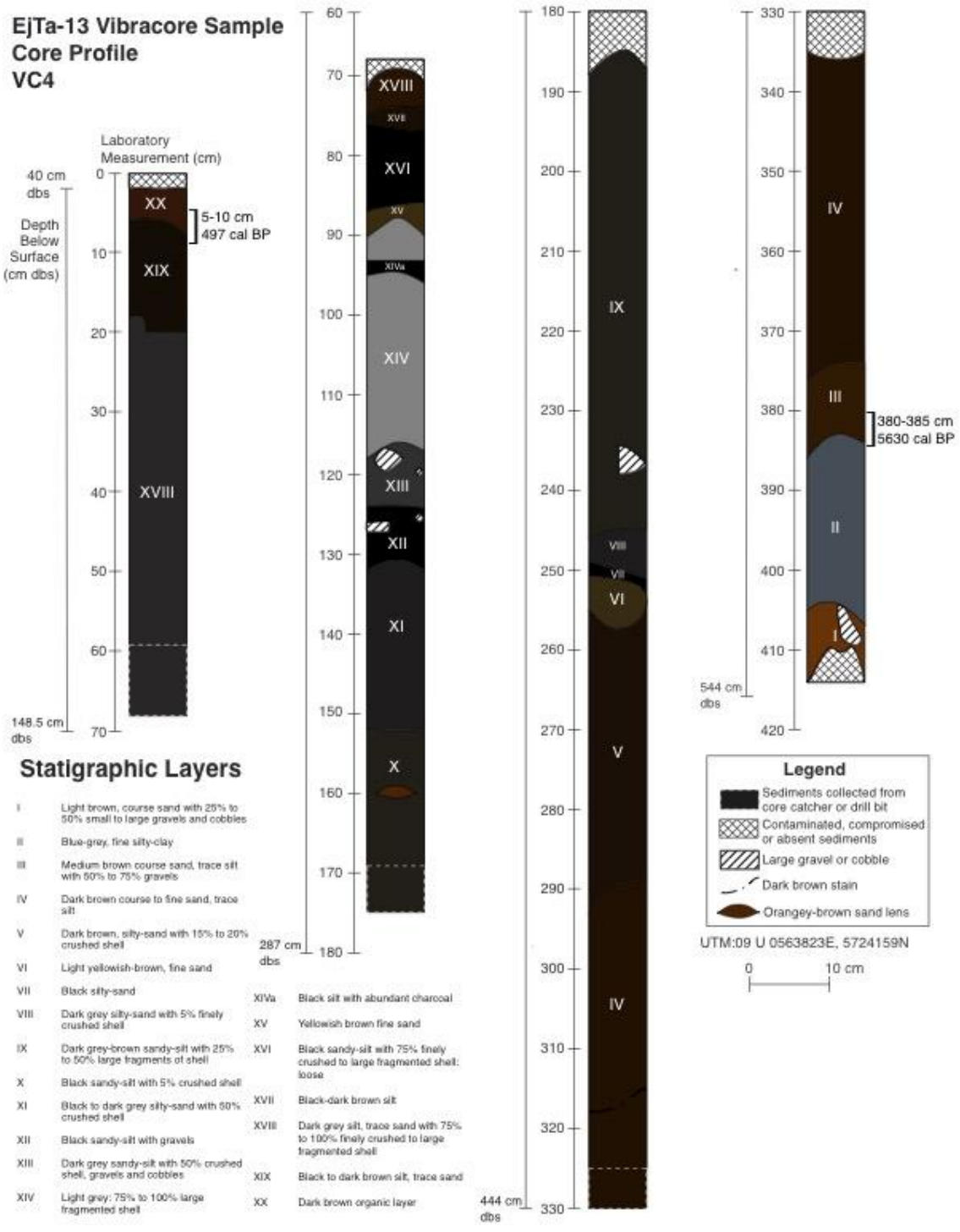


Statigraphic Layers

VI	Roots and littermat, dark brown silty organics
Vb	Intrusion of medium blue/grey clay
	Transition layer between V and VI, dark brown/black silt
Va	Lens of black silt, trace sand <5% finely crushed shell
V	Medium/dark grey silt, trace sand, shell midden, 50-75% crushed shell
IV	Dark brown/black sandy silt, 50% crushed shell
IIIb	Dense shell midden, >90% crushed and fragmented shell
IIIa	Medium to dark grey/black silt, trace sand with 40-90% crushed to partially fragmented shell
II	Dark grey/brown sandy silt with <25% finely crushed shell
I	Dark brown sandy silt, (no shell)

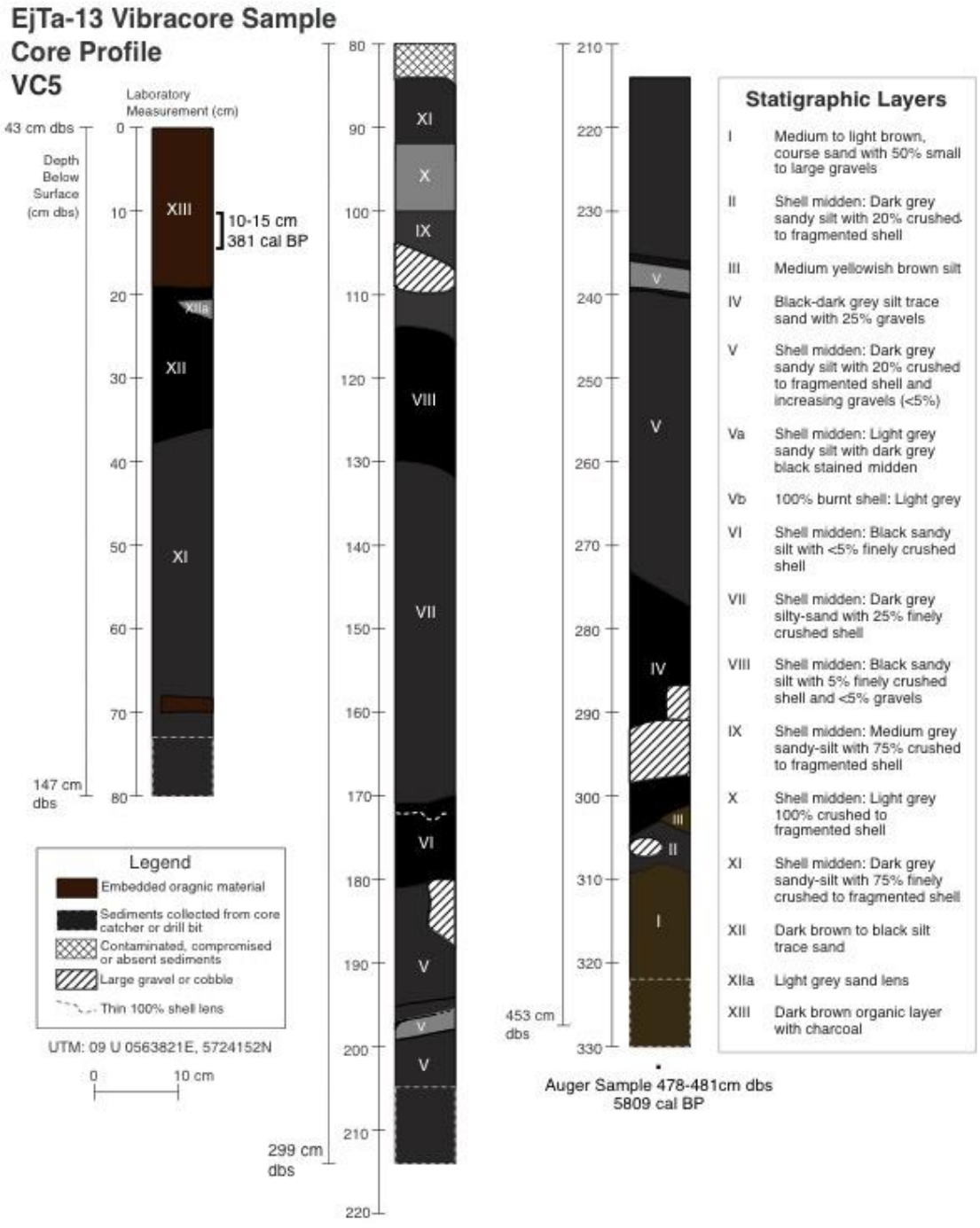

EjTa-13 Vibracore Sample
Core Profile
VC2
Laboratory
Measurement (cm)
45 cm dbs
Depth
Below
Surface
(cm dbs)
148 cm
dbs
XV
XIV
304 cm
dbs
XIII
XII
XIa
XI
X
IX
VIIIa
VIII
432 cm
dbs
VII
VI
V
IV
III
II
I
Statigraphic Layers
XV Dark brown organic layer
XIV Dark brown/black silt, trace sand with <5% finely crushed shell
XIII Yellowish-blue/grey silty clay
XII Black silt, trace sand with 25 to 50% crushed shell
XIa Medium grey silt, trace sand with 75% to 100% crushed to fragmented shell
XI Dark grey to black silt, trace sand with 25% crushed to fragmented shell
X Light grey to medium grey silt with 75-100% crushed, fragmented and large fragmented shell; looser
IX Yellowish-brown fine sand
VIIIa Medium grey silt with 75% crushed shell
VIII Feature: Dark grey silt with 75% to 100% crushed shell
VII Dark brown to dark grey-black sandy silt with 25% finely crushed shell
VI Hearth feature: Light yellowish-grey silty-ash overlaid by thin layer of charcoal -infused silt
V Dark brown sandy silt with 15 to 20% finely crushed shell
IV Feature: Rust/dark red silt with 20% finely crushed shell
III Medium grey-brown fine sand with increasing amounts of gravels
II Medium grey-brown course sand with 50% to 75% gravels and cobbles
I Light grey-brown sand with gravels and cobbles
Legend
Contaminated, compromised or absent sedim
Sediments collected from core catcher or drill
Large gravel or boulder
In Situ faunal remains
Light grey fine-course sand inclusion
*Dates estimated from VC2 2015 core sample
UTM:09 U 0563822E, 5724170N
0
10 cm

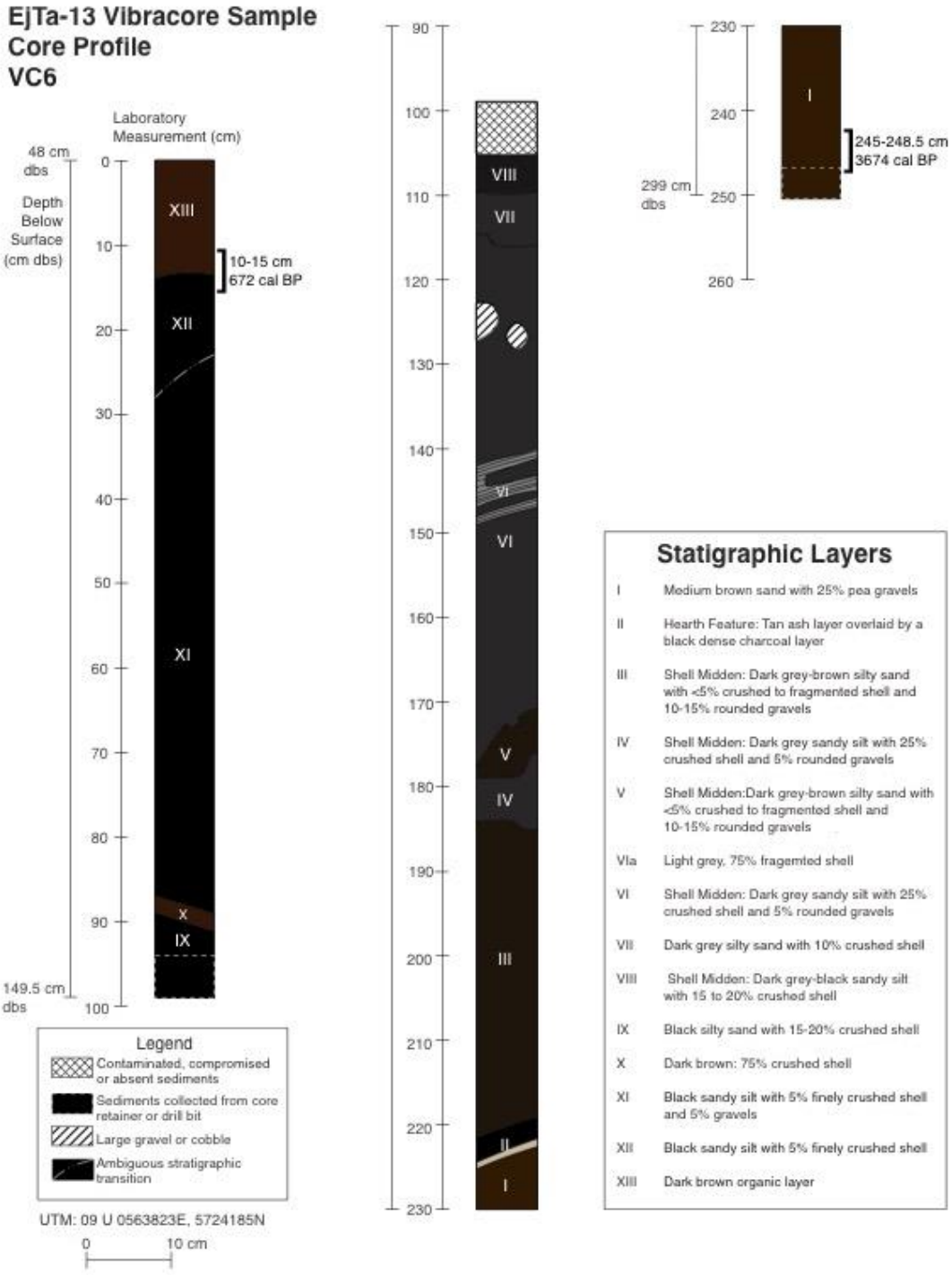

EjTa-13 Vibracore Sample
Core Profile
VC3
Laboratory
Measurement (cm)
45 cm
dbs
Depth
Below
Surface
(cm dbs)
0-5 cm
762 cal BP
XIV
XIII
XII
XI
X
IX
148 cm
dbs
135-140 cm
5475 cal BP
VIII
VII
VI
V
IV
III
II
I
280 cm
dbs
Legend
Sediments collected from core catcher or drill bit
Large gravels or cobbles
UTM: 09 U 0563826E, 5724170N
Statigraphic Layers
I Light blue/grey/yellowish silt
II Medium brown silty sand
III Dark brown stained silty sand
IV Light blue/grey/yellowish dense silt
V Medium grey brown sandy silt with 5% pea gravels
VI Black sandy silt with 1% shell
VII Dark brown silty course sand with 15% pea gravels
VIII Dark grey/black sandy silt with 15 to 20% pea gravels
IX Black sandy silt with 15 to 20% crushed shell
X Medium brown course sand
XI Black sandy silt with <5% shell and15% subrounded gravels
XII Black/Dark brown silt with <5% shell (contains organics
XIII Black sandy silt with 15% crushed to fragmented shell and <5% pea gravels
XIV Dark brown organic layer

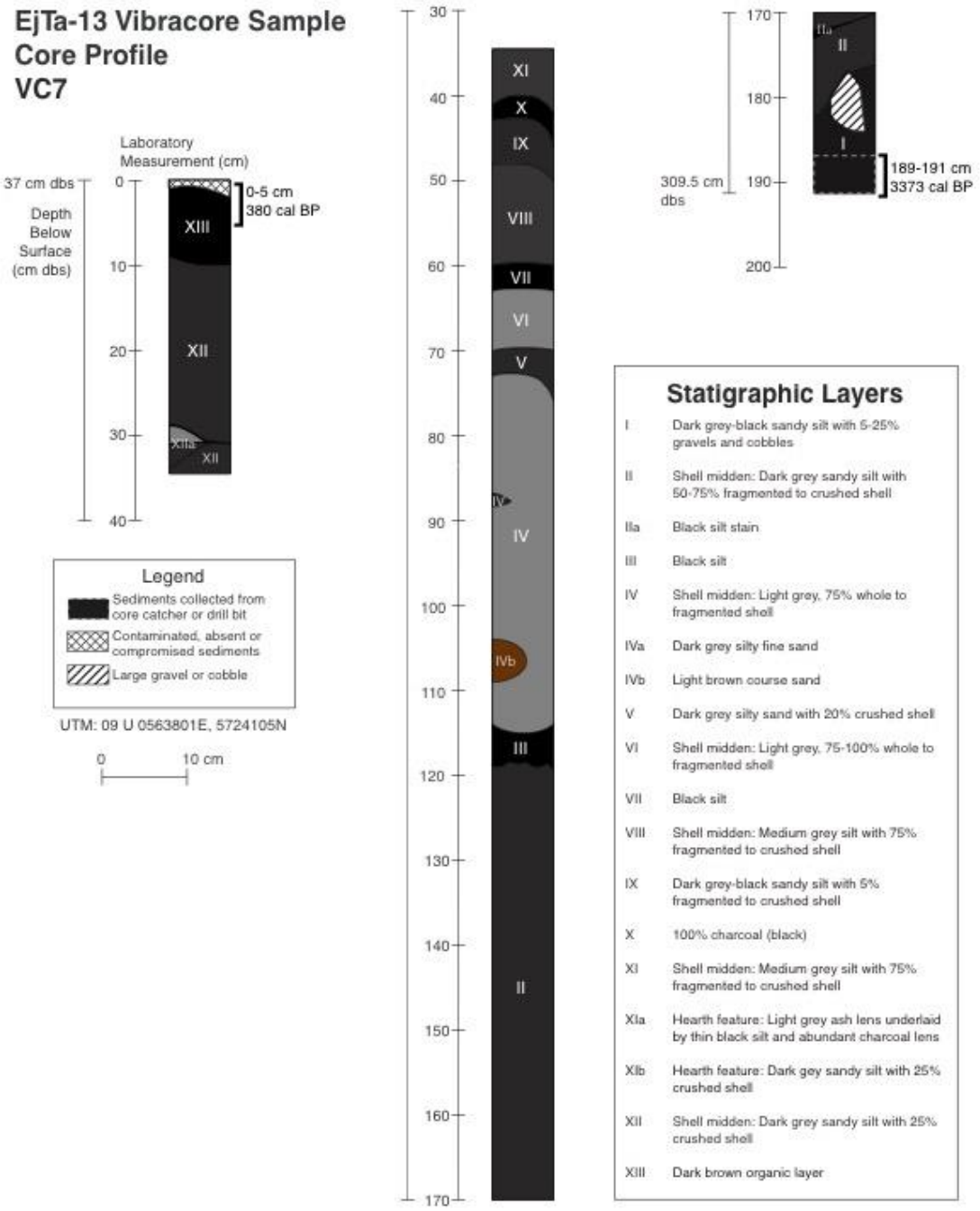


Statigraphic Layers

I	Light brown, course sand with 25% to 50% small to large gravels and cobbles
II	Blue-grey, fine silty-clay
III	Medium brown course sand, trace silt with 50% to 75% gravels
IV	Dark brown course to fine sand, trace silt
V	Dark brown, silty-sand with 15% to 20% crushed shell
VI	Light yellowish-brown, fine sand
VII	Black silty-sand
VIII	Dark grey silty-sand with 5% finely crushed shell
IX	Dark grey-brown sandy-silt with 25% to 50% large fragments of shell
X	Black sandy-silt with 5% crushed shell
XI	Black to dark grey silty-sand with 50% crushed shell
XII	Black sandy-silt with gravels
XIII	Dark grey sandy-silt with 50% crushed shell, gravels and cobbles
XIV	Light grey: 75% to 100% large fragmented shell
XIVa	Black silt with abundant charcoal
XV	Yellowish brown fine sand
XVI	Black sandy-silt with 75% finely crushed to large fragmented shell: loose
XVII	Black-dark brown silt
XVIII	Dark grey silt, trace sand with 75% to 100% finely crushed to large fragmented shell
XIX	Black to dark brown silt, trace sand
XX	Dark brown organic layer


EjTa-13 Vibracore Sample
Core Profile
VC5
Laboratory Measurement (cm)
43 cm dbs
Depth Below Surface (cm dbs)
0
10
20
30
40
50
60
70
80
147 cm dbs
XIII
10-15 cm
381 cal BP
XIIa
XII
XI
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
299 cm dbs
XI
X
IX
VIII
VII
VI
V
V
210
220
230
240
250
260
270
280
290
300
310
320
330
453 cm dbs
V
V
IV
III
II
I
Legend
Embedded oragnic material
Sediments collected from core catcher or drill bit
Contaminated, compromised or absent sediments
Large gravel or cobble
Thin 100% shell lens
UTM: 09 U 0563821E, 5724152N
0
10 cm
Auger Sample 478-481cm dbs
5809 cal BP
Statigraphic Layers
I Medium to light brown, course sand with 50% small to large gravels
II Shell midden: Dark grey sandy silt with 20% crushed to fragmented shell
III Medium yellowish brown silt
IV Black-dark grey silt trace sand with 25% gravels
V Shell midden: Dark grey sandy silt with 20% crushed to fragmented shell and increasing gravels (<5%)
Va Shell midden: Light grey sandy silt with dark grey black stained midden
Vb 100% burnt shell: Light grey
VI Shell midden: Black sandy silt with <5% finely crushed shell
VII Shell midden: Dark grey silty-sand with 25% finely crushed shell
VIII Shell midden: Black sandy silt with 5% finely crushed shell and <5% gravels
IX Shell midden: Medium grey sandy-silt with 75% crushed to fragmented shell
X Shell midden: Light grey 100% crushed to fragmented shell
XI Shell midden: Dark grey sandy-silt with 75% finely crushed to fragmented shell
XII Dark brown to black silt trace sand
XIIa Light grey sand lens
XIII Dark brown organic layer with charcoal


EjTa-13 Vibracore Sample
Core Profile
VC6
Laboratory Measurement (cm)
48 cm dbs
Depth Below Surface (cm dbs)
149.5 cm dbs
XIII
XII
XI
X
IX
10-15 cm
672 cal BP
Legend
Contaminated, compromised or absent sediments
Sediments collected from core retainer or drill bit
Large gravel or cobble
Ambiguous stratigraphic transition
UTM: 09 U 0563823E, 5724185N
0
10 cm
VIII
VII
VI
V
IV
III
II
I
299 cm dbs
245-248.5 cm
3674 cal BP
Statigraphic Layers
I Medium brown sand with 25% pea gravels
II Hearth Feature: Tan ash layer overlaid by a black dense charcoal layer
III Shell Midden: Dark grey-brown silty sand with <5% crushed to fragmented shell and 10-15% rounded gravels
IV Shell Midden: Dark grey sandy silt with 25% crushed shell and 5% rounded gravels
V Shell Midden:Dark grey-brown silty sand with <5% crushed to fragmented shell and 10-15% rounded gravels
VIa Light grey, 75% fragemted shell
VI Shell Midden: Dark grey sandy silt with 25% crushed shell and 5% rounded gravels
VII Dark grey silty sand with 10% crushed shell
VIII Shell Midden: Dark grey-black sandy silt with 15 to 20% crushed shell
IX Black silty sand with 15-20% crushed shell
X Dark brown: 75% crushed shell
XI Black sandy silt with 5% finely crushed shell and 5% gravels
XII Black sandy silt with 5% finely crushed shell
XIII Dark brown organic layer


EjTa-13 Vibracore Sample
Core Profile
VC7
Laboratory
Measurement (cm)
37 cm dbs
Depth
Below
Surface
(cm dbs)
0
10
20
30
40
0-5 cm
380 cal BP
XIII
XII
XIIa
XII
Legend
Sediments collected from core catcher or drill bit
Contaminated, absent or compromised sediments
Large gravel or cobble
UTM: 09 U 0563801E, 5724105N
0
10 cm
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
XI
X
IX
VIII
VII
VI
V
IV
IVb
III
II
170
180
190
200
309.5 cm
dbs
IIa
II
I
189-191 cm
3373 cal BP
Statigraphic Layers
I Dark grey-black sandy silt with 5-25% gravels and cobbles
II Shell midden: Dark grey sandy silt with 50-75% fragmented to crushed shell
IIa Black silt stain
III Black silt
IV Shell midden: Light grey, 75% whole to fragmented shell
IVa Dark grey silty fine sand
IVb Light brown course sand
V Dark grey silty sand with 20% crushed shell
VI Shell midden: Light grey, 75-100% whole to fragmented shell
VII Black silt
VIII Shell midden: Medium grey silt with 75% fragmented to crushed shell
IX Dark grey-black sandy silt with 5% fragmented to crushed shell
X 100% charcoal (black)
XI Shell midden: Medium grey silt with 75% fragmented to crushed shell
XIa Hearth feature: Light grey ash lens underlaid by thin black silt and abundant charcoal lens
XIb Hearth feature: Dark gey sandy silt with 25% crushed shell
XII Shell midden: Dark grey sandy silt with 25% crushed shell
XIII Dark brown organic layer

Appendix E

EjTa-13 Artifact Table

Vibracore test	5 cm core section	No.	Catalogue No.	Artifact material	Artifact type	Production	Condition	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Estimated Time Period	Comments
VC2	70-75	1	86	unidentified material	bead	grinding, perforated	broken	5.4	4.91	3.7	<0.1	NA	
VC2	80-85	1	87	bone	worked bone	polished	fragmented	14.75	5.32	2.59	0.1	NA	
VC2	85-90	1	NA	bone	flake	flake debitage	complete	5.67	3.59	1.84	<0.1	NA	Non-artifact
VC2	85-90	1	88	bone	worked bone	grinding	medial fragment	4.57	2.22	1.64	<0.1	NA	needle-like fragment
VC2	165-170	1	89	shell	bead	grinding, perforated	complete	6.6	6.44	1.66	0.1	NA	
VC3	80-84	1	90	obsidian	flake	flake debitage	effectively complete	4.64	3.8	1.03	<0.1	4,000-2,000	late stage
VC3	92-96.5	1	91	obsidian	flake	flaked and/ battered	fragment	7.41	5.54	2.38	0.1	5,000-4,000	bificially retouched flake fragment
VC3	130-135	1	92	basalt	flake	flaked	effectively complete	4.6	3.66	1.02	<0.1	5,800-5,000	late stage
VC4	200-205	1	93	basalt	shatter	lithic debitage	complete	6.22	3.99	2.55	0.1	4,000-2,000	
VC4	210-215	1	94	unidentified material	flake	flaked	effectively complete	14.84	10.94	4.2	0.7	4,000-2,000	mid stage
VC4	235-240	1	95	quartzite	flake	flaked	distal portion	4.98	3.64	1.01	<0.1	4,000-2,000	late stage
VC4	365-370	1	96	unidentified material	flake	flake	effectively complete	19.09	16.64	5.57	1.9	5,800-5,000	mid stage
VC5	110-115	1	97	unidentified material	flake	flake debitage	unknown	26.56	17.58	7.54	3.2	2,000-380	block shatter
VC5	190-195	1	98	unidentified material	flake	flake debitage	effectively complete	15.28	8.51	1.88	0.2	4,000-2,000	early stage
VC5	208-214	1	99	obsidian	flake	flake	fragment	3.46	2.81	0.49	<0.1	4,000-2,000	late stage
VC5	220-225	1	100	andocite	flake	flake debitage	medial fragment	13.32	2.25	2.2	0.1	4,000-2,000	early stage
VC5	230-	1	101	California	bead	grinding,	effectively	8.1	7.53	2.36	0.2	4,000-	

Vibracore test	5 cm core section	No.	Catalogue No.	Artifact material	Artifact type	Production	Condition	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Estimated Time Period	Comments
	235			mussel		perforated	complete					2,000	
VC5	230-235	1	102	California mussel	bead	grinding, perforated	effectively complete	7.72	5.68	2.76	0.1	4,000-2,000	
VC5	230-235	1	103	California mussel	bead	grinding, perforated	effectively complete	6.9	6.35	1.96	0.1	4,000-2,000	
VC5	230-235	1	104	California mussel	bead	grinding, perforated	effectively complete	6.18	5.42	1.49	<0.1	4,000-2,000	newly fragment
VC5	230-235	1	105	California mussel	bead	grinding, perforated	effectively complete	5.88	5.27	1.27	<0.1	4,000-2,000	
VC5	230-235	1	106	California mussel	bead	grinding, perforated	fragment	4.66	2.71	1.31	<0.1	4,000-2,000	
VC5	230-235	1	107	quartzite	flake	flake debitage	fragment	6.54	3.54	1.11	<0.1	4,000-2,000	late stage
VC5	240-245	1	108	dacite	flake	flake debitage	effectively complete	6.53	3.6	0.95	<0.1	5,000-4,000	late stage
VC6	75-80	1	109	obsidian	flake	flaked	distal portion	6.6	4.21	1.24	<0.1	2,000-380	late stage
VC6	75-80	1	110	obsidian	flake	flake debitage	effectively complete	4.43	3.19	1.14	<0.1	2,000-380	early stage (contains cortex on dorsal surface)
VC6	95-99	1	111	obsidian	flake	flake debitage	effectively complete	7.49	2.22	0.84	<0.1	2,000-380	late stage
VC6	115-120	1	112	mammal bone	worked bone	grinding/bevelled	incomplete	35.3	6.67	4.27	1	4,000-2,000	Shaped to a dull point
VC6	140-145	1	113	mammal bone	worked bone	grinding and shaping	incomplete	15.06	4.71	2.78	0.1	4,000-2,000	
VC6	140-145	1	114	basalt	flake	flaked	effectively complete	11.92	6.77	1.92	0.2	4,000-2,000	mid stage
VC6	140-145	1	115	basalt	flake	retouched flake	proximal portion	11.86	7.14	2.43	0.2	4,000-2,000	mid stage
VC6	140-145	1	116	basalt	flake	flaked	medial fragment	8.67	3.55	0.55	<0.1	4,000-2,000	late stage
VC6	140-145	1	117	basalt	flake	flaked	effectively complete	5	4.04	1.01	<0.1	4,000-2,000	late stage
VC6	140-145	1	118	basalt	flake	flaked	effectively complete	3.82	2.85	0.83	<0.1	4,000-2,000	late stage
VC6	145-150	1	119	bird bone	worked bone	grinding/bevelled	medial fragment	14.9	2.44	0.98	0.1	4,000-2,000	needle-like fragment
VC6	220-225	1	120	bone	worked bone	grinding and polish	fragment	20.35	6.04	1.48	0.1	4,000-2,000	

Vibracore test	5 cm core section	No.	Catalogue No.	Artifact material	Artifact type	Production	Condition	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Estimated Time Period	Comments
VC7	15-20	1	121	ochre	NA	NA	NA	NA	NA	NA	<0.1	2,000-380	
VC7	20-25	1	122	ochre	NA	NA	NA	NA	NA	NA	0.1	2,000-380	
VC7	30-35	1	NA	gastrolith	manuport	NA	complete	49.57	38.95	32.71	83.3	2,000-380	Non-artifact
VC7	40-45	1	123	basalt	flake	flaked	undetermined	11.2	5.66	1.85	0.1	2,000-380	
VC7	40-45	1	124	basalt	flake	flaked	undetermined	6.06	3.01	0.69	<0.1	2,000-380	
VC7	105-110	1	125	shell	bead	grinding, perforated	complete	3.75	3.56	1.31	<0.1	4,000-2,000	
VC7	180-187	1	126	basalt/andicite	flake	flaked	distal portion	5.04	3.04	0.9	<0.1	4,000-2,000	mid stage
VC6	189-191	1	127	obsidian	flake	flaked	complete	7.52	4.4	1.13	<0.1	4,000-2,000	late stage
VC7	160-165	1	128	unidentified material	flake	platform-bearing shatter	incomplete	5.51	3.89	1.48	<0.1	4,000-2,000	early stage
VC7	80-85	1	129	unidentified material	flake	flaked	effectively complete	32.07	21.25	14.79	8.4	2,000-380	early stage
VC7	210-215	1	76	obsidian	flake	flaked	undetermined	3.38	2.54	2.32	<0.1	4,000-2,000	
VC6	240-245	1	77	unidentified material	flake	flaked	broken	5.2	4.56	0.99	<0.1	4,000-2,000	early stage
VC5	135-140	1	78	unidentified material	flake	flaked	broken	11.23	7.89	1.73	0.2	4,000-2,000	mid stage
VC5	275-280	1	79	unidentified material	lithic tool	flaked pebble tool	water worn	28.05	17.05	8.52	5.3	5,000-4,000	
VC5	322-329	1	130	unidentified material	shatter	flake debitage	complete	3.91	3.58	1.28	<0.1	5,800-5,000	
VC5	322-329	1	131	unidentified material	shatter	flake debitage	complete	4.47	3.74	2.73	<0.1	5,800-5,000	
VC4	265-270	1	NA	bone	flake	flaked	undetermined	5.97	3.69	0.55	0.01	5,000-4,000	
VC4	355-360	1	NA	bone	flake	flaked	undetermined	7	3.99	0.7	<0.1	5,800-5,000	
VC5	225-230	1	134	bone	worked bone	grinding and shaping	fragmented	0.69	0.17	0.09	0.2	4,000-2,000	possibly a 'handle' for an artifact 'broken off'
VC6	115-120	1	135	bone	worked bone	grinding and shaping	fragment	9.26	3.7	1.91	<0.1	4,000-2,000	
VC6	125-130	1	136	bone	worked bone	grinding/bevelled and shaped to a	fragment	11.05	2.23	1.41	<0.1	4,000-2,000	possible herring rake

Vibracore test	5 cm core section	No.	Catalogue No.	Artifact material	Artifact type	Production	Condition	Length (mm)	Width (mm)	Height (mm)	Weight (g)	Estimated Time Period	Comments
						point							tine or comb fragment ?
VC6	170-175	1	137	bone	worked bone	grinding	fragment	18.08	2.77	2.15	0.1	4,000-2,000	
VC6	220-225	1	138	bone	worked bone	grinding	fragment, calcined	15.34	2.2	1.48	0.1	4,000-2,000	
VC2	85-90	1	NA	bone	flake	flaked	complete	5.5	3.3	1.2	<0.1	NA	Non-artifact
VC6	210-215	1	NA	mammal bone	flake	flaked	undetermined	8.8	4.3	2.2	<0.1	4,000-2,000	Non-artifact
VC6	140-145	1	NA	mammal bone	flake	flaked	undetermined	13.1	3.6	3.04	<0.1	4,000-2,000	Non-artifact
VC6	140-145	1	NA	mammal bone	flake	flaked	undetermined	5.95	6.63	2.85	<0.1	4,000-2,000	Non-artifact
VC6	140-145	1	NA	mammal bone	flake	flaked	undetermined	8.01	3.14	0.94	<0.1	4,000-2,000	Non-artifact
VC6	140-145	1	NA	mammal bone	flake	flaked	undetermined	6.58	3.52	1.3	<0.1	4,000-2,000	Non-artifact
VC6	140-145	1	NA	mammal bone	flake	flaked	undetermined	6.61	2.01	1.31	<0.1	4,000-2,000	Non-artifact