POINTS IN TIME: STONE TOOL ANALYSIS AS AN INDICATION OF GROUP MOVEMENT AT THE BIRCH CREEK SITE (35ML181), SOUTHEASTERN OREGON

By

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To the Faculty of Washington State University

The members of the Committee appointed to examine the Thesis of Philip Robert Fisher find it satisfactory and recommend that it be accepted.

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Abstract

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In this thesis I explore the question of occupational continuity at the Birch Creek Site (35ML181) in southeastern Oregon with a focus on the Middle Archaic. The site is located in the physiographic province of the Owyhee Uplands along the Owyhee River at what can be described as a transitional zone between the Great Basin and the Columbia Plateau. A series of thirteen radiocarbon dates from approximately 6,600 B.P. to 2,100 B.P. provided a means by which to assess the occupational history through discrete sections of time.

Obsidian and chert comprise a near totality of the raw material used in the chipped stone assemblage from the site. Behavioral differences in the collection and utilization of these material types is considered the product of new groups of prehistoric peoples adapting to an unfamiliar landscape. This is recognized in the archaeological record as assemblages that differ significantly from all others.

Three lines of evidence from the chipped stone assemblage were used to answer the question of continuity in the Middle Archaic. These are the raw material frequencies of chert and obsidian use through time, the source locations of obsidian identified at the Birch Creek site, and the established projectile point chronology of the site. As the data set is composed of material from discrete assemblages of time, any change or patterning in the data was used to identify periods of time when new groups of prehistoric people moved into the Birch Creek Site.

Analysis of the relative raw material frequencies, obsidian source locations, and projectile point chronology indicate that new groups of prehistoric peoples inhabited the Birch Creek Site at different times during the documented 4,000 year occupational history.

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Dedication

This thesis is dedicated to my Dad and for my Mom.

Chapter 1

Introduction

The Birch Creek Site (35ML181) located in Southeastern Oregon (Figure 1.1) contains dated components from the Early, Middle, and Late Archaic periods. A majority of material for this thesis comes from the Middle Archaic period. The central objective of this study is to partition the Archaic components into narrow time spans through use of radiocarbon ages, in order to develop a fine-grained means by which to analyze the lithic assemblages from the site. With this refined chronology I will explore changes in human adaptive strategies throughout the Middle Archaic.

Prehistoric occupation of the Northern Great Basin and surrounding areas is present for roughly 11,000 years. The Paleoindian period lasts from roughly around 11,000 to 8,000 B.P and following this period is the Early Archaic, lasting from approximately 8,000-6,000 B.P. The Middle Archaic from which most of the material for this study is derived, is dated to around 6,000-2,000 B.P. The Late Archaic lasts from roughly 2,000 B.P. to present (Andrefsky et al. 2003). These dates are not rigid as there are a number of chronologies for each region that differ slightly from one another.

Recent studies from the Birch Creek Site have found a continuity of resource use through time during the occupational history of the site. In this study continuity refers to the constant or gradual change in resource use through time. That is there are no periods of time punctuated by marked differences in resource use. Cole (2001) analyzed the chipped stone assemblage from the site and compared the variability between chert and obsidian. He concluded that local cherts were used in greater abundance across the site than obsidian, except in the case of hafted bifaces throughout the Middle Archaic period. Van Galder (2002) analyzed the faunal remains from the site, composed largely of mammal, bird, and fish remains. Although much of the bone was too deteriorated to classify to the species level, size classification made it possible to infer changes in subsistence patterns. It was concluded that species diversity steadily increased with time at the site.

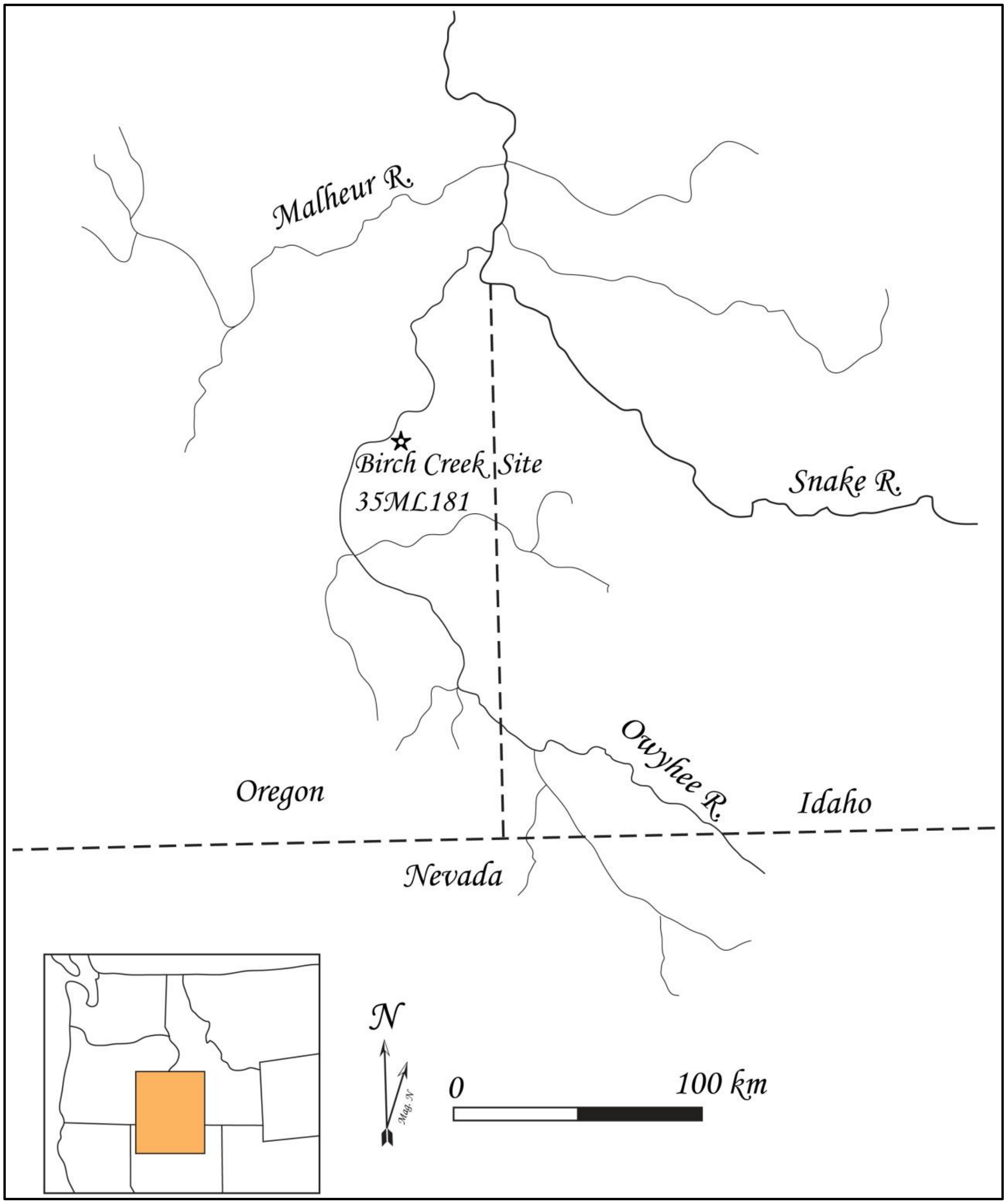

Figure 1.1 Location of the Birch Creek Site in southeastern Oregon along the Owyhee River.

The technological organization of material and tools from the Birch Creek Site was also analyzed for a number of studies in which continuity was again found. Centola (2004) compared the chipped stone assemblage from the older Mazama ash component, dated to around 6,700 B.P., to that of the house-pit component. Again there was an apparent continuity between time periods. The groundstone tools from the Mazama component and house-pit were analyzed by Cowan (2006) to the same conclusion.

These studies suggest continuity throughout the Middle Archaic occupation of the Birch Creek Site. However, the previously discussed analyses focusing on material from the Birch Creek Site were broken down into time periods covering large expanses of time. Combining material for analysis from large spans of time such as pre house-pit and house-pit occupation decreases the resolution of the data. While this in no way detracts from the studies, subtle changes or short occupations can be simply absorbed and lost when material is lumped. This study however uses a number of radiocarbon dated assemblages to provide a look at life at the site into relatively thin slices of time. This provides a means of assessing the continuity at the Birch Creek Site or if at certain times in prehistory different activities were taking place.

The chipped stone technology from each of the radiocarbon dated assemblages is the focus of this analyses. This study analyzes lithic debitage such as flake shatter and proximal flakes, as well as stone tools including retouched flakes, scrapers, non-hafted bifaces, and hafted bifaces. A comparison of these various stone artifacts and raw material types should identify any differences between assemblages. Any differences between assemblages could indicate different activities or behaviors dispelling the apparent continuity at the site if it exists.

In contrast to previous studies, three lines of evidence are used in this thesis to demonstrate that continuity did not in fact occur at the Birch Creek Site. Differences in relative raw material frequency, obsidian sources, and projectile point types were tested against two models of occupation at the site. These are the Population Continuity Model (PCM) and the Pioneer Population Model (PPM). The Population Continuity Models posits continued occupation throughout the Archaic by related groups of people with a continued knowledge of the region. Whereas the Pioneer Population Model calls for the appearance of groups of new people, unfamiliar with the landscape and resource locations. This lack of familiarity is evident by differences in the three lines of evidence from the expected PCM or null hypothesis.

This thesis is broken down into six chapters centered on addressing the issue of occupation continuity. The rest of this introduction chapter discusses the regional setting, site description, and ethnographic background. Chapter Two discusses the methods employed to define each assemblage and gather the material for analysis. Chapter Three introduces each of the stone artifact and debitage types and the methods used to analyze each. Chapter Four takes an in-depth look at the projectile point or hafted biface typologies from the study to develop a chronology for the Birch Creek Site. Chapter Five presents the three lines of evidence and the supporting conclusions drawn to support the Pioneer Population Model. Chapter Six ties together the material covered in the earlier chapters and provides conclusions.

Site Description and Background

The Birch Creek Site (35ML181) is located along the Owyhee River in the Malheur County of Southeastern Oregon about 36 miles northwest of the town of Jordan Valley, OR. The site itself lies on an alluvial plain along a bend in the river (See Figure 1.2) composed of a series of terraces. These fluvial terraces formed from Holocene flooding of the Owyhee River, indicating numerous events at and downstream of the site (Vandal 2007). Walker (2001) analyzed the sedimentation and the processes leading to landform development of the Middle Holocene period excavations. These studies indicate a complicated history of sedimentation and erosion at the site due to its proximity to the river. These series of events have led to localized rather than uniform stratigraphy. Numerous cuts and fills are present within the unit profiles at the Birch Creek Site. Fluvial processes can seriously affect the processes under which artifacts and cultural material are deposited and thus the interpretations of archaeologists (Butzer 1982,

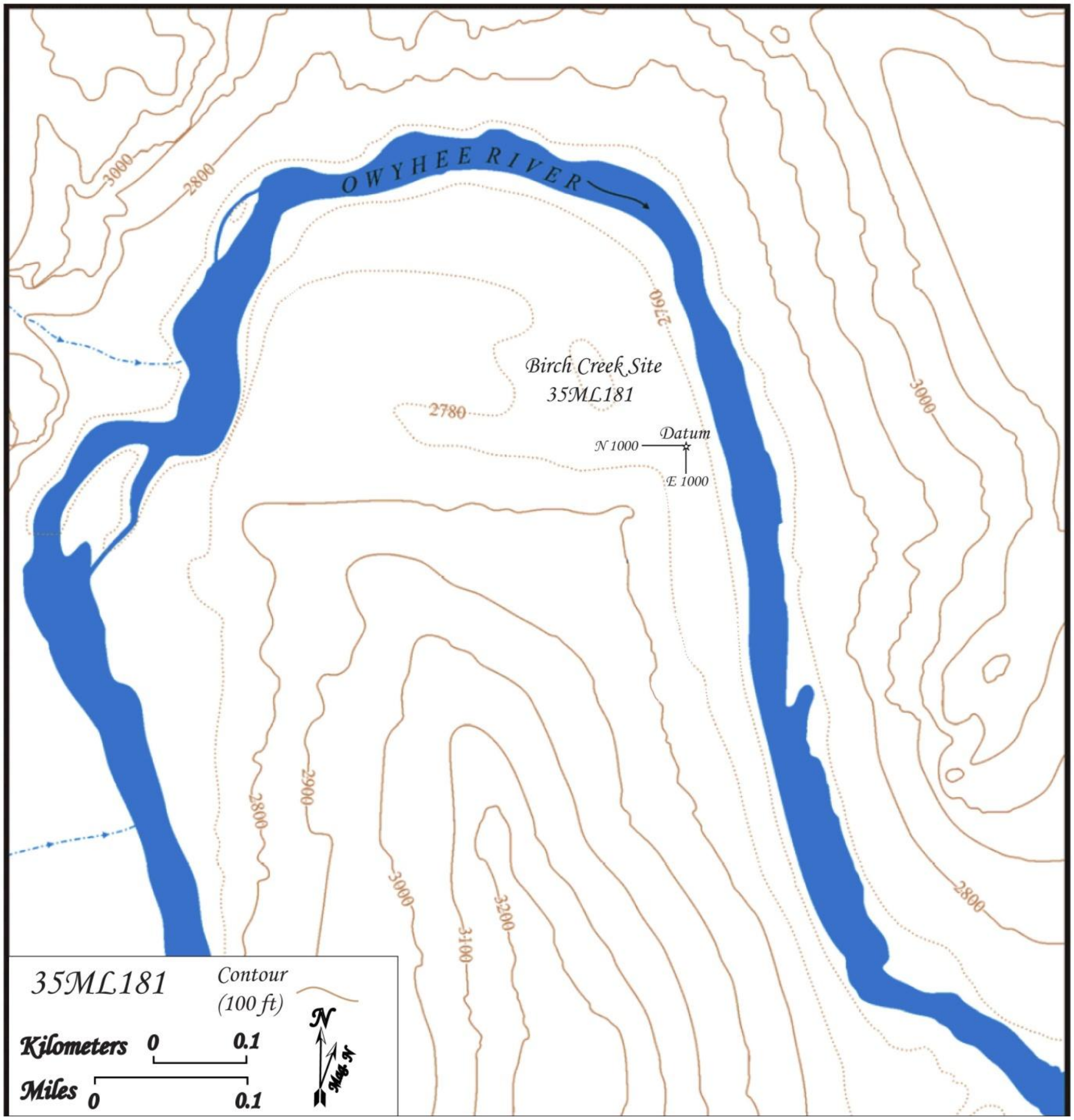

Figure 1.2 Topography around the Birch Creek Site.

Waters 1992). Therefore, the compilation of assemblages proved difficult requiring careful examination of written records from the excavation forms and notes. Sampling methods will be discussed further in Chapter 2.

Although the Owyhee River depositional history makes the interpretation of the archaeological record extremely complicated, its proximity to the river is likely a major reason for the sites repeated use over 4,000 years. Rivers are an extremely important feature on the landscape, and strongly shape human behavior (Gladfelter 1977). Throughout human history people have situated themselves near rivers (Turnbaugh 1978) for a number of reasons including resource availability and transportation (Brown 1997). In the area of the site, the Owyhee River is a third order stream that receives most of its discharge from upstream tributaries to the south (Noll 2009). The Owyhee River eventually drains to the Pacific Ocean by way of the Snake and Columbia Rivers.

The Snake and Columbia Rivers are extremely important in the prehistory of the area. These waterways provided prehistoric peoples with numerous natural resources as well as a means of transportation. These rivers were also the location of winter villages, a characteristic of Plateau cultures comprised of numerous house-pits located in river canyons. Due to the moderate climate of these river canyons, winter months were spent camping in these relatively warmer areas. The fact that house-pits are present at the Birch Creek Site, an area traditionally classified as Great Basin, is extremely interesting in the prehistory of the area. The site contains elements of both Plateau and Great Basin cultures making this a transitional zone between the two.

Field work at the Birch Creek Site took place over six seasons of excavations and a single season of ground penetrating radar (GPR) work (See Table 1.1). The most recent excavations took place in 2006 in which Christopher Noll (2009) analyzed a Late Archaic component at the site. The material for this study comes from the excavations held during the first five field seasons and not from the 2006 excavation. In total 94, square meter, units were excavated during the five field seasons. The focus of the excavations centered on a house-pit block area and a trench to the north (See Figure 1.3). Spaced out between these two areas is a number of

Table 1.1 Birch Creek Excavation Years and Research.

Excavation Year	Research
1998	Excavation
1999	Excavation
2000	Ground Penetrating Radar (GPR)
2001	Excavation
2002	Excavation
2003	Excavation
2006	Excavation

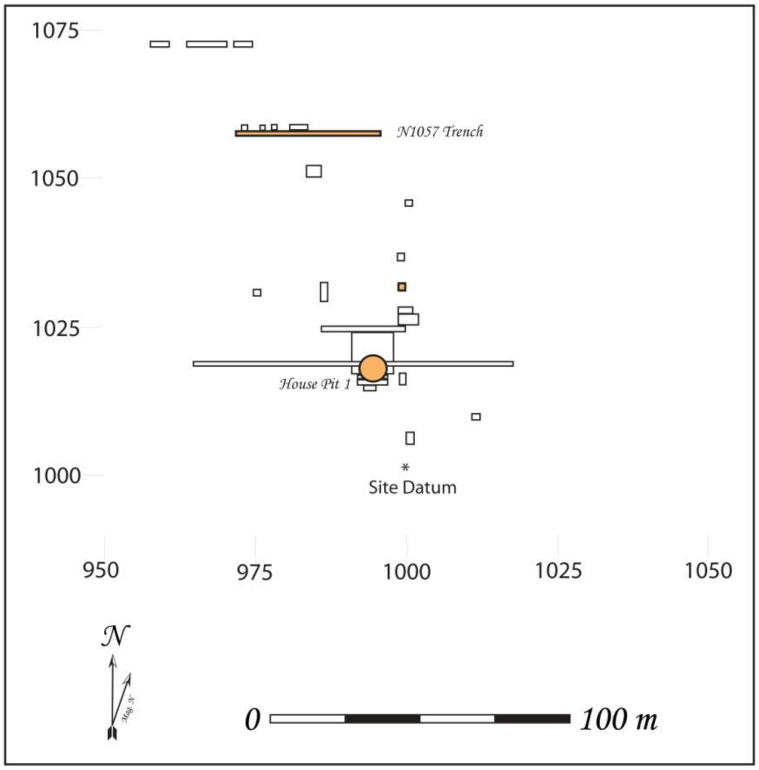

Figure 1.3 Birch Creek excavation units and locations.

test unit excavations and smaller block excavations. After the 2000 GPR work was conducted the site was expanded to include the N1057 trench (Andrefsky et al. 2003). This led to two different grid systems. The original grid system used in the 1998 and 1999 excavation years is based off of a datum at 0N 0E. The datum for the rest of the excavation years (2001-2003, and 2006) is based off of a 1000N 1000E datum. As the datum is the same for the two grid systems simple arithmetic is needed to convert between the two. By adding 1000 to the old northing, and subtracting the old westing or adding the old easting to 1000 the new grid system can be converted from the old. Material for this study comes from the new as well as the old grid system, with old units converted appropriately. Appendix A lists the old units with their new unit numbers.

Today the Birch Creek Site rests on land owned by the Bureau of Land Management (BLM). The site was first identified in an archaeological survey conducted by Reg Pullen (1976) for the BLM along the Owyhee River corridor. The presence of chipped stone and other artifacts on the surface first alerted people to the site. Excavations at the Birch Creek Site have been made possible through collaboration between Washington State University and the BLM. Excavations have been conducted by graduate and undergraduate students of WSU and other institutions participating in summer field schools between 1998 and 2006.

Regional and Environmental Setting

Geology and Topography

The Owyhee Uplands are characterized by plateaus and river beds cut deep into the landscape, forming steep canyon walls. The elevation in this area ranges from just over 2,000 feet to 6,500 feet above sea level (Kittleman 1973). The Uplands formed from vast basalt flows and rhyolite upwelling during the middle Miocene period.   This formation corresponds to large basalt flows from the same period that formed much of the Columbia Plateau (Bishop 2003). Fault scarps in the Owyhee Uplands are much less pronounced than those found to the south and southeast in the Basin and Range physiographic province (Baldwin 1976). The Owyhee Uplands are bound to the north by the Blue Mountains, the High Lava Plains to the east-northeast, the Basin and Range to the southeast and south, and the Snake River Plain to the west (Noll 2009).

The High Lava Plains extend from the Deschutes River Valley to the eastern edge of the Harney Basin. The Blue Mountains limit the northern expanse of the High Lava Plains while they dissipate into the Basin and Range to the south. The geology is characterized mainly by young Pliocene and Pleistocene period lavas. Topography is relatively flat and unchanging, consisting of lava flows with interspaced cinder cones and lava buttes (Baldwin 1976).

The Basin and Range topography and vegetation of Southeastern Oregon are very similar to the characteristic landscape of the Great Basin further to the south (Musil et al. 1995). However, rather than internally draining to a single large basin lake which occurs in the western and eastern sections of the Great Basin, the northern section is comprised of a series of smaller internally drained basins (Cressman 1986). This area is distinguished by northward faulting that gives rise to a number of mountain chains that all drain internally (Musil et al. 1995). The highest of these is Steens Mountain which rises to over 9,000 feet from basin floors that rest around 4,000 feet (Hansen 1947). This faulting occurred at the end of the Miocene period when the Pacific and North American Plates began moving past one another. The Owyhee Uplands are rather abruptly separated from the Basin and Range physiographic province by the Brothers fault zone which limits the northern expanse of the Basin and Range (Bishop 2003).

To the North of the Owyhee Uplands lie the Blue Mountains. The Blue Mountains are bordered to the north by volcanic flows from the Columbia Plateau and to the west by flows from the John Day formation (Baldwin 1976). The Blue Mountains are much older in age than the surrounding areas. Fragments of subduction zones and volcanic islands as well as parts of sea floor, coral reef, and mantle can be found in the Blue Mountains. This area dates to at least 100 million years from the Mesozoic and even Paleozoic eras (Bishop 2003).

Situated to the west of the Owyhee Uplands is the Snake River Plain. This area began forming from volcanic flows of basalt around 12 million years ago. The Snake River Plain extends from the Owyhee Uplands in the southwest across southern and central Idaho to Yellowstone National Park in the east (Plew 2000). The area is drained by the Snake River into which the Owyhee River itself drains.

Environment

Precipitation is low in the site area and occurs mostly in the cold winter months, and average annual precipitation is around 15 inches (Hansen 1947, Plew 1978). The intermountain area located between the Cascades and Rocky Mountains can be classified as an arid to semi-arid environment due to the rainshadow effect of the Cascade Mountains. This classification of arid to semi-arid environment is caused by low precipitation and high evaporation rates (Musil et al. 1995). The temperature range of the Owyhee Uplands is extreme. Winter months see temperatures drop well below 0 degrees Fahrenheit, while temperatures during the summer can exceed 100 degrees Fahrenheit. Due to this extreme range, high desert climate temperatures at night even in the summer can drop close to freezing (Kittleman 1973, Moe 1978, Plew 1978). Cooler weather is usually associated with the higher elevations, especially with Steens Mountain and the Blue Mountains to the North. These areas see much more precipitation than the basin and plateau areas characteristic of the Owyhee Uplands (Musil et al. 1995).

A number of factors such as elevation, topography, soil, and climate regulate the presence of vegetation in the Owyhee Uplands and Northern Great Basin. Kittleman (1973) argues that climate is the main factor in the regulation of plant species whereas Hansen (1947) proposes it is the alkalinity of the soil. Hansen (1947) argues that the precipitation, low as it is, is sufficient to support prairie grasses. Instead Hansen (1947) attributes the lack of this vegetation to the unfavorable conditions of thin, rocky, and often alkaline soils. Hansen (1947) divides the non-timbered area of the Northern Great Basin into three vegetation zones based loosely on topography and soil conditions. The first is that of ridges and rocky faces that are composed of non-alkaline soils. The second and third relate to basin floors that have large alluvial or lacustrine deposits that can be highly alkaline, and basin floors associated with organic sediments. Noll (2009) notes that much of the sediment found at the Birch Creek Site is alkaline in nature, which helps in understanding factors limiting vegetation growth. A combination of the factors listed above is likely the directive for the various plant species and vegetation zones found in the Northern Great Basin and those surrounding the locality of the Birch Creek Site.

The semi-arid environment around the Birch Creek Site and the Owyhee uplands is classified as a sagebrush or shrub steppe environment (Franklin and Dyrness 1973, Musil et al. 1995, Plew 1978). The most abundant shrub species is the big sagebrush (*Artemisia tridentata*) and other species of sagebrush (*Artemisia* spp.). Commonly associated with sagebrush in the shrub steppe environment of the site is western juniper (*Juniperus occidentalis*). Rabbitbrush (*Chrysothamnus* sp.) is also an abundant shrub found in this environment. A number of grasses (Poaceae) are also found in the Owyhee Uplands. These include cheat grass (*Bromus tectorum*), wheatgrass (*Agropyron* sp.), and Idaho fescue (*Festuca idahoensis*) (Franklin and Dyrness 1973). Other plants such as greasewood (*Sarcobatus*) and wild buckwheat (*Eriogonum* spp.) are also present in the area (Musil et al. 1995). Willow (*Salix*) can be found in the Owyhee Uplands (Plew 1978), and is present near the site area (Noll 2009).

An earlier study was conducted on groundstone samples from the Birch Creek Site in search of ancient pollen remains, possibly indicating subsistence. From the pollen wash of these artifacts, thirteen taxa of plants were positively identified through pollen identification. Mainly ancient pollen from non-arboreal pollen was identified, but some arboreal pollen such as pine (*Pinus*), Rhamnaceae, and willow (*Salix*) were found. The non-arboreal pollen consisted of sagebrush (*Artemisia)*, sunflowers (Asteraceae Low and High Spine), mustards (Brassicaceae), goosefoot (Cheno-Ams), buckwheat (*Eriogonum*), bean (Fabaceae), grasses (Poaceae), Polygonaceae, and greasewood (*Sarcobatus*-type). This study indicated that prehistoric people were utilizing a number of the local and regional plants as food sources.

Above the sagebrush shrub-steppe zone in the Northern Great Basin is the forest zone (Franklin and Dyrness 1973). These changes in vegetation zones are experienced like contours on a map at certain elevations, again due to a number of factors including climate. These zones are not abrupt but fluid with transitional biomes of vegetation types (Musil et al. 1995). The forest zone is mostly comprised of coniferous trees. Ponderosa pine (*Pinus ponderosa*) is the most common conifer in the higher elevations of the Owyhee Uplands. Found rarely on the upper limits of the Steens Mountains at high elevations is the white pine (*Pinus monticola*). The second most abundant tree in the forest zone of the Northern Great Basin is the lodgepole pine (*Pinus contorta*) (Hansen 1947). The pine family (Pinaceae) is known from ethnographic accounts such as Steward (1938) to have been extremely important to subsistence economies in the Great Basin. Pine nuts were collected in huge quantities at certain times of the year and processed or stored for later use (Ebeling 1986). The forest zone as well as the sagebrush shrub-steppe zone were important sources of plant materials and seeds that directly impacted the people and their interaction with the environment in the Great Basin.

Despite its harsh climate, the Northern Great Basin supports an abundance of animal species. This includes a large number of avian species, large and small mammals, and fish. Avian species include numerous small birds, sage grouse (*Centrocercus urophasianus*) and waterfowl (Plew 1978). Waterfowl take advantage of wetlands and marshes in the Owyhee Uplands during migration. Over 22 species of duck as well as pelican (Pelecanidae), heron (Ardeidae), and swan (Cygninaie) frequent marshes such as Malheur marsh. Birds of prey such as hawks (Accipitridae), golden eagle (*Aquila chrysaetos*), and owls (Strigiformes) are present (Musil et al. 1995).

Also native to the area are a large number of mammals. Small mammals include such animals as mountain cottontail (*Sylvilagus nuttalli*), white-tailed jackrabbit (*Lupus townsendii*), yellow-bellied marmot (*Marmota flaviventris*), and pocket gopher (*Thomomys* spp.). There is also a large presence of rodents such as pack rat (*Neotoma*). Large herbivores such as antelope (*Antilocapra americana*), mule deer (*Odocoileus hemionus*), elk (*Cervus canadensis*), and bighorn sheep (*Ovis canadensis*) are present across the Owyhee Uplands (Musil et al. 1995, Plew 1978). The Owyhee Uplands are home to several species of carnivores. Mountain lion (*Felis concolor*), coyote (*Canis latrans*), and bobcat (*Lynx rufus*) are three of the most prevalent native carnivore species (Musil et al. 1995).

There are a large number of fish species found in the streams and rivers that drain the Owyhee Uplands into the Snake River. These include but are not limited to the tui chub (*Gila bicolor*), redside shiner (*Richardsonius balteatus*), and speckled dace (*Rhinichthys osculus*) (Bisson and Bond 1971). Anadromous fish live in the salt water of the Pacific Ocean most of the year but journey up freshwater rivers, such as the Snake, and streams to reproduce. These fish runs were an extremely important resource that was exploited by prehistoric peoples of the Plateau (Steward 1938). Excavations at Nahas Cave located near Pole Creek, a tributary of the Owyhee River, revealed the remains of steelhead trout (*Salmo gairdneri*) (Plew 1986). Ethnographic accounts also report people traveling north up the Owyhee River for salmon (Steward 1938). It appears that in the past anadromous fish made their way up the Owyhee River and were likely an important resource for the inhabitants.

Ethnographic Background

The Birch Creek Site is located in a very important and interesting area, and affords the opportunity to explore the interactions and life ways at a boundary between two culture areas (Andrefsky et al. 2003). The site lies in a transitional area between the Columbia Plateau to the north and the Great Basin to the South. While the Owyhee River drains the Owyhee Uplands into the Snake and Columbia Rivers it is still considered a part of the Great Basin cultural area (Kroeber 1939). Kroeber (1939) separates the Great Basin from the Columbia Plateau for a number of reasons, the main reason being that the two regions are separated as their subsistence and settlement patterns differ considerably between the two culture areas. There is a striking difference between the vegetation and environment of the two that ultimately affected the native inhabitants of the Great Basin and their movement across the landscape. Opinions differ on this subject and some such as D’azevedo (1986), place the area around the Birch Creek Site in the Columbia Plateau, while other scholars argue that the archaeology indicates the area should be placed in the Great Basin (Aikens 1993).

The location of the Birch Creek Site in Southeastern Oregon has been ethnographically inhabited by the Northern Paiute and Shoshone bands such as the Northern Shoshone (Fowler and Liljeblad 1986, Stewart 1938). These groups practiced a semi nomadic way of life centered around family groups "subsisting on hunting, gathering, and fishing" (Fowler and Liljeblad 1986: 436). Resource availability greatly affected the life way of the Northern Great Basin inhabitants as well as their mobility. Movement around the landscape resulted from the seasonal appearance and disappearance of resources (Arkush 1995). This included the harvesting of seeds, roots, pinyon nuts (Arkush 1995), and anadromous fish runs from the Snake into rivers such as the Owyhee (Steward 1938).

The Northern Paiute were broken into small bands or groups that moved around a traditional homeland (Horr 1974). These homelands can be viewed as districts that were occupied by individual bands comprising the Northern Paiute (See Figure 1.4). The different groups or bands of the Northern Paiute were named after the district in which they resided. Often these names come from a topographic feature or major resource that was found in the area (Fowler and Liljeblad 1986). The Birch Creek Site lies in the middle of the Tagötöka district, meaning "tuber eaters" (Stewart 1939). Population densities from this region are imperfectly understood, and when ethnographic accounts are available they are likely incorrect due to the affects from European disease (Steward 1938). However, a basic idea of population density is helpful in understanding group size and movement within the environment. Stewart (1939) calculates population densities for these "districts" of the Northern Paiute as ranging from 2.5 square miles per person to upwards of 33 square miles per person.

The individual districts of the Northern Paiute varied considerably and often overlapped around resources. The foraging range of these groups likely contributed to the varying district sizes, which were by nature fluid. The overlap of district boundaries often brought groups into contact with others occasionally forming communal camps. Structures were usually conical in

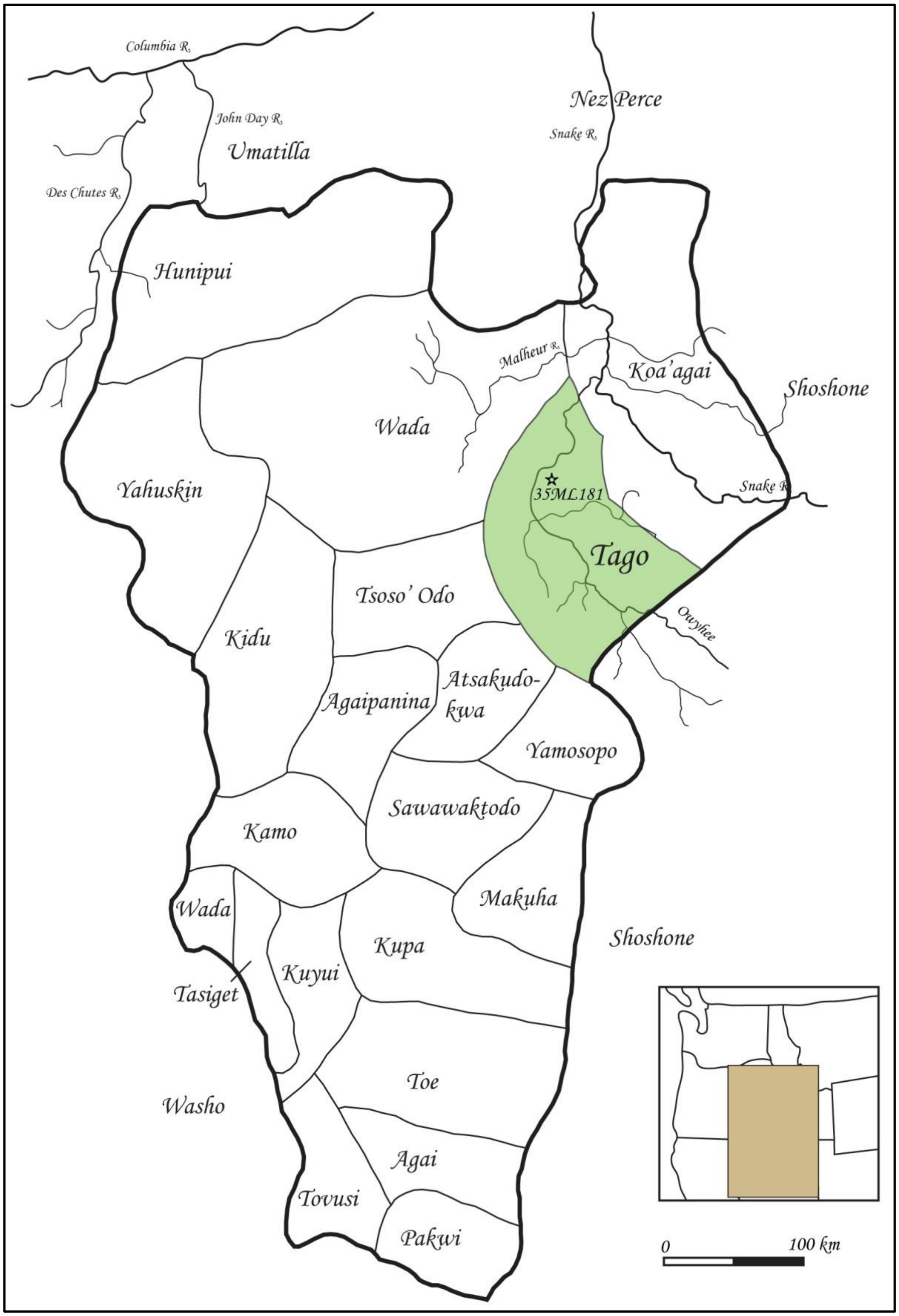

Figure 1.4 Northern Paiute districts around the Birch Creek Site.

form and comprised of willow poles covered in grass or tule mats (Fowler and Liljeblad 1986). This is similar in nature to the structures used by the Northern Shoshone. Again the structures were conical in shape and were often covered in grass or sagebrush or through the weaving of willow branches to form a wikiup (Murphy and Murphy 1986). Structures and camp size of the Northern Paiute frequently varied by season. Individual family structures were usually spaced apart from one another in camp in favored spots, so as not to put extra pressure on the surrounding resources. In summer, camps were small consisting of family groups employed in foraging rounds. Winter camps could see upwards of fifty people or more living in a communal area. House structures during winter in colder areas such as mountain environments were often excavated a foot or two into the ground for extra warmth and built up similarly to the structure previously described (Fowler and Liljeblad 1986).

Chapter 2

Analytical Sample

This study uses radiocarbon ages to define analytical assemblages that are compared over the occupational span of the Early to Middle Archaic periods. A total of 13 organic samples (See Table 2.1) were radiocarbon dated from various units and levels at the Birch Creek Site. These samples came from excavations over multiple field seasons that include the main block area, the northern trench, and a smaller test unit (Figure 2.1). Each of the radiocarbon dates for this study defines a separate assemblage composed of cultural material directly associated with the dated sample. This was done to create a picture of the material in use at the site at a specific point in time. Rather than looking at the material from between two dated layers, this study provides a way to assess over 4,000 years of occupation of the Northern Great Basin from discrete, temporally varying assemblages.

Each of the radiocarbon samples essentially represents an assemblage that was created through the compilation of field notes, excavation notes, sediment descriptions, and profile drawings from numerous field seasons. The unit and level of each dated sample were the starting point for this analysis. Once the unit and level of each radiocarbon sample were established, the assemblages were expanded to all adjacent levels and units to include all the material that could be associated with the original sample. Using the previously described written records, a list of levels for each unit was recorded (Appendix B) and broken down into two categories; those of high confidence and those of less confidence. Levels were excavated in arbitrary five centimeter intervals across all excavations at the site unless otherwise noted.

Table 2.1 Radiocarbon Samples.

Project Number	Inventory Number	Coordinates	Measured Age BP	2 Sigma Age BP
1	Beta 23912	N1057-E980	6640±40	7595-7460
2	Beta 18824	N1017-E992	3980±50	4560-4350
3	Beta 20346	N1057-E981	3980±50	4540-4280
4	Beta 9884	N1050-E984	2140±50	2330-2010
5	Beta 10564	N1026-E1000	2190±40	2330-2120
6	Beta 17590	N1024-E991	2970±40	3330-3060
7	Beta 7492	N1017-E992	2620±40	2780-2730
8	Beta 12009	N1019-E994	2760±110	3160-2730
9	Beta 17250	N1017-E996	4480±70	5315-4865
10	Beta 130362	N1016-E994	2460±70	2735-2330
11	Beta 130363	N1017-E993	2430±60	2725-2335
12	CAMS 24010	N1057-E979	0845±40	910-670
13	CAMS 24546	N1057-E975	3005±35	3330-3070

High confidence levels are those that rest safely within the various surface depths of a radiocarbon dated layer. Based on the depths calculated for the layer in question from each unit, any levels that came in contact with or crossed the calculated boundaries were excluded from this classification.

Lower confidence levels are those that cannot, with absolute certainty, be shown to rest entirely within the dated layer. This classification could be caused from a level coming in contact with or crossing the upper or lower surface of the dated layer under examination. In some instances the arbitrary five centimeter depth of a level partially crossed above or below the calculated limits of the high confidence layer boundary due to the undulating sediment layers. In these cases levels were classified as lower confidence as the level did not rest entirely within the requirements set forth under the classification of high confidence. Levels were also classified with less confidence if any information pertaining to classification was missing. For example, missing level forms which prevented the actual depth of a layer to be referenced against the calculated high confidence boundary would result in a classification of less confidence. Another reason for this classification came in the form of missing north or south wall profile drawings for units, leading to the inability to calculate the extent of high confidence boundaries from across the entire unit.

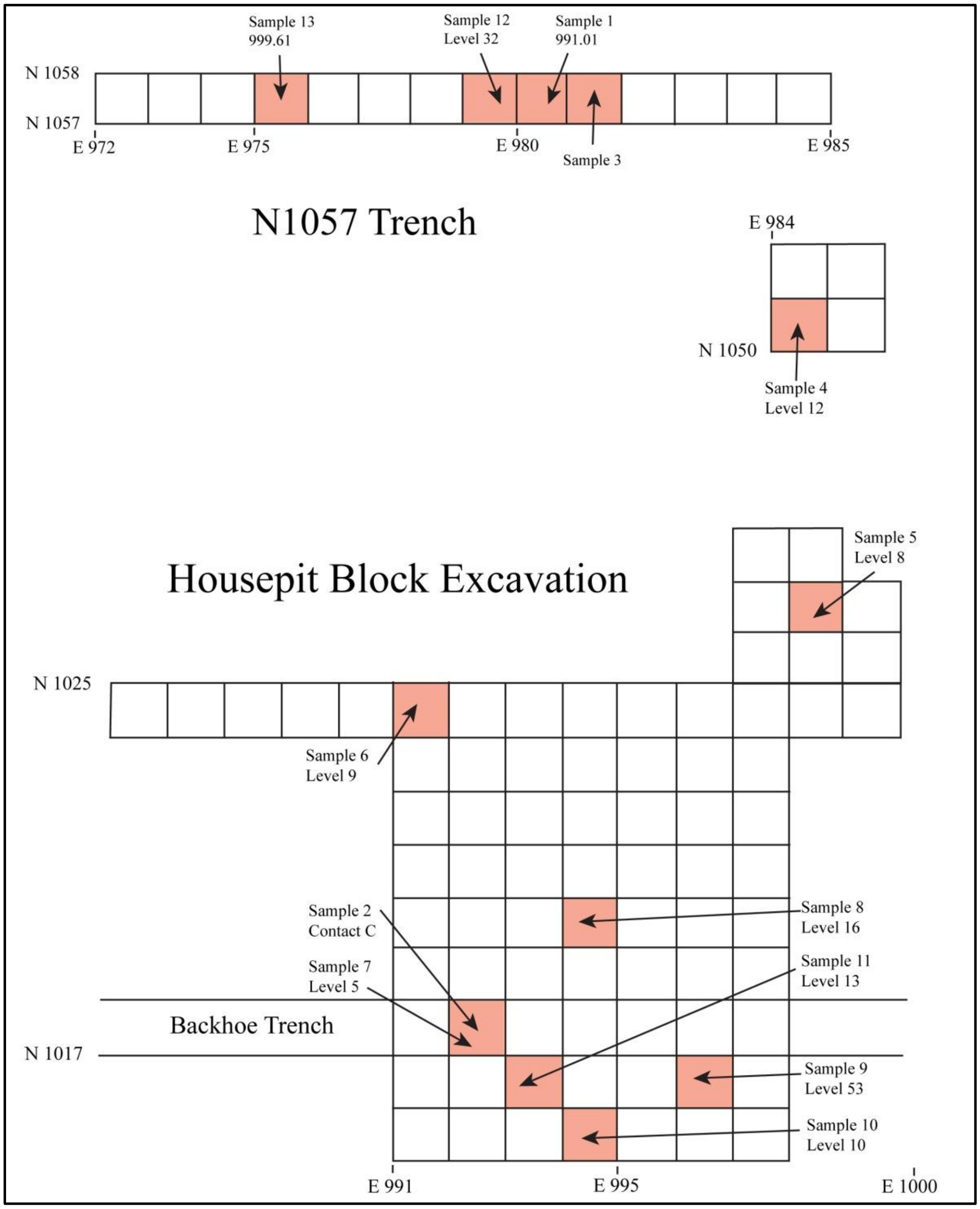

Figure 2.1 Unit locations of radiocarbon samples (not to scale).

Due to the undulating surface at the site and the subsequent sediment layers containing cultural material, neat stratigraphy was a rarity. Most sediment layers varied in depth across the excavation units and even between unit walls. The recorded depth of each sample was used to find the recorded sediment layer in which the sample was removed. Based on this knowledge the depths of the sediment layer in question were calculated, and the levels falling within this range were deduced using excavation notes and profile drawings from both the northern and southern walls.

Starting with the original sample unit and layer, the upper surface limits of the sediment layer in question were recorded at both the eastern and western edges of the unit from either the southern or northern profile drawing. This same procedure was also used to record the lowermost depths for the same layer at the eastern and western edges from the profile drawing. This process was then completed on the profile drawing from the opposite unit wall. In all, eight depths, four from the upper surface of the layer and four from the lower surface of the same sediment layer were calculated. The lowest depth from the four upper surface points and the highest depth from the four lower surface points then became the depth range for all high confidence levels. This was done to break excavation levels within the sediment layer into high and lower confidence classifications. This created two boundaries in each unit that set the depth limits under which it could be said with certainty that a level was associated with a radiocarbon date. With the boundaries set for each unit, excavation forms were referenced to record all of the five centimeter levels associated contained within the layer of the original radiocarbon sample. The layer containing the radiocarbon sample was then tracked to neighboring units using the same process and repeated until the layer ended or until the provenience of any artifacts that might have rested in the same sediment layer became questionable. The main cause of questionable levels was due to recognized mixing discovered during excavation, or from unclear notes pertaining to the layer. This methodology is based on the assumption that the surfaces between the north and south wall profiles extend across the unit.

If for some reason one of the upper or lower surface limits from the unit corners was not the lowest or highest point respectively in the sediment layer, those surface points were disregarded. Instead a new point was established that limited the boundary for classification of high confidence. Hypothetically, imagine an inclusion from turbation cut into the upper surface of the sediment layer. If this inclusion extended down lower than any one of the upper four corner points, those corner points no longer represented the lowest limit of the upper surface of that layer. Instead, the lowest extending depth of the turbation became the uppermost point at which high confidence levels could range. Thus the integrity of classifying levels with high confidence was preserved.

Once levels for both high and less confidence were determined, the Birch Creek Archaeological Project database was accessed to pull the inventory numbers and counts for all artifacts associated with each assemblage for analysis. As a major part of this study relates to the temporal projectile point chronology of the Northern Great Basin, the counts for this artifact type were initially calculated for each assemblage. Due to a total sample size of 30 projectile points, and the fact that only 9 of the projectile points are classified as high confidence, both the high and lower confidence levels are examined in this study. Additionally, some assemblages contained no high confidence specimens which made creating a chronology for the area without the lower confident levels much more challenging. To avoid bias in this study, all material from both high and lower confidence levels are examined. Lower confidence should in no way be considered low confidence; this classification simply indicates that there are levels that are not, with absolute certainty, associated with an assemblage. The inclusion of material from levels with lower confidence will, however, enhance this study and support the material that is classified with high confidence as the sample size is increased.

Through the methods described above, the various units and levels associated with each of the 13 radiocarbon assemblages were compiled (Appendix B), although for this study, 12 assemblages will be analyzed. These assemblages are the basis of this study from which all of the cultural material was referenced. Two assemblages for this study are of special interest and require further explanation.

Assemblage 12 (845±40 BP) from unit N1057 E979 level 32 dates to much younger than the believed age of the sediment layer in which it is located. The depth of the sample is over 1.5 meters below datum yet it is much younger than the next temporally closest assemblage of number 4 (2,140±50 BP). Assemblage 4 comes from level 12 of unit N1050 E984 l which is much closer to the surface than that of Assemblage 12. It is believed that the radiocarbon sample for assemblage 12 was taken from a root which extended into the layer associated with the respective assemblage (Andrefsky Jr., William, personal communication 2008). This assemblage contains the only Late Archaic component at 845±40 B.P., although this date must now be considered suspect. If the radiocarbon date presented is much younger than the actual age of the cultural material and associated sediment layer there is a potential problem in the analysis of material looking for change over time, and caution in interpretation is required. The interpretation of this assemblage is addressed later in this study against material from the other assemblages.

Assemblages 10 (2,460±70 BP) and 11 (2,430±60 BP) were combined into a single assemblage. Thus there are only 12 assemblages from 13 radiocarbon samples. Although samples 10 and 11 come from different but adjacent units and levels, N1016 E994 level 10 and

N1017 E993 level 13 respectively, they both fall into the same sediment layer. Therefore, when the associated levels and units for each assemblage were collected, level 10 from unit N1016 E994 and level 13 from unit N1017 E993 both fell into the high confidence of a single assemblage as can be seen in (Appendix B). The fact that these samples come from different units and levels but are still considered high confidence in what was to be two separate assemblages is important. Even more noteworthy is the fact that both of the samples are dated very close to one another from the same sediment layer, which lends confidence to the practice employed in compiling assemblages for analysis in this study.

Chapter 3

Description of the Chipped Stone Assemblage

The manufacturing of lithic tools from a complete nodule or core is a reductive process that produces various kinds of debitage. Debitage is defined here as the discarded material resulting from the production of a lithic artifact (Andrefsky 2005). This reductive process of tool production can be broken down into two categories, objective pieces and detached pieces. Objective pieces such as flakes, bifaces, and cores are those that have been modified in one way or another in an intentional manner by the knapper. Detached pieces include any lithic pieces that separate from the objective piece such as shatter, flakes, chips, and even blades. The line separating objective and detached pieces is not rigid.

Detached pieces are removed when an objective piece is struck with another object. This occurs through percussion or pressure flaking. Percussion flaking requires the striking of an objective piece with a rock hammerstone (hard hammer percussion) or a softer billet made from antler, bone, or wood (soft hammer percussion). Pressure flaking does not involve the striking of an objective piece; rather, direct pressure is placed on the objective piece, usually from an antler or bone tine that removes smaller flakes (Andrefsky 2005).

A central factor in the process of lithic production is the raw material used. Raw materials that are suitable for knapping have three key properties that facilitate stone tool production. These properties are whether or not the raw material is brittle, homogenous, and isotropic. Stones useful for flintknapping are brittle in nature so that they can be shaped yet they retain enough strength to make them useful. Homogeneity of raw material is essential for producing stone tools. Bedding planes or inclusions in the raw material as well as large crystal structures will cause the material to break in unintended ways. Finally, the material must be isotropic. Isotropic material is somewhat flexible so that the force of impact does not shatter the material. Obsidian is the best example of a natural material that meets these key properties. Cryptocrystalline silicates (CCS) such as cherts are also suitable, but to a lesser extent than obsidian because of their crystal structure (Andrefsky 2005). Obsidian and chert represent the two raw materials types utilized in all stone tool production at the Birch Creek Site. Analysis of the chipped stone assemblage thus focuses on the chert and obsidian material.

Lithic reduction is a dynamic, constantly evolving process. Blades or flakes removed during the production of the objective piece can then become tools. Once work is intentionally started on a detached piece, it becomes the new objective piece from which other forms of debitage are produced. This could result from a number of scenarios, one being the removal of small flakes for the purpose of resharpening the edge of a flake tool. In this manner the life history of stone tools and debitage becomes very complex. Understanding the processes that result in the formation of stone tools and associated debitage is imperative in understanding prehistoric activities and use at a site.

Lithic tools vary greatly in size and form depending on the intended function of the objective piece. The analysis of these varying tools and debitage can be used to infer certain behaviors of the prehistoric inhabitants at the Birch Creek Site. Twelve assemblages, each representing a thin slice of time spanning 4,000 years of prehistory in the area, present a great opportunity to look for change over time and/or continuity at the site. For this study, and as described in chapter 2, assemblage is used to refer a group or set of artifacts related to one another (Odell 2004). Both objective and detached lithic pieces were analyzed from each of the twelve assemblages. These include lithic shatter, flakes, retouched flakes, scrapers, and bifaces.

The following descriptions present the methods by which each lithic category was analyzed and the reasons for which they were recorded.

Flake Shatter

Gross measurements were taken of flake shatter in the form of total count and total weight by assemblage (See Table 3.1). This was done due to the nature of this form of debitage.

Table 3.1 Flake Shatter Frequency From Birch Creek.

	Chert		Obsidian	
Assemblage	Count	Weight (g)	Count	Weight (g)
Sample 1	1579	302.3	99	3.5
Sample 2	1562	622.5	71	5.7
Sample 3	1536	267.6	113	7
Sample 4	2430	1605.8	285	29.1
Sample 5	817	484.3	117	8.9
Sample 6	1984	421.5	713	72
Sample 7	6313	3359.2	1108	176.8
Sample 8	6794	1897.8	440	25.9
Sample 9	16	11.6	4	0.4
Sample 10&11	7541	4965.3	761	106.5
Sample 12	663	361.3	27	9.6
Sample 13	874	336.5	54	11.2
Total	32109	14635.7	3792	456.6

As no platform is present for flake shatter, it is impossible to measure the length and width of individual pieces. Although an in-depth analysis of all the pieces was not conducted, flake shatter is still an important variable to take into account when analyzing the lithic debitage at a site. The production of lithic tools is a reduction process which represents not only the activities taking place at a site but also the level at which these activities were occurring. The analysis of weight and count as well as the average shatter size by material type and assemblage, can be used when comparing the other lithic remains of a site (Andrefsky 2001).

Proximal Flakes

Lithic flakes are detached pieces that form a large amount of the debitage recovered from sites. For every objective piece, a great number of detached pieces are produced. The single property that separates flakes from other forms of debitage such as shatter is the presence of a striking platform at the proximal end of the flake. Flakes usually fall into three classic forms; conchoidal, bending, and bipolar. The conditions, under which each flake type form differs, and Cotterell and Kamminga (1987) outline the mechanics behind this. There are a number of flake characteristics that can be used to infer prehistoric behaviors. These include size measurements such as weight, length, width, thickness, platform length, and platform thickness. The presence or absence of cortex on flakes can also be used to infer behavioral activities as cortex is only present at the initial stage of raw material reduction.

Weight of Birch Creek lithics were recorded in grams (g). Length and width can be hard to replicate, as not all flakes are the same shape. The length in no way indicates the maximum dimension of the flake; rather, the maximum length was taken by measuring perpendicular to the platform through the bulb of force, if present. Width was taken by measuring the maximum distance perpendicular to the length measurement. Figure 3.1 demonstrates the length, width, and thickness dimensions recorded for flakes. As the bulb of force on conchoidal flakes can drastically vary the thickness between flakes, a thickness measurement was taken at the perceived center point. In this way, the thickness measurement was standardized across all flakes. Platform length was taken at the maximum distance from one flake edge to the other.

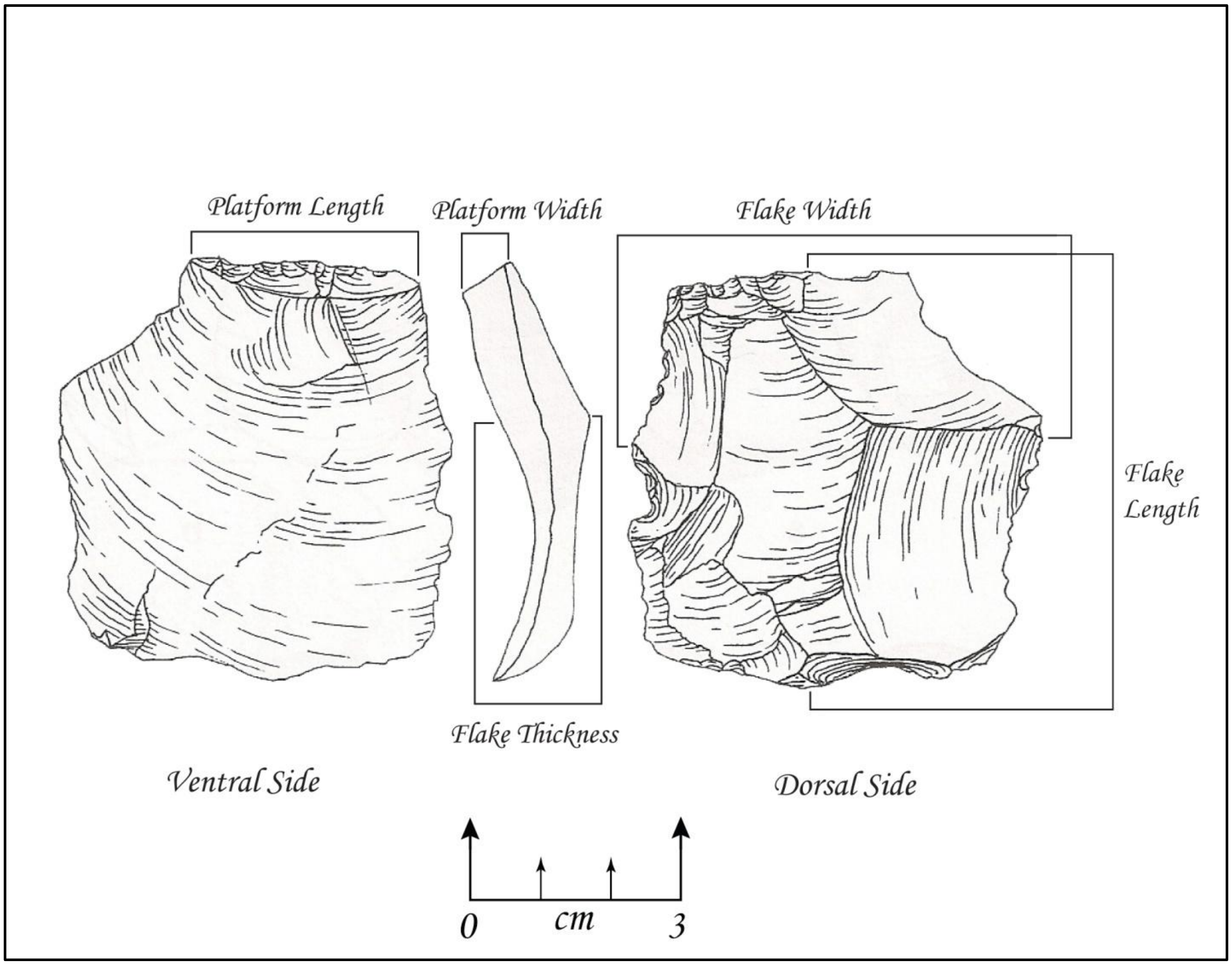

Figure 3.1 Location of flake measurements.

Platform thickness was measured by recording the maximum distance across the platform from the dorsal to ventral side. A demonstration of platform measurements can be seen in Figure 3.1.

Flake Sampling

The total population of proximal flakes from all of the assemblages numbered close to 15,000. Therefore, a sample population of 10% was analyzed. This sampling was conducted only on proximal flakes. All other lithic counts in this thesis represent the total frequencies of each object type from each assemblage. As obsidian and chert or cryptocrystalline silicates (ccs) flakes accounted for nearly 100% of all flakes recovered, analysis focused on these two raw material types. Only a small number of flakes produced from materials other than obsidian and chert, such as basalt, were present. However, the counts between the two material types differed enough that 10% of the chert population and 10% of the obsidian population were sampled. This was done to properly analyze the flakes of both chert and obsidian at the frequencies in which they occur from all assemblages. To ensure that each assemblage was properly sampled based on the numbers of flakes present, the method for sampling 10% as discussed above was applied to each assemblage (See Table 3.2) Therefore 10% of each material type was sampled from each assemblage to represent a 10% sample of the total population.

Table 3.2 Flake Sample Frequencies Per Assemblage.

Assemblage	Chert	Obsidian	Total
1	105	11	116
2	46	7	53
3	44	3	47
4	78	32	110
5	26	8	34
6	64	43	107
7	180	78	258
8	344	36	380
9	0	0	0
10&11	242	58	300
12	34	6	40
13	29	4	33
Total	1192	286	1478

A significant number of the flakes in this analysis were bagged together which presented a problem while sampling. In some cases rather than every flake bagged and given its own inventory number, up to 400 flakes shared the same bag and inventory number. When more than one flake shared a bag and inventory number, each flake was given a decimal value. For example, inventory number 10569 contained 12 flakes. Each of the 12 flakes would be given its own inventory number 10569.1, 10569.2 through 10569.12. In this way each flake had an equal chance of being sampled. The flakes were then entered by material type and assemblage into Stata 9.2 (StataCorp. 2005) and 10% of both material types by assemblage were randomly sampled.

Of note here is the fact that the sample from Assemblage 9 was excluded from this analysis. Only four flakes were present, which is too small to sample when looking at 5%-10% of an assemblage. All four flakes from Assemblage 9 were, however, included in the overall analysis of the Birch Creek flakes.

Retouched Flakes

Retouched flakes are detached pieces that have been modified by the maker into an objective piece. Retouched flakes are usually the product of the resharpening of a cutting edge along one or both sides through the removal of smaller flakes. Retouched flakes can fall into three categories based on the location of retouch. Unimarginal flakes have retouch present on one edge on either the dorsal or ventral side of the flake. Unimarginal flakes can have retouch on both the dorsal and ventral sides; however, the location of retouch does not meet along the flake edge. If retouch is present on both the dorsal and ventral sides of a flake that meet along an edge, the flake is classified as bimarginal. Flakes that have unimarginal as well as bimarginal retouch present along the edge of a flake tool are known as combination flake tools (Andrefsky 2005). The breakdown of retouched flake frequency between chert and obsidian by assemblage can be seen in Table (3.3).

In order to assess the amount of retouch present along the edge of a flake tool in a way that removes tool size from the equation as necessitated by Kuhn (1990), a standardized method for measuring retouch on flake tools was employed. The fact that the geometric index of reduction presented by Kuhn (1990) requires the measurement of retouched face lengths, presents a problem when assessing the retouch of tools with little retouch. This includes retouched flakes that do not have face angles greater than 60° as scrapers do. The Clarkson's (2002) index of invasiveness is a very recent yet popular method for assessing the amount of curation present on retouched flakes and even bifaces. The index of invasiveness breaks the dorsal and ventral sides of a lithic tool into 16 segments that are then classified 0-1 by the length that retouch flake scars extend into the center of the artifact. The accumulated score of the flake scar score is then divided by the number of segments (16) to produce a value out of 1 (Figure 3.2). Like the Kuhn (1990) index, higher index values equate to more curation of the tool.

Table 3.3 Chert and Obsidian Retouched Flake Frequencies.

Assemblage	Chert	Obsidian	Total
1	3	0	3
2	5	0	5
3	4	0	4
4	6	1	7
5	3	0	3
6	6	6	12
7	20	7	27
8	43	2	45
9	0	0	0
10&11	36	7	43
12	7	0	7
13	1	0	1
Total	134	23	157

However, the Clarkson index requires a great deal of documentation for each tool in order for replication to be possible. For this reason a series of simple measurements adapted from Clarkson (2005) and Dibble and Chase (1981) were taken in favor of the Clarkson index. The length (l) of retouch on a flake tool was divided by the circumference (c) of the tool (See

Figure 3.3). In this index the calculated value is standardized out of a value of 1 and tool size is removed from the equation. As most edges along flake tools are not straight the curvature was taken into account by measuring the two values with a length of string that was then measured. This index does not measure curation in the same way as the Clarkson (2002) index but it does present a simple way to calculate the amount of flake edge curated by the prehistoric users.

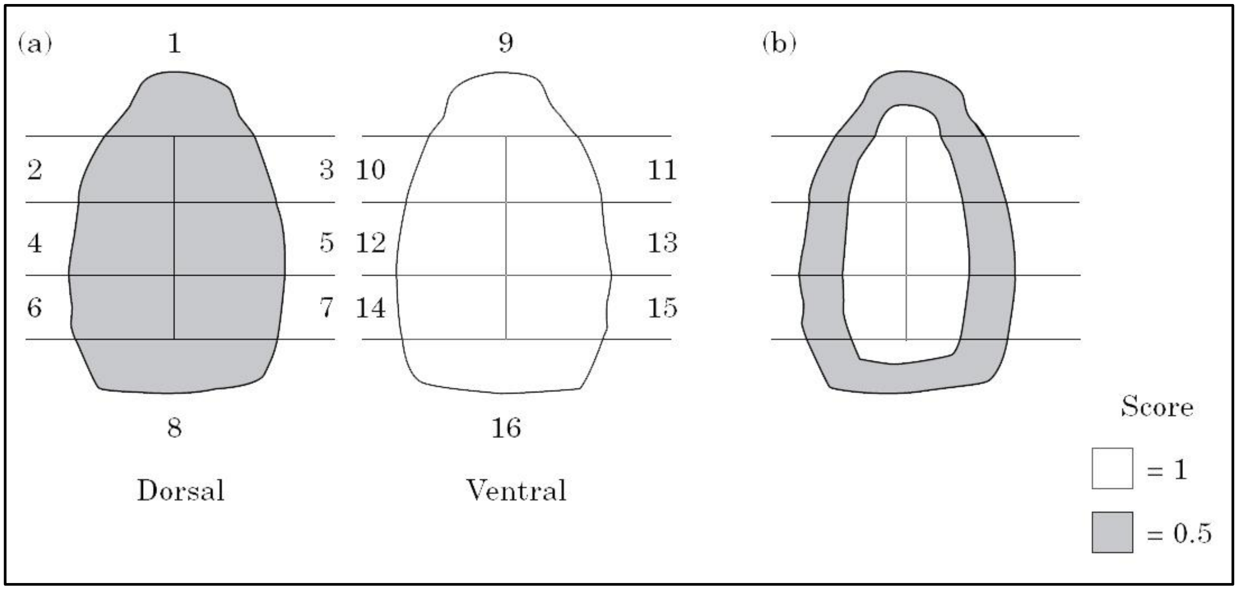

Figure 3.2 Clarkson (2002) Invasiveness Index measurements.

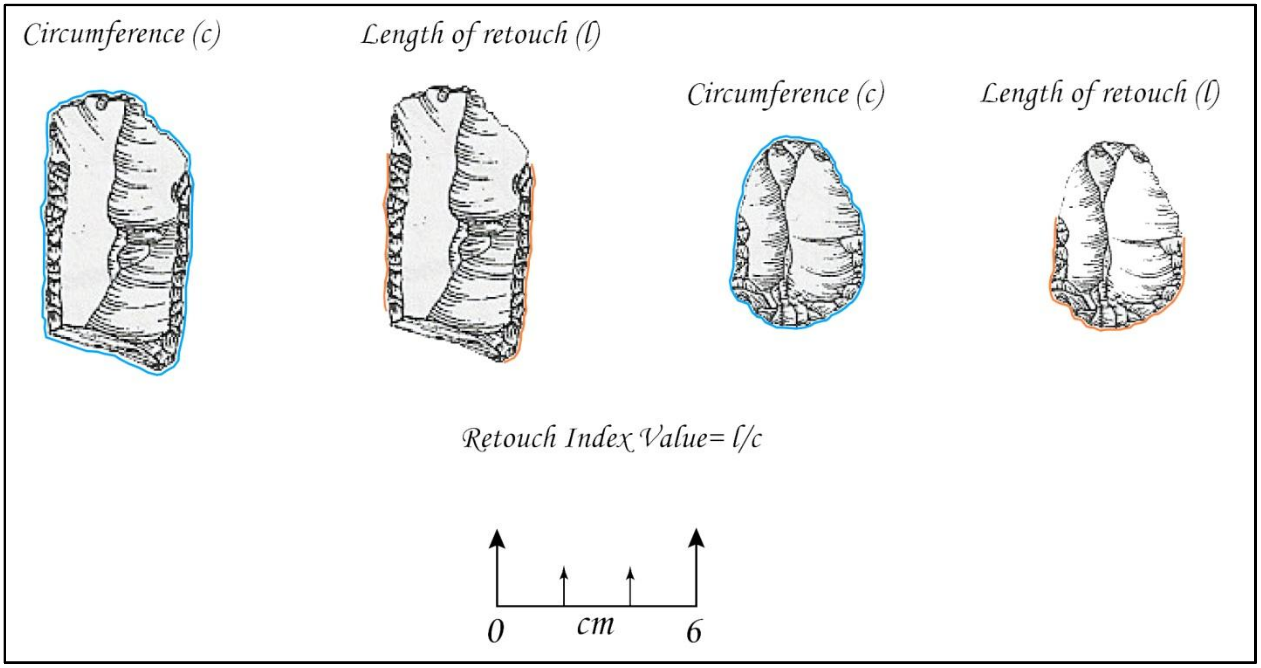

Figure 3.3 Retouch Index measurements.

Scrapers

The life history or use life of a stone tool is non renewable and thus there is a correlation between the amount of use and the amount of retouch present on an artifact. Retouch is the product of resharpening a flake or tool edge in order to extend the use life of a lithic artifact. This is easily understood by looking at the economic tradeoff of resharpening a single flake tool when the edge dulls compared to carrying around raw material or a number of separate tools. The amount of retouch on artifacts such as scrapers is important as it can offer insights into the activities and behaviors of prehistoric inhabitants (Kuhn 1990). The curation of a lithic tool is the amount of use present on the artifact out of the total possible amount of use from a tool. The term scraper is used to describe any flake tool that shows retouch along an edge with an angle between 60° and 90° (Andrefsky 2005). Table (3.4) presents the frequency count of chert and obsidian scrapers in this study.

Table 3.4 Frequency of Chert and Obsidian Scrapers.

Assemblage	Chert	Obsidian	Total
1	1	0	1
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	1	1	2
7	3	0	3
8	0	0	0
9	0	0	0
10&11	3	0	3
12	0	0	0
13	0	0	0
Total	8	1	9

One way to measure the amount of curation on a scraper is the geometric index of reduction or Kuhn's index (Andrefsky 2005, Kuhn 1990). The index is relatively simple to calculate and is based on a few key assumptions and rules. Any estimation of reduction should be free of assumptions related to the nature of the processes under which it was produced. The second assumption is that the relative center of a flake should be the thickest part. Therefore, as flakes are removed for resharpening along an edge towards the thickest part of a unifacial tool, the face angle will become steeper. More retouch along an edge will also cause the length of the face to grow. Figure (3.4) demonstrates the various stages and growth of the face length (t) compared to the maximum thickness (T) of a tool. As flakes are removed, the previous edge face is removed and moves closer to the center of the artifact. Moving closer to the center of the tool causes the face length to grow as it moves towards the thickest part of the tool. Therefore the index value of t/T grows closer to 1 as more is removed from the objective piece. Index values closer to 1 or values larger than other index values indicate more curation and therefore should be indicative of more use. The Kuhn index provides a way to standardize values that are independent of artifact size. Therefore, when comparing scraper tools using Kuhn's index, the only comparison is that of curation and not artifact size.

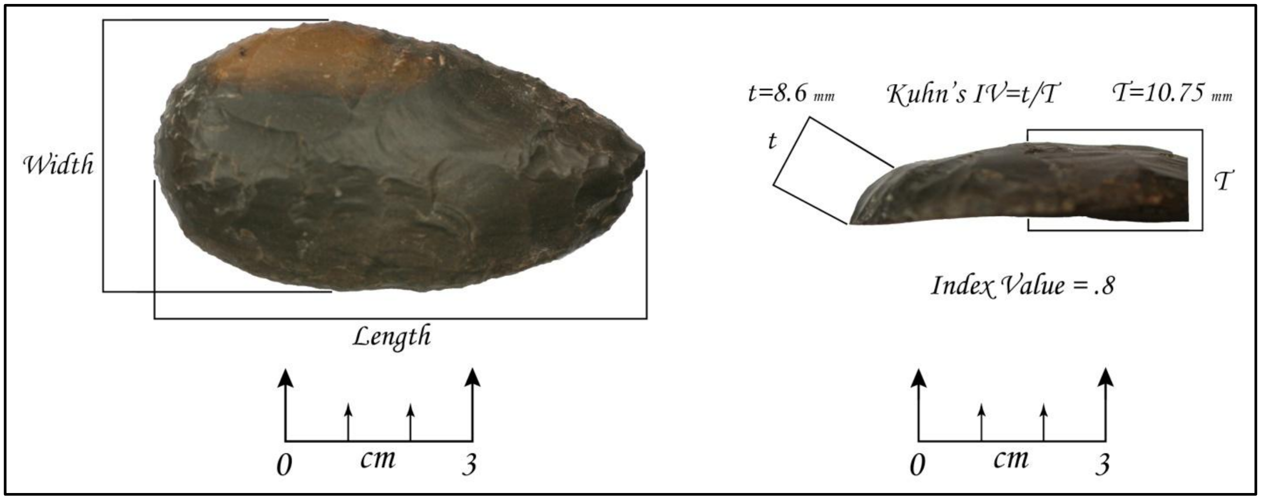

Figure 3.4 Kuhn (1990) Geometric Index of Reduction measurements.

Bifaces

Bifaces have numerous classifications and labels depending on the shape and stage of production. A biface is simply an objective piece that, through the removal of flakes or detached pieces, has been extensively modified to form a tool with two faces or sides that meet along a shared edge. The key to classifying bifaces is the fact that flake scars extend to at least the center of the tool from each edge. Therefore any indications of dorsal and ventral sides have been erased by the presence of flake scars. The term biface describes the shape of the tool type and does not necessarily connote function, as bifaces can be used for a wide range of activities. Bifaces that are of adequate size can be used as a core in which flakes are detached and can become tools. Bifaces can also be used for cutting, chopping or hafted to an implement to create a projectile point for arrows or spears. Bifaces may be used for a specific purpose or for a wide range of activities. However, a good way to begin the classification of bifaces is to separate between nonhafted and hafted bifaces. Differentiating between hafted and nonhafted bifaces is simply based on the morphological characteristics that are present on those that are hafted and those that are handheld or nonhafted (Andrefsky 2005).

Nonhafted Bifaces

Nonhafted bifaces lack an area on the tool that demonstrates the presence of being hafted to an implement at one time. This lack of a hafting area does not imply a different functional use between another biface, as it could simply represent an earlier stage of reduction that never made it to a hafting stage. Typically, nonhafted bifaces are similar in shape, and therefore size classification is used to describe nonhafted bifaces (Andrefsky 2005). Measurements of weight, length, width, and thickness were taken. The length of nonhafted biface was usually the longest maximum distance of the tool, but in less obvious situations, the length was taken as the distance perpendicular to the flake scar patterns. From there the width was easily taken perpendicular to the length at the maximum difference. Thickness was also recorded as a maximum distance and was thus not always recorded at the center of the tool. For this study, a biface broken so that any haft element that at one point could have been present is now missing was classified as a nonhafted biface, since they could not definitively be classified as hafted bifaces. The possibility remains that they were however, at one a hafted tool. As many of these unhafted bifaces were broken, analysis was not conducted on this material other than raw material frequency counts by assemblage (Table 3.5).

Table 3.5 Chert and Obsidian Non-hafted Biface Frequencies.

Sample	Chert	Obsidian	Total
1	3	0	3
2	0	0	0
3	0	0	0
4	3	4	7
5	1	2	3
6	1	2	3
7	4	7	11
8	15	3	18
9	0	0	0
10&11	13	13	26
12	0	3	3
13	0	2	2
Total	40	36	76

Hafted Bifaces

Hafted bifaces are those that show signs of being hafted to an object or implement. Hafted bifaces are often viewed as projectile points, although this is not always the case. Hafted bifaces cover a vast range of tools and functions. These include drills, axe heads, projectile points, and any other bifacial tools hafted to a shaft element of any sort (Odell 2004). There are a couple key indicators that a bifacial tool has been hafted. The first is the presence of grinding along the basal section of the tool. This was done to prevent the sharp edges of the tool from cutting the bonding material between the biface and haft element. Another way to identify differences is in the flake patterning. The hafted section of a biface is encompassed by the bonding material and is thus resistant to retouch. The blade of the tool is subject to retouch when the edge becomes dull. This leads to the blade becoming smaller due to curation while the hafted section remains the same. A product of this reduction sequence is the appearance of different flake scars or patterns between the blade and haft sections (Andrefsky 2005).

A total of 30 hafted bifaces were identified from nine assemblages. Table (3.6) provides a breakdown of the frequency of chert and obsidian hafted bifaces in each assemblage.

Table 3.6 Chert and Obsidian Hafted Biface Frequencies.

Assemblage	Chert	Obsidian	Total
1	0	2	2
2	3	1	4
3	0	0	0
4	0	3	3
5	0	0	0
6	0	2	2
7	2	6	8
8	1	4	5
9	0	0	0
10&11	2	2	4
12	0	1	1
13	1	0	1
Total	9	21	30

Measurements of the bifaces are taken from Andrefsky (2005:186), based on three common forms of hafted bifaces. Table (3.7) provides an explanation of the location of each measurement. A visual demonstration of the measurements can be seen in Figure (3.5) from samples in this study. The measurements of each hafted biface can be seen in Appendix (I). One

Table 3.7 Description of Hafted Biface Measurements Adapted from Andrefsky (2005).

Attribute Name	From	To
BLL-Blade Length	Tip of biface	Tip of Shoulder
NH-Neck Height	Neck	Base
HL-Haft Length	Top of Haft Element	Base
BLW-Blade Width	Shoulder	Shoulder
NW-Neck Width	Neck Edge	Neck Edge
BW-Base Width	Base Edge	Base Edge
SC- Shoulder to Corner	Shoulder	Basal Corner

of the major focuses of this particular study is the classification and chronology of hafted bifaces; an in-depth analysis of these tools will be explored in the following chapter.

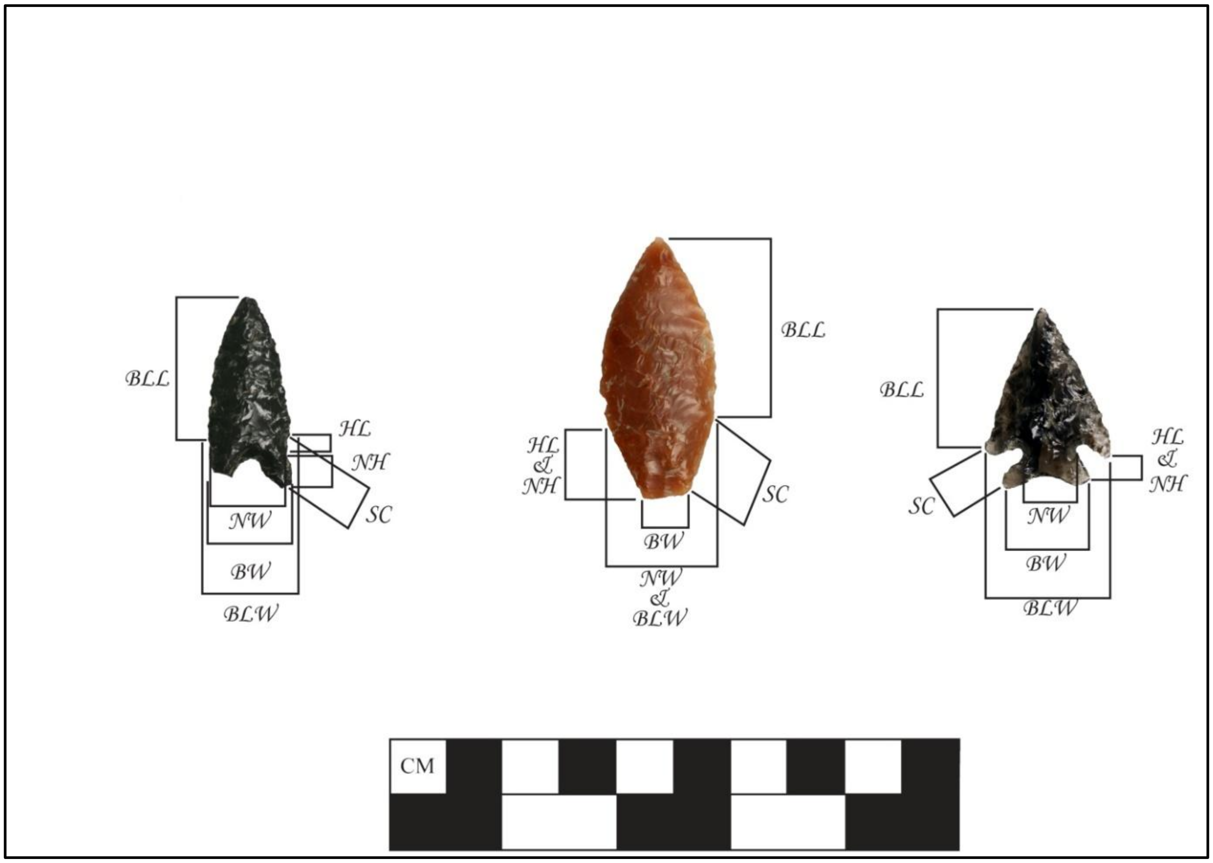

Figure 3.5 Hafted biface measurements adapted from Andrefsky (2005).

Chapter 4

Projectile Point Study

Projectile points, or hafted bifaces, are important time markers for the chronology of a region and the prehistoric inhabitants. Clewlow (1967) outlines an important rationale for this argument. In general, as archaeological excavations unearthed buried cultural strata, it became apparent that certain projectile point typologies were associated with different cultural time periods. This form of relative dating provided archaeologists with the means to start building the chronologies of different regions which could then in turn be used to compare sites. With the introduction of absolute dating techniques such as radiocarbon dating these typologies could be directly calibrated. The establishment of typologies and site chronologies is important, not just for site comparison, but also for questions about mobility and human behavior (Christian 1997).

Although the typologies and chronologies of projectile points have been studied across the Great Basin in substantial detail, great expanses of time are often associated with each type within the typology. This is especially true in the Northern Great Basin where some projectile point types are believed to have been used for thousands of years (Andrefsky Jr., William, personal communication 2009). It is therefore essential that a detailed and well dated assemblage of projectile points be used to establish a chronology for the Northern Great Basin. In fact, Flenniken and Wilke (1989:156) point out that “no ancient site with a succession of dart point forms spanning the time of the Western Archaic has ever been found and studied in the western Great Basin.” This study provides the perfect opportunity to examine finely dated cultural material to establish a projectile point chronology of the Birch Creek Site and the Northern Great Basin. Bettinger and Eerkens (1999:231) characterize a “good” typology as one that is able to “identify consistently recurring combinations of attributes.” It is therefore the goal of this study to establish different typologies that can be used for the purpose of comparison through the analysis and reference of a number of works regarding Great Basin projectile points.

Nine of the assemblages from this analysis, spanning 4,000 years of prehistory, contained diagnostic points previously described and documented from the Great Basin. All thirty projectile points from the 12 assemblages were selected for analysis in this study. Referencing previous studies, twenty-eight of the thirty identified projectile points were assigned to the following nine types: Elko Eared, Elko Corner Notched, Humboldt, Turkey Tail, Desert Side Notch, Northern Side Notch, Contracting Stemmed, Split Stemmed Pinto, and Gatecliff Contracting Stemmed. Table (4.1) provides a breakdown of the assemblages and the frequencies of each projectile point type. The various types used in classification for this study are described and documented below. Identifications were also made through visual comparisons of specimens identified by Clewlow (1967), Hanes (1977), Justice (2002), O’Connell (1967), and Plew (2000).

Table 4.1 Projectile Point Type Frequencies.

Assemblage	Date	Elko Eared	Elko Corner	Humboldt Basal Notch	Turkey Tail	Desert Side Notch	Northern Side Notch	Contracting Stemmed	Split Stemmed Pinto	Gatecliff Contracting Stem
4	2140±50	2								1
5	2190±40									
10&11	2430±60	2		1		1				
7	2620±40	2	2	2				1		1
8	2760±110		2	1				2		
6	2970±40									
13	3005±35				1					
2	3980±50			2			1		1	
3	3980±50									
9	4480±70									
1	6640±40						1	1		
12	845±40						1			

Projectile Point Types

Elko Eared

The Elko series of projectile points are described here as having a general trend in shape of being triangular. The differentiation of Elko Eared from other Elko points comes from basal attributes and shape. The most noticeable attribute is the drooped or diagonally extending tangs from the base, which give the appearance of ears. See Figure (4.1) of all Elko Eared Points. The base is concave in nature, adding to the effect of the ears. The notches forming the ears are deep and narrow, extending from the corner of the projectile point. The shoulders are of often equal in width or slightly larger than the ears (Hanes 1977, Justice 2002, O'Connell 1967).

Elko Corner Notched

As with Elko Eared, Elko Corner Notched has an overall triangular shape (Figure 4.1). The notches again extend from the corner but are not as deep as they are on Elko Eared. Basal edges are variable in shape ranging from convex to flat and even concave. Elko Corner Notched points with a concave basal edge are not as prominent or deep as they are on Elko Eared. The shoulders of Elko Corner notched are always wider than the basal tangs (Hanes 1977, Justice 2002, O'Connell 1967).

Humboldt Basal Notched

Humboldt Basal Notched points have a Lanceolate blade shape with convex edges (Figure 4.2). The basal edges are indented and form a concave surface which creates tangs extending from the base when viewed from above. Basal notching varies in width and length among the specimens but it is the shape and nature of the attributes of the base that provide the means for identifying this typology (Hanes 1977, Justice 2002).

Desert Side Notched

Desert Side Notched points are small and triangular in nature (Figure 4.1). Overall shape of the Desert Side Notched point ranges from isosceles to equilateral. The hafted basal sections of these points are the widest part of the tool. Notches extend into the base from the side and have outward and down extending tangs. The basal edge is straight to slightly concave (Hanes 1977, Justice 2002).

Northern Side Notched

Justice (2002:168) describes this type as being “the most widely recognized side notched type of the Archaic period in the west…is a somewhat generalized type and has a wide range of variation.” Overall shape is Lanceolate to triangular in nature (Figure 4.2). Blade edges are straight to slightly convex. Basal edges are convex with notches extending diagonally out from the side with square end tangs that are slightly rounded. Basal tangs and shoulders are about equal in width (Hanes 1977, Justice 2002).

Contracting Stemmed

Contracting stemmed points are convex in shape and are highly variable in overall size and degree of convexity (Figure 4.3). Basal edges are not concave and show no signs of basal notching differentiating them from Humboldt Basal Notched. They also differ from Humboldt

Basal Notched in that they are slightly wider at the midsection. The hafted section contracts when moving towards the basal edge which is flat.

Split Stemmed Pinto

The Split Stemmed Pinto type is triangular in overall shape (Figure 4.1). Edges are straight to slightly convex. Width of the shoulders range from nearly equal to wider than the basal edge and tangs. The basal edge is concave and forms an upside down U shape with extending tangs or ears that are parallel to slightly inwardly sloping to the edge (Justice 2002).

Gatecliff Contracting Stemmed

This type of point is very similar in shape and design to the pinto type. The basal edge is bifurcated (Figure 4.2) into two ears which extend below the shoulders. The Basal edge is concave and can range from an upside down V to U. The shoulders are wider than the tangs or “ears” (Justice 2002).

Turkey Tail

Turkey Tail types (Figure 4.3) are often associated with the Eastern Woodland complex of the Midwest and Upper Great Lake regions. This does not, however, limit the geographic extent of Turkey Tail types. They are also found in the Western Idaho Archaic Burial Complex (WIABC) dating from around 4,500 to 4,000 B.P. and possibly as young as 3,500 B.P. The identification of the single Turkey Tail from the Birch Creek Site as well as those of the WIABC in no way implies cultural connection to the Eastern Woodland complex. The designation in this

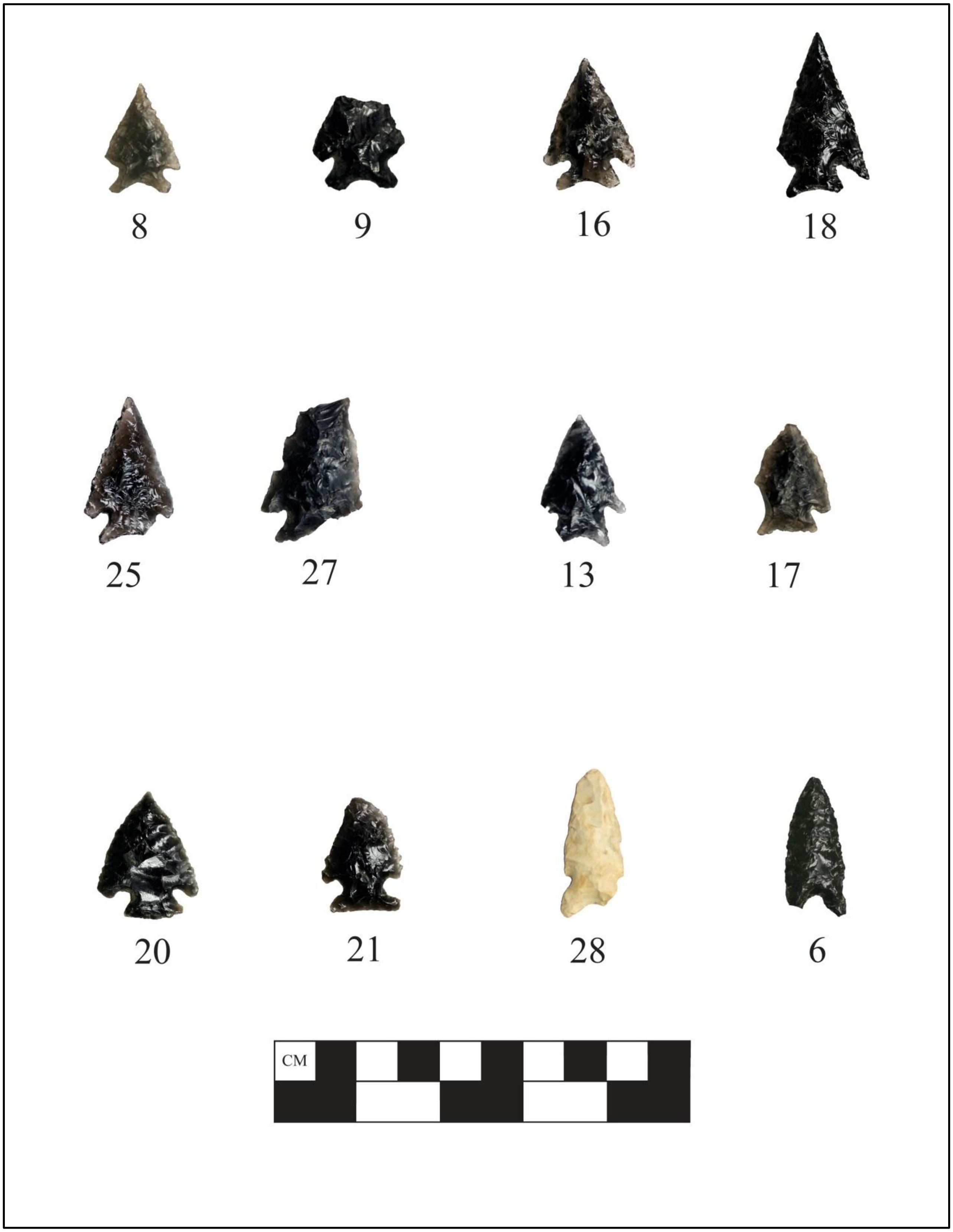

Figure 4.1 Projectile Points. Elko Eared: 8, 9, 16, 18, 25, 27; Elko Corner Notched: 13, 17, 20, 21; Desert Side Notch: 28; Split Stemmed Pinto: 6.

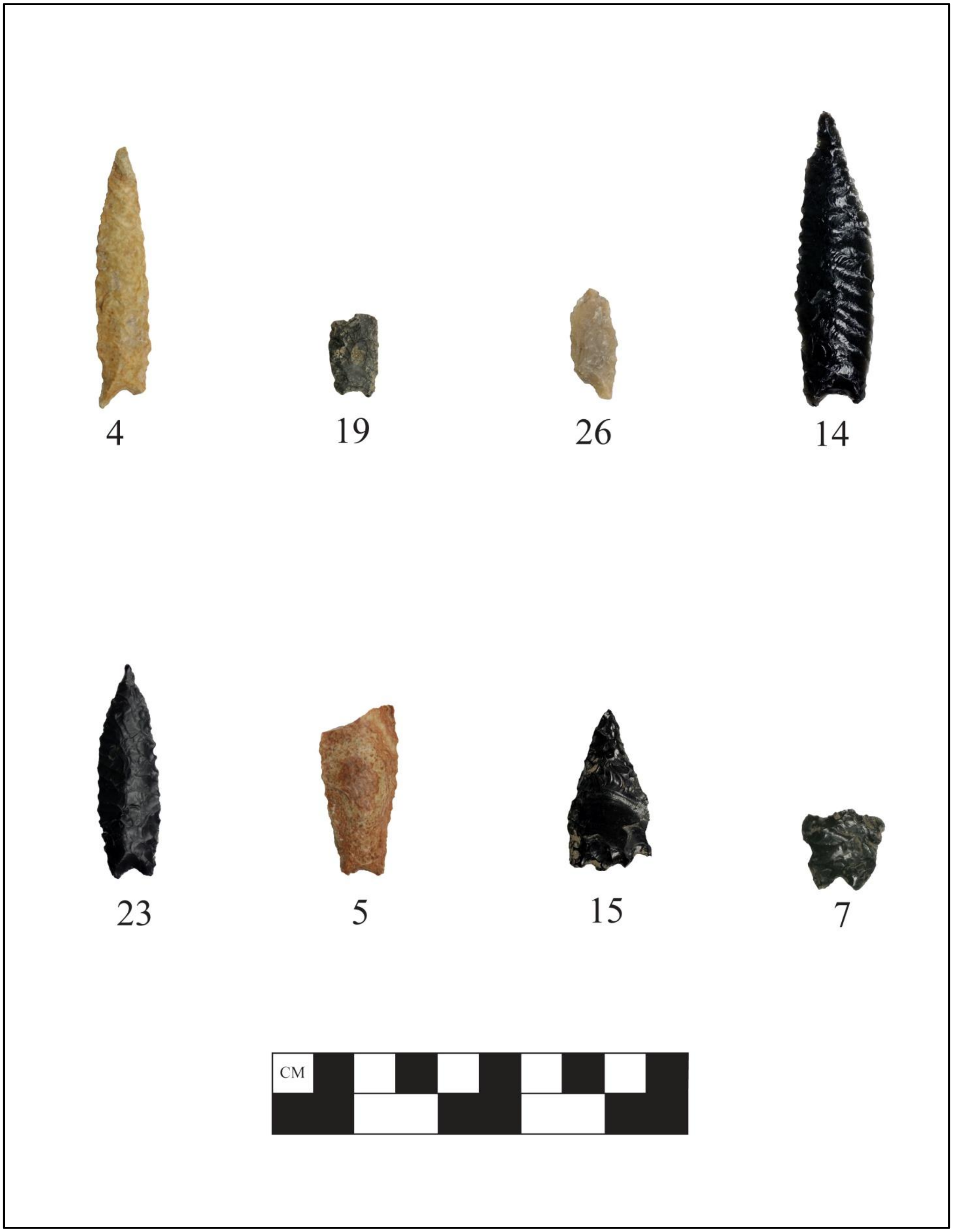

Figure 4.2 Projectile Points. Humboldt Basal Notch: 4, 19, 26, 14, 23, 5; Gatecliff Contracting Stemmed: 15, 7.

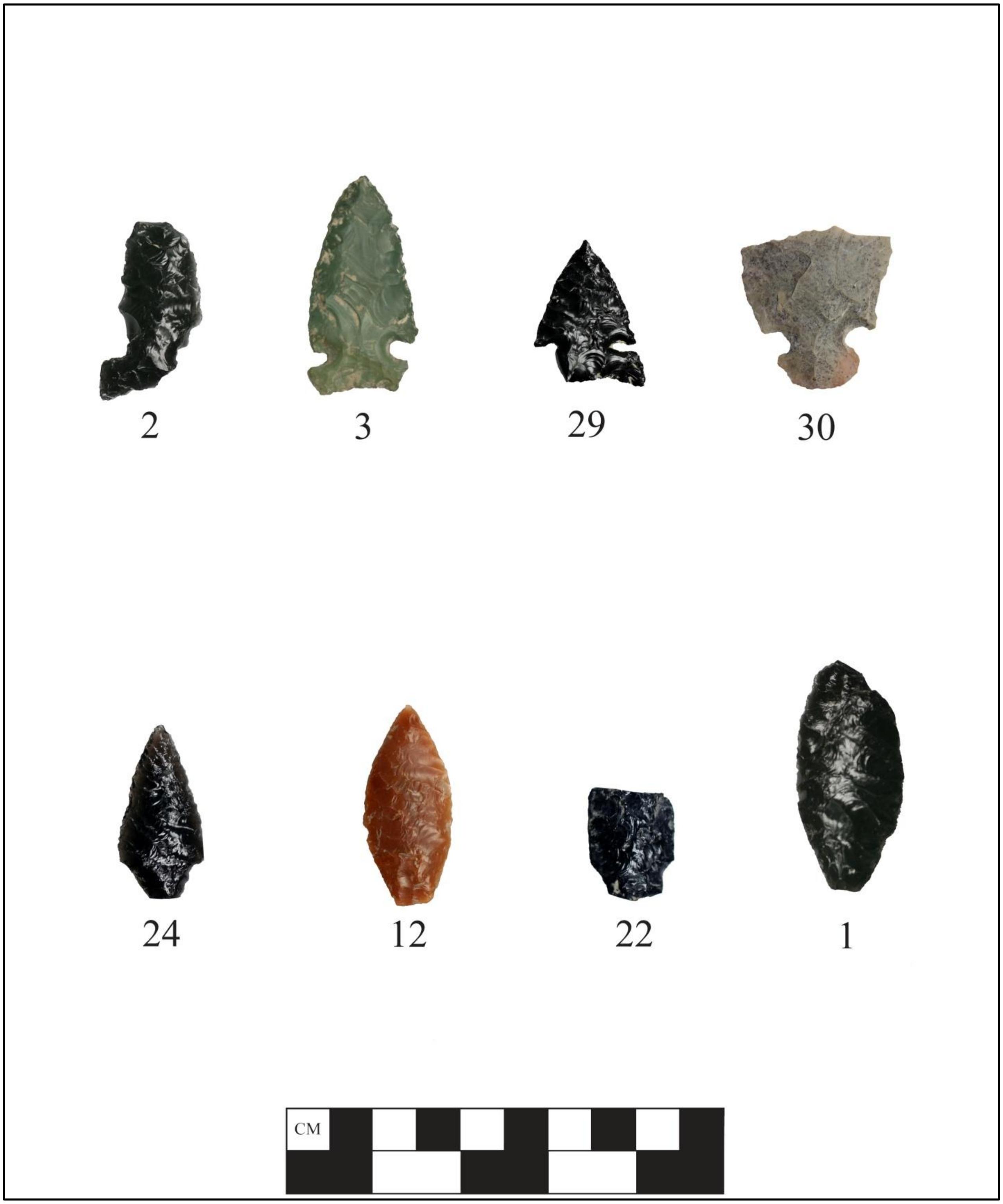

Figure 4.3 Projectile Points. Northern Side Notch: 2, 3, 29; Turkey Tail: 30; Contracting Stemmed: 24, 12, 22, 1.

case is simply based on morphological similarities (Pavesic 1985). Identification is based on the unique attributes of the basal hafted area. The overall shape is oval in nature and blade edges are convex. The hafted section appears low on the tool, the basal edge is extremely rounded, and in some specimens it can come almost to a point.

Chronology

The objective of this study, based on the material from dated assemblages is meant to explore the temporal use of various projectile point types through time in the Northern Great Basin. Table (4.2) provides data for the presence or absence of the eight typologies.

Table 4.2 Chronological Presence/Absence of Projectile Point Types at the Birch Creek Site.

Assemblage	Date	Elko Eared	Elko Corner	Humboldt Basal Notch	Turkey Tail	Desert Side Notch	Northern Side Notch	Contracting Stemmed	Split Stemmed Pinto	Gatecliff Contracting Stemmed
4	2140±50	x								x
5	2190±40									
10&11	2430±60	x		x		x				
7	2620±40	x	x	x				x		x
8	2760±110		x	x				x		
6	2970±40									
13	3005±35				X					
2	3980±50			x			x		x	
3	3980±50									
9	4480±70									
1	6640±40						x	x		
12	845±40						x			

Chronologies are established from the earliest and latest date of presence at the site. The presence of projectile point types presents a range of use at the site even if some assemblages lack any specimens. Thus projectile point type chronologies are not assumed to disappear from use just because there are no specimens from one assemblage of time. Two of the projectile points or hafted bifaces could not be classified to a typology and were classified as unknown. They were not used in this study for a projectile point chronology.

The Elko series first appears around 2,760±110 B.P. in assemblages at the Birch Creek Site with Elko Corner Notched points. These remain present until 2,620±40 B.P. which also marks the first appearance of Elko Eared points. Elko Eared points then remain until the last radiocarbon dated assemblage at 2,140±50. This does not limit the use of Elko Eared points at the site to 2,140±50 B.P. Elko Eared could have been used even longer into the Late Archaic; however, it is only safe to say the chronology lasted this long without a younger assemblage. The absence of Elko Corner Notched in the three later assemblages indicates that the use of this type was limited to a small window of time at the Birch Creek Site.

The Humboldt Basal Notched type appears in the assemblages at the Birch Creek Site at 3,980±50 B.P. This type has a much longer presence at the site of nearly 1,500 years. The last assemblage in which Humboldt Basal Notched are present is 2,430±60 B.P.

There is a single Desert Side Notched point that dates to 2,430±60 B.P. This indicates a very brief period of use at the Birch Creek. As this was the only diagnostic Desert Side Notched point from all of the assemblages both younger and older in age, the ability to make conclusive statements about the chronology of this point type and its presence over time at the site is limited.

Northern Side Notched points are present at the site from the very earliest radiocarbon dated assemblage. There is a gap of about 2,500 years between the oldest assemblage dated 6,640±40 B.P. and the next appearance, which also happens to be the terminal date of presence at the site of 3,980±50 B.P. The two dated assemblages (3 and 9) between the minimum and maximum range of use at the site contain no points of any type. One of the assemblages, 9, contains hardly any lithic or cultural material. Therefore, the fact that there is such a large gap between the dated presences of Northern Side Notch points should not cause concern. There is one other assemblage that contains a Northern Side Notched point, which is Assemblage 12. As noted before, this assemblage contains some inconsistencies with its date and the material sampled for dating. Therefore it is impossible to exactly place this assemblage's location within this chronological study. However, based on information that will be presented in the following chapter, the assemblage date likely falls within a date range of 3,000 to 4,000 years B.P. This extends the presence of Northern Side Notched at the site by up to 1,000 years, although, this is assertion is not absolute. To make a conservative estimate, the chronology of Northern Side Notch projectile point at the Birch Creek Site lasts from 6,640±40 B.P. to 3,980±50 B.P.

The Contracting Stemmed points have the longest chronological presence at the Birch Creek Site. Contracting Stemmed points are found in the earliest assemblage at 6,640±40 B.P. Again the lack of points from Assemblages 3 and 9 should not be viewed as an inconsistency within the chronology. Contracting Stemmed points appear again at 2,760±110 B.P. and end at 2,620±40 B.P. at the Birch Creek Site.

There is a single instance of Split Stemmed Pinto at the Birch Creek Site at a date of 3,980±50. As discussed with the Desert Side Notch, the fact it is only found from one assemblage limits the amount that can be said for the chronology of this type.

The Gatecliff Contracting Stemmed type presents a very similar chronology to that of the Elko Eared type. Gatecliff Contracting Stemmed first appears at the site in the assemblage dating to 2,620±40 B.P., and once again ends at the youngest assemblage dating to 2,140±50 B.P. This should not be viewed as the latest use at the site, as there are no younger dated assemblages.

The single Turkey Tail point presents a rather interesting scenario. Turkey Tail points are often found in caches and burials of the Western Idaho Archaic Burial Complex, which dates to around 4,000 to perhaps 3,500 years B.P. (Pavesic 1985). However, the Turkey Tail point found at the Birch Creek Site dates to 3,005±35 B.P. It is also the only diagnostic hafted biface from the assemblage. This point type is located farther west than the WIABC and is younger in age than other dated contexts of this point typology. This is of significant importance due to the location of the Birch Creek Site to the WIABC and the time to which it was dated.

This study indicates that there are definite patterns regarding the appearance and disappearance of projectile point types at the Birch Creek Site. A continuation of various projectile point types through time is also apparent at the site. These patterns will be discussed further in the next chapter in regards to the question of continuity at the Birch Creek Site.

Chapter 5

Change or Continuity in the Middle Archaic

Exploration of the data was first employed to look for the presence of any relationships or patterns in the data from which to base further analysis. As the dataset is composed of the frequencies of certain variables in each assemblage, a useful approach is correspondence analysis (CA). Correspondence is a multivariate statistical analysis best suited for data that is composed of numerical counts or the presence or absence of a trait in a nominal scale (Shennan 2006). Typically, CA is "often used to display or confirm a known or suspected pattern as opposed to discovering unknown grouping within the data" (Baxter 1994:103). While CA is not a technically a tool for exploratory data analysis (EDA) it is used in this study to look for temporal variation much like seriation. Seriation is often used in archaeology to chronologically order variables based on their intrinsic values. These variables are usually chronologically sensitive such as the radiocarbon dated assemblages of this study. Therefore, the patterning of variables becomes very important (Shennan 2006).

Rather than converting the data into similarity distance metrics as is done for principle components analysis, correspondence analysis works directly with the data frequency matrix. The attraction that CA presents for archaeological data is the simultaneous representation of "both the rows and columns of the data matrix as points on the same plot" (Baxter 1994:100). In this case rows represent dated assemblages while the columns represent various frequency counts of variables. Like principle components analysis (PCA), correspondence analysis also reduces the dimensionality of numerical data into more easily interpreted results (Shennan 2006). Usually, the results are viewed in the first two dimensions, as this is easily interpreted visually by a standard biplot. Correspondence analysis includes a description of the amount of variability (inertia) that each dimension explains in the analysis. This allows for the interpretation of data that is grouping or patterning itself around certain variables or assemblages. This patterning "is an archaeological rather than statistical problem" (Baxter 1994:105) and it is up to the archaeologist to interpret based on prior knowledge of the data and an understanding of the context from which it came.

While the focus of this study is on the chipped stone assemblage, additional non-lithic counts were included to look at broader trends across a number of variables. This was done to assess if any site wide patterns were evident. The chipped stone variables are later explored based on these broader trends.

As some variables contained low counts, the data was condensed to increase frequency. Table (5.1) presents the frequencies of each by assemblage. All lithic tools were combined for this part of the study to form a lithic tools variable. In all, five variables were included for each assemblage. These include lithic tools, flakes, and the non-lithic remains of mammal bone, non-

Table 5.1 Artifact Frequencies.

Assemblage	Date	Mammal Bone	Non-Mammal Bone	Shell	Lithic Tools	Flakes
4	2140±50	22	0	16	20	1089
5	2190±40	7	0	10	6	335
10&11	2430±60	40	45	52	90	2966
7	2620±40	30	6	33	54	2531
8	2760±110	706	349	602	81	3791
6	2970±40	493	116	198	21	1061
13	3005±35	41	43	0	4	318
2	3980±50	353	69	129	13	520
3	3980±50	69	83	1	5	463
9	4480±70	0	8	4	0	4
1	6640±40	134	242	8	13	1155
12	0845±40	278	151	5	15	390
Total		2173	1112	1058	322	14623

mammal bone, and shell. As the analysis of material for this study focused on lithics, the counts of bone and shell came directly from the Birch Creek Archaeological Project database without any analysis.

As a further precaution, the data from Table (5.1) were standardized and can be seen in Table (5.2). While this is not necessary for correspondence analysis, it was done as a control to make sure certain variables were not being weighted based on high frequencies. Variables were standardized and presented as a percent of the variable total. This standardization by variable, allowed for each variable no matter the count, to be comparable to all others. The CA results from both the standardized and frequency matrices were very similar, indicating that high frequencies were not weighing on the data. Therefore, the frequency counts were used to visually represent the data seen in Figure (5.1)

Table 5.2 Standardized Artifact Frequencies.

Assemblage	Date	Mammal Bone	Non-Mammal Bone	Shell	Lithic Tools	Flakes
4	2140±50	0.010	0.000	0.015	0.062	0.074
5	2190±40	0.003	0.000	0.009	0.017	0.023
10&11	2430±60	0.018	0.041	0.049	0.28	0.203
7	2620±40	0.014	0.005	0.031	0.168	0.173
8	2760±110	0.325	0.314	0.569	0.252	0.259
6	2970±40	0.227	0.104	0.187	0.065	0.073
13	3005±35	0.019	0.039	0.000	0.012	0.022
2	3980±50	0.162	0.062	0.122	0.04	0.036
3	3980±50	0.032	0.075	0.001	0.016	0.032
9	4480±70	0.000	0.007	0.004	0.000	0.000
1	6640±40	0.062	0.218	0.008	0.04	0.079
12	0845±40	0.128	0.136	0.005	0.047	0.027

Figure (5.1) presents the findings of the correspondence analysis. 90.6% of the variability is explained by the first two dimensions. The two dimensions are distinguishing between lithic and faunal assemblages as well as between assemblages containing mammal and non-mammal counts. As can be seen in the groupings from Figure (5.1) the lithic denoted assemblages plot positively on Dimension 1 while the faunal assemblages plot negatively. Dimension 2 explains the difference between mammal and non-mammal animal bone groups. Dimension 1 is therefore clarifying the difference between lithic and faunal remains, while dimension 2 is explaining the differentiation between mammal and shell and non-mammal bones.

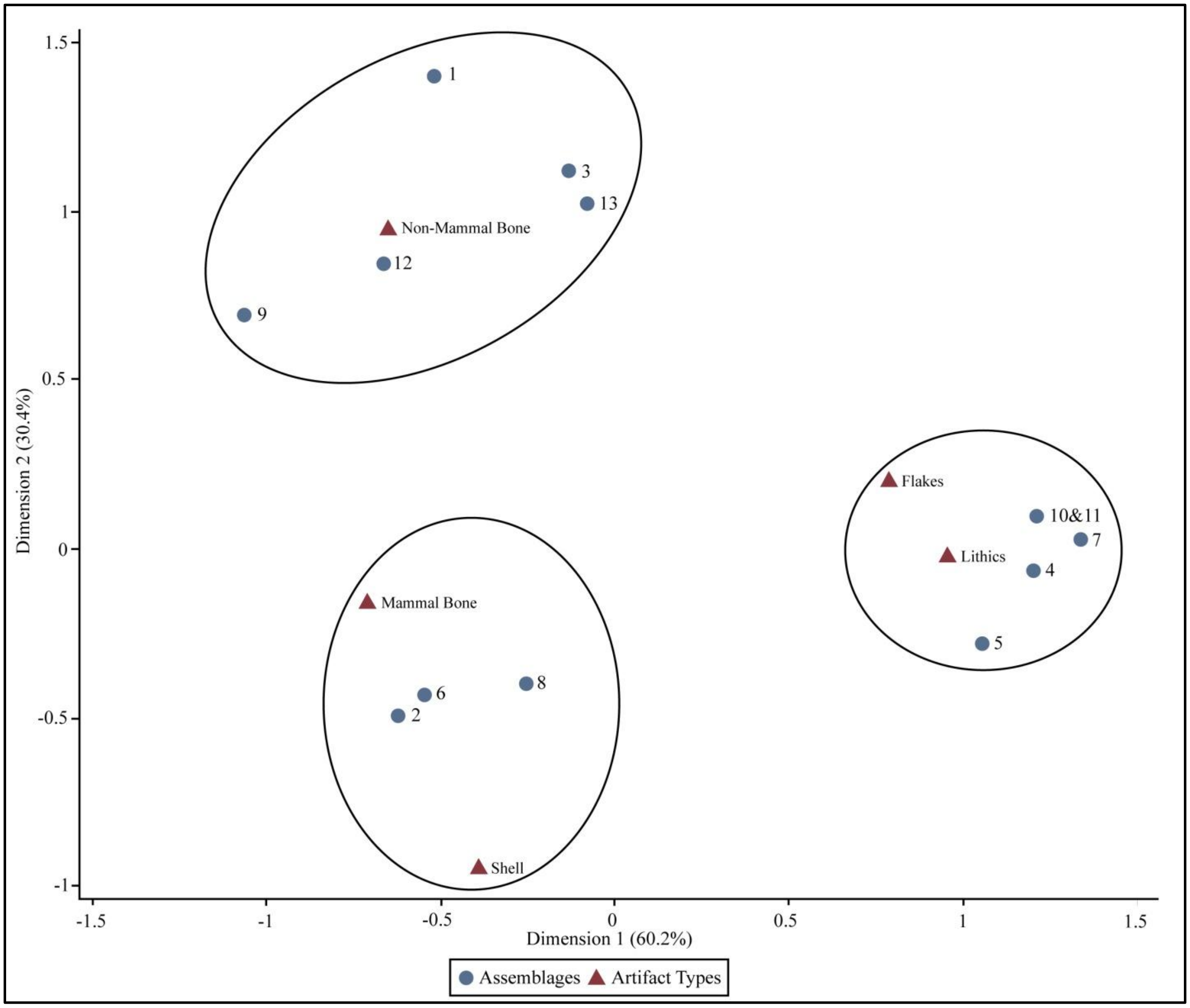

Figure 5.1 Correspondence analysis biplot results.

It is imperative to note that specific variables are associated with certain assemblages shown encircled. Looking at Table (5.3), the three distinct groupings of assemblages with variables were grouped temporally. The first grouped around Assemblages 4, 5, 11, and 7 encircled on the right, while the second grouped around Assemblages 8, 6, and 2 encircled at the lower center. Finally, encircled to the upper center, the last group was composed of Assemblages 13, 3, 9, 1, and 12. Of additional interest is the grouping of Assemblage 12 with Assemblages 13, 3, 9, and 1. As previously discussed, the date of 845±40 is believed to be wrong. Yet, based on depth, it is grouping with assemblages expected to be around its true date.

Table 5.3 Temporal Grouping of Assemblages.

Assemblage #	Date	Adaptive Strategy
4	2140±50	Latest
5	2190±40	Latest
10&11	2430±60	Latest
7	2620±40	Latest
8	2760±110	Middle
6	2970±40	Middle
13	3005±35	Earliest
2	3980±50	Middle
3	3980±50	Earliest
9	4480±70	Earliest
1	6640±40	Earliest
12	845±40	Earliest

These three groupings are viewed as distinct chronologically associated assemblages. Besides the visual association of the data, the argument for three separate groupings is supported by the fact that the data did not form a horseshoe curve or “arch effect”. The horseshoe curve is often a result of chronologically continuous change. Battleship curves are invisible when plotted on a single dimension. However, when presented on two dimensions as in a CA biplot the result appears similar to that of a horseshoe (Smith and Neiman 2007). Smith and Neiman (2007:60) demonstrate in their data that regularly dated assemblages fit nearly perfectly along the horseshoe curve and that “there is no significant source of variation in type frequencies other than time." In reference to Figure (5.1) there are distinct groupings that appear rather than continuous change. As there is not a continuous distribution it is argued that this does not represent a continuous and gradual change as expected from a CA biplot of a battleship curve on perfectly seriatable data. This could possibly represent the gaps in irregularly dated chronologically associated assemblages. However, based on the definite separation and grouping of variables and assemblages, this punctuation between groupings is argued to represent distinct time periods and temporally distinct adaptive strategies at the Birch Creek Site.

Based on these results from CA, it is apparent that somewhat different activities were taking place at the site over time. The question that arises from the results of this analysis, then, is this: do these results represent different groups of people with varying adaptive strategies inhabiting the Birch Creek Site at different time periods of its use? To test this, each of the groupings of assemblage seen in Figure (5.1) and temporally in Table (5.3) is considered a different "adaptive strategy." In this study I focus not on the specifics of each adaptive strategy but rather the differences in the chipped stone assemblage between adaptive strategies. Each of the temporally grouping assemblages and material is termed for this analysis as an "adaptive strategy" utilizing the temporal terminology described earlier.

Analysis of Models

Based on the preliminary findings from the Correspondence Analysis, different "adaptive strategies" were developed around the associating material and assemblages. These adaptive strategies (Earliest, Middle, and Latest) that grouped temporally provide the starting point from which to address the question of occupation at the Birch Creek Site. Previous studies (Cole 2001, Cowan 2006, Wallace 2004) from the Birch Creek Site indicate that continuity occurred at the site through time. These however, used rough periods of time that spanned a vast expanse of prehistory. Based on the correspondence analysis the question of population continuity or the appearance of different populations of prehistoric people at the Birch Creek Site was raised. Three lines of evidence, raw material frequencies, obsidian sourcing, and projectile point chronology will be used to test the population continuity of the site through the Archaic. To do this, two models were established for testing. These will be discussed separately as the Population Continuity Model (PCM) and the Pioneer Population Model (PPM).

Population Continuity Model (PCM)

The Population Continuity Model is based on the idea that a related group of people inhabited the Birch Creek Site throughout the Middle Archaic. This model does not call for continuous occupation or even sedentism. Rather, the site was occupied by a group of culturally related people through time with the same adaptive strategy and resource knowledge. Seasonal rounds following the appearance of resources based on availability was a common practice in this region and the Great Basin (Steward 1938, Arkush 1995). Abandonment of the site for a number of years is likely. However, the knowledge by members of the group to return to the site with the same knowledge of the landscape and resources will produce a similar pattern in the archaeological record as the previous occupation. Based on these arguments, the PCM should look rather continuous and stable in terms of raw material usage, utilization of different obsidian sources, and continuous presence of projectile point typologies within the chronology.

Pioneer Population Model (PPM)

The Pioneer Population Models is based on the assumption that, if new groups of prehistoric people moved into the Birch Creek Site, they would bring with them different adaptive strategies and knowledge of resources. As the landscape would be unfamiliar, there would be a contrast between the material culture they left behind and that of the previous inhabitants. There would be a period of time in the archaeological record that should appear distinctly different until the landscape was explored and became familiar. Distinct differences between adaptive strategies should be present beginning with each population shift. Based on these arguments the PPM should identify sharp differences in raw material frequency, utilization of different obsidian sources, and the introduction and disappearance of projectile point typologies in the chronology of the site at the start of the adaptive strategies.

As the earliest adaptive strategy encompasses the earliest dates from the site there is no way to properly identify when the original occupation took place. This is not to say the data from the earliest adaptive strategy is useless. Rather, the earliest adaptive strategy establishes a cultural pattern from which it is possible to evaluate the change of following adaptive strategies. It is the analysis of the start and end of the middle and latest adaptive strategies that should provide the clear evidence for the Pioneer Population Model or the Population Continuity Model. The end of the latest adaptive strategy in this study does not necessitate the abandonment or discontinued use of the Birch Creek Site by those associated with this adaptive strategy. Material younger than Assemblage 4 (2,140±50 B.P.) could still be associated with this adaptive strategy, but has yet to be dated or compiled. Therefore, in analyzing the PCM and PPM only the start of the latest adaptive strategy is appropriate in assessing the presented data.

It is very unlikely that the start of each adaptive strategy based on dated assemblages will coincide exactly with the moment of initial occupation by a new group. Therefore, ideal patterning is unlikely. However, it should be expected that if new groups moved into the area the important overall patterns and trends associated with the PPM will be evident in the data and differ significantly from the PCM at the Birch Creek Site. The following analysis will test both models to determine the validity of each proposed adaptive strategy. Conclusions drawn from this analysis will attempt to present evidence that supports either the hypothesis of population continuity or pioneering populations at the Birch Creek Site.

Obsidian and Chert Frequencies

The question of raw material availability and the effect it has on mobility, curation, and recycling of lithic tools and debitage is already well established. The distribution and types of raw material are a major factor affecting the lithic technology of groups. More effort must be put into the acquisition of raw material in an area where raw material availability is scare or where sources are simply unknown (Kelly 1988). This section analyzes the chipped stone from the assemblages in order to address the question of continuity at the Birch Creek Site.

Groups moving into a new area will be unfamiliar with the landscape and topography. This will limit the population’s ability to acquire resources until the landscape is explored and becomes well-known. Raw material is no exception to this limit on natural resources. When a group moves into a new area, raw material is brought with them. This is due to the fact that the next time a suitable source of raw material will be located is unknown (Andrefsky 1994). Bamforth (1986:40) asks the question “why would anyone transport tools from place to place if raw material could be attained everywhere?” If raw material is available locally and this is known by the population, why travel long distances for exotic material? Gramly (1980) presents evidence from Mount Jasper, a prehistoric site in New Hampshire, that indicates formalized tools made of high quality material were abandoned when new sources of local raw material were found close by. It makes sense, then, that a new group will use greater amounts of non-local material until the region is explored and local sources are discovered. In the case of the Birch Creek Site, obsidian is exotic and non-local, whereas cherts are found locally.

In order to compare the assemblages over time for any changes in raw material use, the data was standardized by assemblage (Table 5.4). This was accomplished by adding up the total amount of lithic material whether it be tools, flakes, or shatter for each assemblage, and then dividing the chert and obsidian counts by that total. This was done rather than standardization by material type as a comparison of the frequency of the two material types was wanted for each assemblage rather than across all time periods. This allows for the comparison of chert and obsidian frequencies of each assemblage against those of all the other assemblages. The aim is to identify if new groups acting as pioneer populations were using the Birch Creek Site or if the site was inhabited through time based on the use and frequencies of local and non-local lithic material.

Table 5.4 Standardized Relative Raw Material Frequencies

Assemblage	Date	Obsidian Flakes	Obsidian Shatter	Obsidian Tools
4	2140±50	0.287	0.105	0.412
5	2190±40	0.230	0.125	0.333
11	2430±60	0.187	0.092	0.289
7	2620±40	0.290	0.149	0.408
8	2760±110	0.093	0.061	0.132
6	2970±40	0.400	0.264	0.579
13	3005±35	0.116	0.058	0.500
2	3980±50	0.115	0.043	0.111
3	3980±50	0.058	0.069	0.000
9	4480±70	0.500	0.200	0.000
1	6640±40	0.095	0.059	0.222
12	0845±40	0.131	0.039	0.364

A greater frequency of obsidian material would be expected under the Pioneer Population Model (PPM) at the point in time when new groups moved into the Birch Creek. After the initial pioneering event the relative obsidian frequencies would be expected to drop off while that of chert should increase as local sources became known. Therefore a spike in the relative frequency of obsidian at the start of a new adaptive strategy would be expected that gradually declines as local cherts are utilized in greater frequency (Figure 5.2). According to the Population Continuity Model (PCM) the relative frequency of obsidian should not rise or peak as sources of local cherts would already be known. Thus a constant and higher frequency of chert would be expected throughout all adaptive strategies with this model.

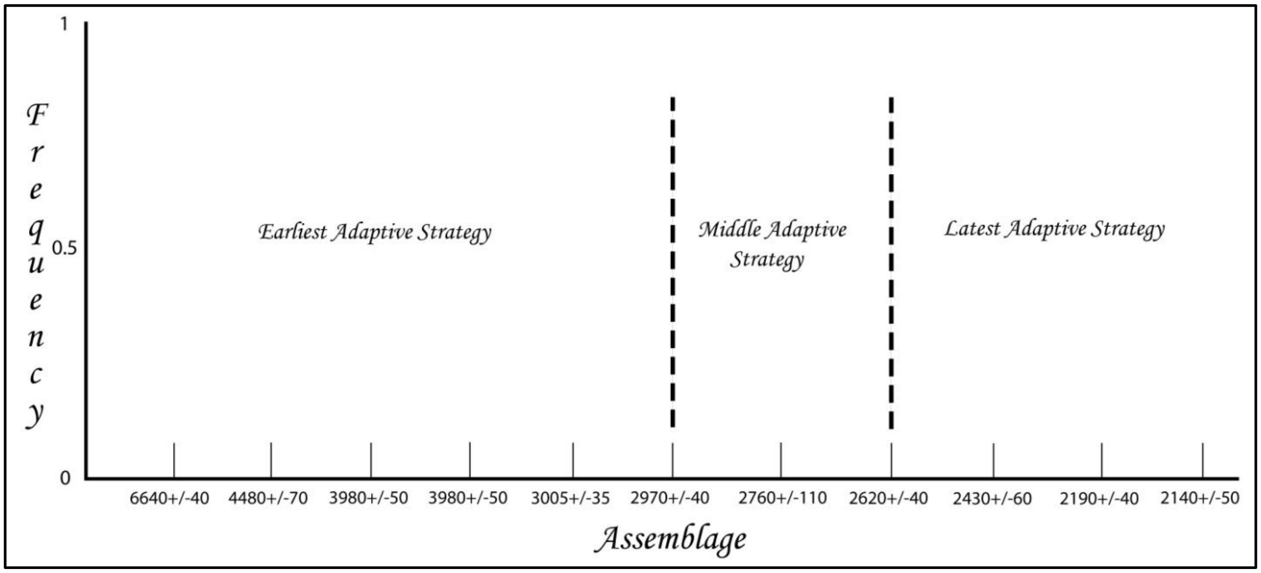

Figure 5.2 Expected relative frequency spikes of obsidian at the start of adaptive strategies under the PPM.

The earliest dated assemblage used in this study is that of Assemblage 1 dated to 6,640±40 B.P. Just because Assemblage 1 is the first assemblage, it should not be expected to be the start of the earliest adaptive strategy. This date could lie anywhere in the course of the earliest adaptive strategy whether it be the start, middle or end. Peaks in obsidian frequency should not be expected until the start of the middle and latest adaptive strategy under the PPM. Figure (5.3) presents the relative frequencies of obsidian from earliest assemblage to latest.

Overlain in the figure, as dotted lines, are the associated starts of the middle and latest adaptive strategy. These are the expected times with higher relative frequencies of exotic obsidian.

As is indicated by the findings in Figure (5.3), the peaks in obsidian frequency occur exactly where they would be expected given the PPM. As can be seen at 2,970±40 B.P. and 2,620±40 B.P., the start of each adaptive strategy shows a marked spike in the frequency of nonlocal obsidian use. This is then followed by a significant decrease in the frequency of obsidian. The interim times when the frequency of obsidian decreases there is a rise in the frequency of chert. As is proposed by the PPM model, these are the times when the location and utilization of local material, chert, is expected given a familiarization of the region around the site area.

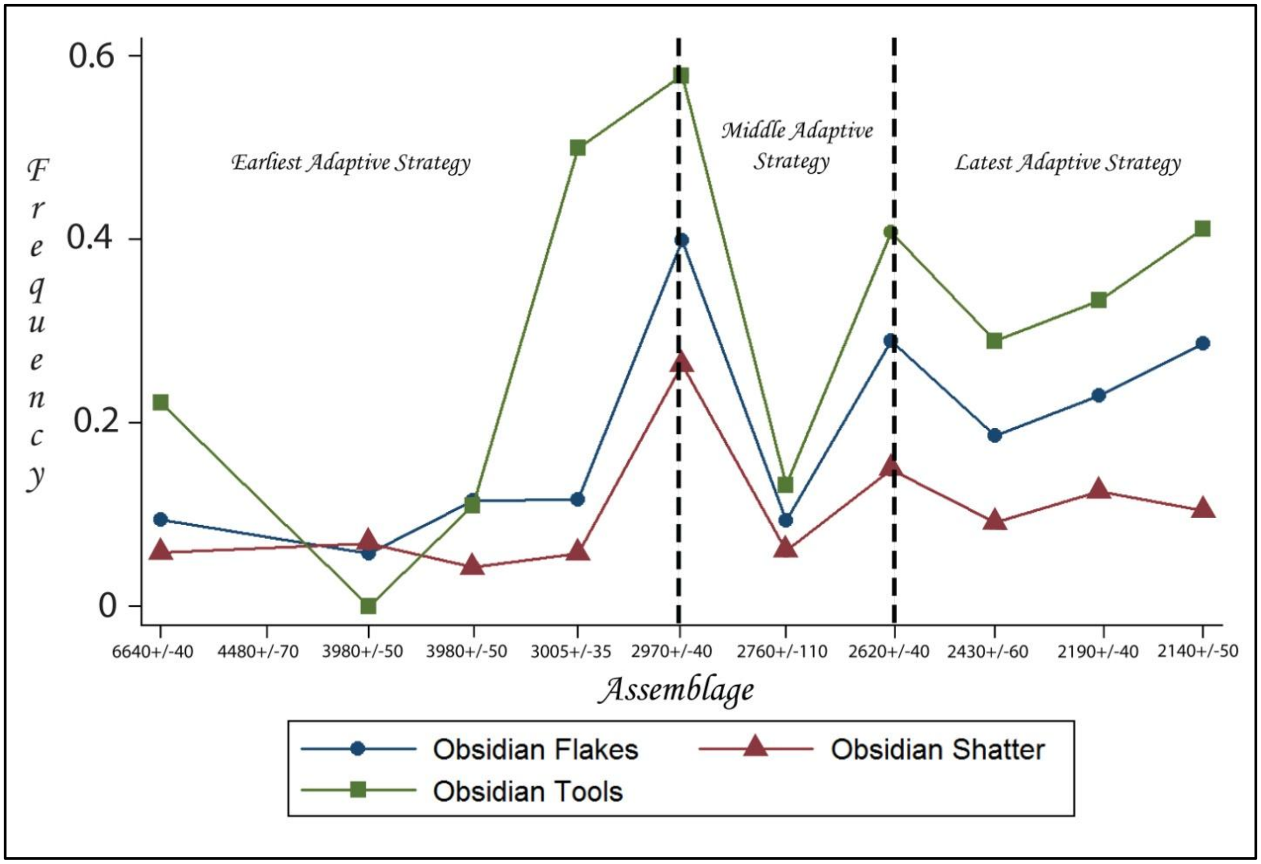

Figure 5.3 Relative frequencies of obsidian to chert.

Of interest is assemblage 12 dated to 845±40 B.P. highlighted in orange from Figure 5.4. Based on the frequencies of obsidian and its association to the earliest adaptive strategy this is the best placement for the assemblage without a reliable date. This is also the most reasonable placement of the assemblage given its context as noted in Chapter 2.

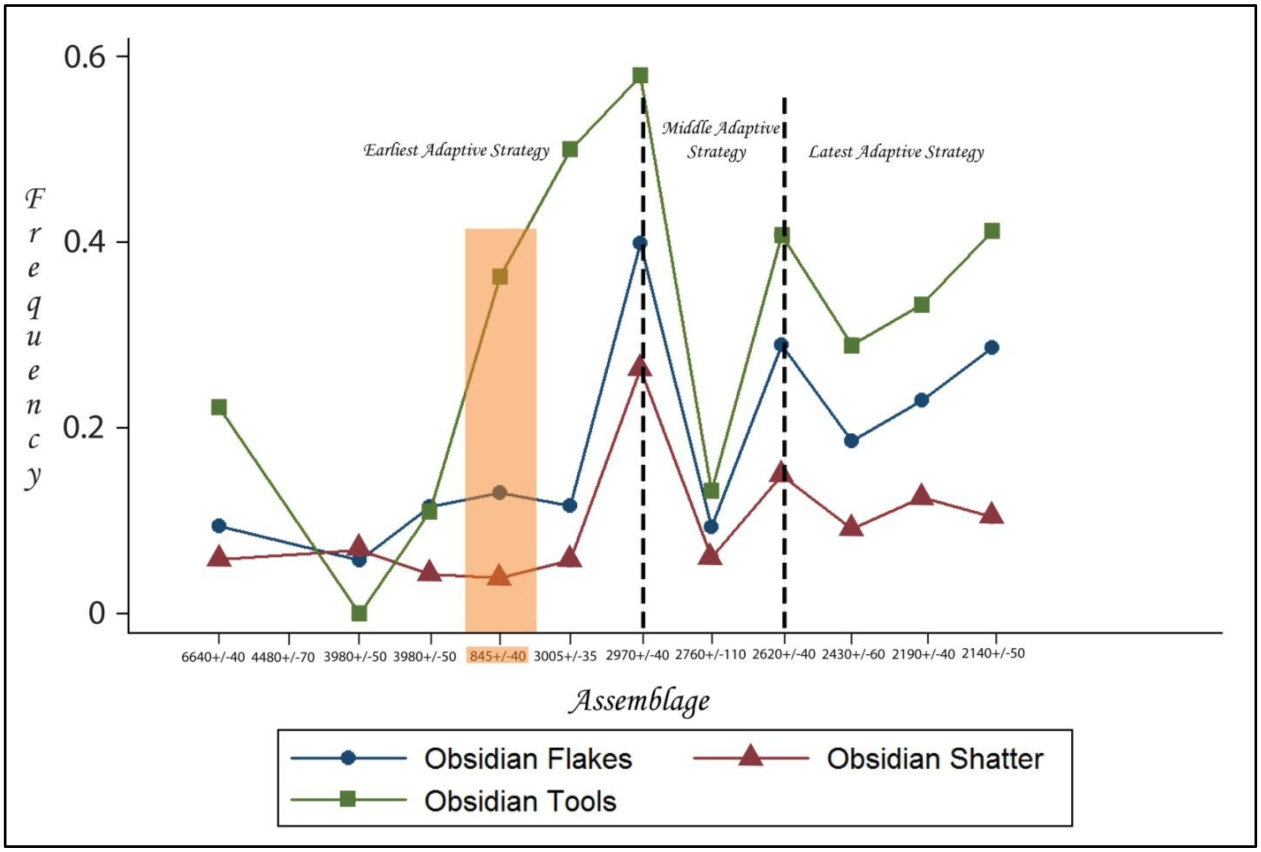

Figure 5.4 Association of Assemblage 12.

Under the PCM, it would be expected that there should be no spikes or peaks of obsidian usage. Instead there would remain a relatively high and constant concentration on chert composing the chipped stone assemblage at the Birch Creek Site. However, it is apparent that this is not the case. The presence of spikes in obsidian frequency indicates that there was a reliance on nonlocal obsidian. These occur right where they would be expected with the initiation of new adaptive strategies indicating the potential introduction of new groups to the Birch Creek Site. These groups would be less familiar with landscape and resource locations, requiring a heavier reliance on nonlocal sources of obsidian for stone tool production. This supports the PPM that new groups indeed inhabited the Birch Creek Site.

Obsidian Sourcing

The second line of evidence utilized to address the question of continuity is the analysis of obsidian sourced material through X-ray fluorescence (XRF). A total of 36 obsidian tools and debitage were sampled for sourcing by Northwest Research Obsidian Studies Laboratory. These specimens were sourced for use in earlier studies dealing with the mobility patterns and chipped stone analysis of material from the Birch Creek Site. Both Cole (2001) and Centola (2004) provide more detailed information regarding obsidian sourcing at the Birch Creek Site. As the specimens were purposefully chosen for sourcing, they do not represent a random sample of the population. Therefore, analyzing the frequency of sourced specimens by assemblage is statistically invalid. Instead, the geographic distribution of obsidian sources is used in a presence or absence format for a comparison of assemblages and adaptive strategies.

The 36 sourced specimens came from twelve sources, ten known and two unknown. The shortest distances from the Birch Creek Site to each source is listed in Table (5.5) and eliminating the two unknown sources, ranges from 32 to 122 kilometers. A majority of the sources are to the north and west of the Birch Creek Site (Figure 5.5). The source locations vary in distance and direction from the site, which is useful when identifying patterns in the archaeological record.

Each source is localized and varies in distance between all of the other sources that were utilized by inhabitants of the Birch Creek Site. This is important information, as “even if the quarry is located near other resources, the decision to visit it may have been deliberate, and the efforts expended to extract the tool-quality rock should not be ignored” (Wilson 2003:391).

Table 5.5 Obsidian Sources and Distance from 35ML181.

Obsidian Source	Distance (KM)	Direction
Dry Creek Canyon (GGOV)	32	NW
Skull Springs	32	NW
Venator	35	NW
Coyote Wells & Coyote Wells East	36-37	NW
Twin Springs Bench (GGOV)	37	NW
Sourdough Mountain	38	NE
Barren Valley	40	SW
Indian Creek Buttes Variety A	48	SW
Gregory Creek	55	NW
Timber Butte	122	NE
Unknown 6	?	?
Unknown 12	?	?

The decision to choose one source of exotic raw material over another could be due to a number of reasons. It could be a group decision to choose one source of obsidian over another in that certain attributes of one source could be more appealing or desirable to a particular group. Most importantly, it could be due to the fact that different groups of people have differential information about obsidian source locations.

Applying these questions to the Pioneer Population Model versus the Population Continuity Model, major differences can again be expected. With the PCM, once a source of obsidian has been identified, it will be repeatedly used over time by the same group of people who possess the same knowledge occupying the Birch Creek Site. Over time, as the group utilized the landscape, new sources would be discovered and utilized in the same manner. However, when looking at the question of obsidian sources through the PPM, the expectations are much different. If a new group moves into the area and occupies the Birch Creek Site, the non-local sources of obsidian will be utilized differently. It would be expected that at the start of

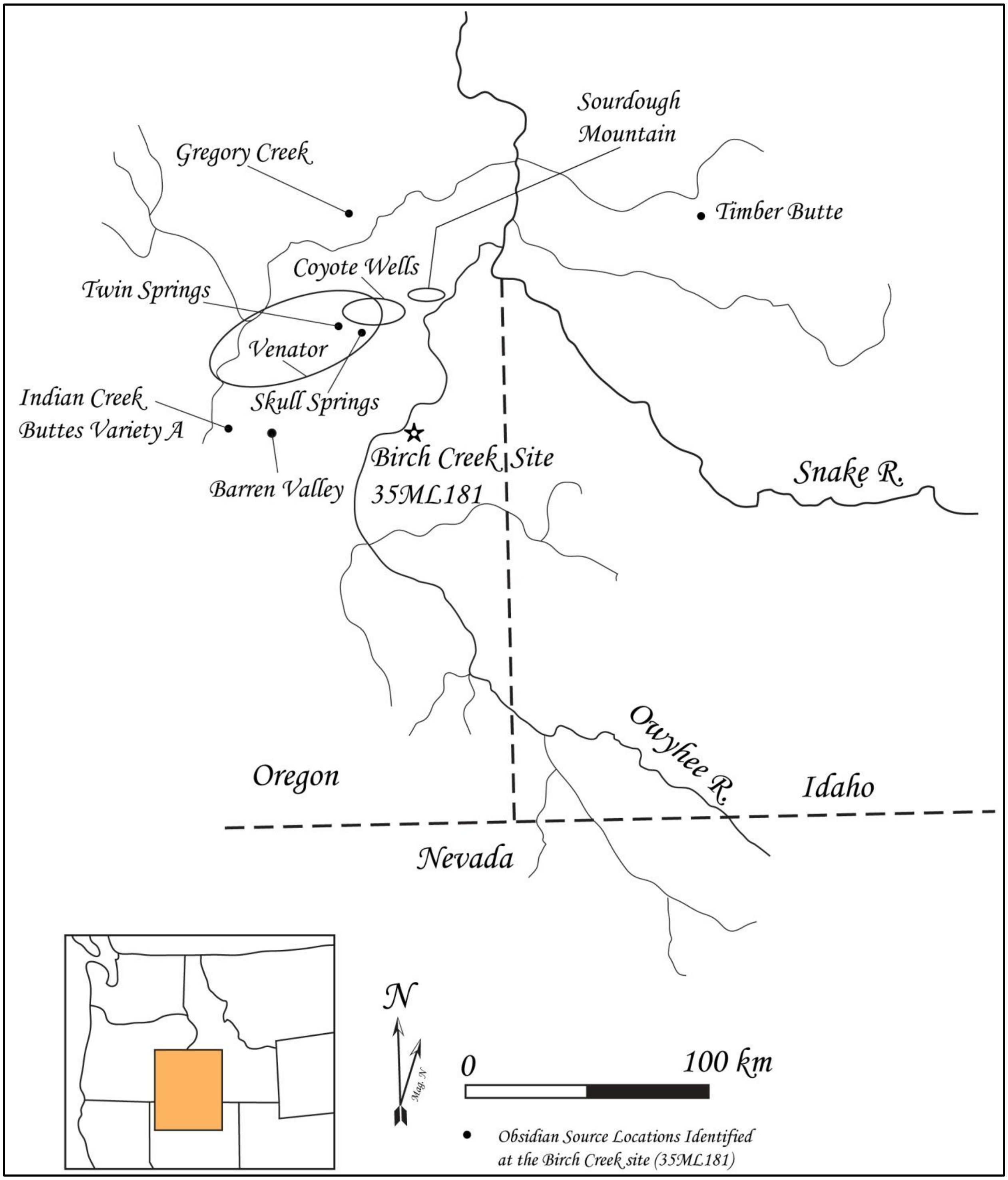

Figure 5.5 Location of obsidian sources identified at the Birch Creek Site.

a pioneer population (adaptive strategy), different obsidian sources would be utilized than those previously. This does not necessitate an abandonment of a source. However, it would be expected that new sources would also be incorporated and therefore associated with a new group. The abandonment and then later re-utilization of a source would also be indicative of a new group population at the site.

Major differences in the utilization of obsidian sources can be seen across time and across the different adaptive strategies (Table 5.6). Again focusing on the transitions and presence and absence of obsidian sources, the PPM will be tested. As was previously discussed, Assemblage 12, although only dating to 845±40 B.P., shows association through correspondence analysis to the earliest adaptive strategy. The apparent plot based on chipped stone frequencies towards the end of the earliest adaptive strategy sometime between 4,000 and 3,000 years B.P. also lends support of this. Therefore it will be assumed that sources from this assemblage do indeed make up those of the earliest adaptive strategy.

Table 5.6 Obsidian Sources and Adaptive Strategies.

Assemblage	Date	Dry Creek Canyon (GGOV)	Skull Springs	Venator	Coyote Wells	Coyote Wells East	Twin Springs Bench (GGOV)	Sourdough Mountain	Barren Valley	Indian Creek Buttes Variety A	Gregory Creek	Timber Butte	Unknown 6	Unknown 12
4	2140±50			x										
5	2190±40													
11	2430±60			x	x	x		x		x			x	x
7	2620±40	x		x	x				x			x		
8	2760±110		x	x			x	x	x					
6	2970±40								x					
13	3005±35							x						
2	3980±50		x						x					
3	3980±50													
9	4480±70													
1	6640±40									x	x			
12	845±40				x			x				x		

Starting with the earliest adaptive strategy, attention will be drawn to the Coyote Wells, Indian Creek Buttes Variety A, Gregory Creek, and Timber Butte sources. Gregory Creek obsidian is only found in a single assemblage, Assemblage 1. The Coyote Wells source is also important as it is found in Assemblage 12, and then not again until Assemblages 7 and 11.

Between these assemblages there is a definite absence of obsidian from this source location. This absence corresponds with Assemblages 6 and 8, which comprise that of the middle adaptive strategy. This pattern can also be seen in the source use from Indian Creek Buttes Variety A and the Timber Butte source. There is an absence in use of these obsidian sources for the entire middle adaptive strategy. This supports the PPM in that these three sources were utilized early in the occupation of Birch Creek Site and then again only in the latest adaptive strategy. Abandonment of a source is expected when a new group moves into an area and does not know the location of resources in the region.

Two obsidian sources are of importance in the middle adaptive strategy. These are the Skull Springs and Twin Springs Bench sources. Their presence is only in Assemblage 8, which is at the end of this adaptive strategy. Nowhere else is this source utilized but in the middle adaptive strategy. This indicates the presence of a group or population at the Birch Creek Site that located different resources than those previously occupying the site. This population likely differed from the group occupying the site in more recent history during the latest adaptive strategy. This is due to the fact that the sources were abandoned in the later adaptive strategy. This absence from the site during this time is interpreted as a new group occupying the site that, having explored the region and located different resources in the region.

Important sources worth noting for the latest adaptive strategy are the Dry Creek Canyon, Unknown Sources 6 and 12, Coyote Wells, Indian Creek Buttes Variety A, and Timber Butte. The first three sources, Dry Creek Canyon as well as Unknown Sources 6 and 12 are important as they are only utilized in the latest adaptive strategy. It is expected that under the PPM that new groups will identify new resources and exploit them differently from previous groups. This is exactly what is occurring in these three source locations, as they are not used before this adaptive strategy. The Coyote Wells, Indian Creek Buttes Variety A, and Timber Butte sources discussed above also support the PPM. This is due to the fact that these sources were abandoned for a period which coincides with the middle adaptive strategy. They were again, however, utilized after a period of inactivity by the latest adaptive strategy. This is exactly what would be expected by the PPM, with a new group moving into the region and utilizing different resources than those previously.

There are two sources that require attention that were not previously discussed. These are the Venator and Sourdough Mountain sources that indicate use in at least two adaptive strategies. The argument for this occurrence here is based on the locality of each. The Venator source spans a relatively large area as can be seen in Figure (5.4). With a larger area for resource acquisition, it is more likely that groups in the region will find a source from which to extract raw material. The second locale, Sourdough Mountain, is located along what has been documented ethnographically as a travel route to and from the Snake River (Steward 1938). This is referring to the proximity of the Sourdough Mountain source to the Owyhee River. Cole (2001) also presented this conclusion as to why close to one third of the obsidian material sourced comes from this location when the nodules are relatively small and would require greater effort to transport. The fact that Sourdough Mountain is located on a major travel way of prehistoric peoples, it is reasonable to assume that there is a greater likelihood this source would be utilized by groups going to and coming from the Birch Creek Site.

Taking into account the fact that the Venator and Sourdough Mountain sources present a greater chance of discovery and in the case of Sourdough Mountain a greater ease of availability, the obsidian sourcing greatly supports the PPM. It is expected under the PPM that different groups will exploit different resources than those of previous groups occupying an area. The analysis of obsidian source use indicates that this was taking place between all of the adaptive strategies. The overlap of some sources is to be expected, but the varying degree to which sources were utilized in different adaptive strategies is of prevailing importance here.

Projectile Point Chronology

The third line of evidence used to analyze the proposed models of pioneer populations or population continuity is the established projectile point chronology for the Birch Creek Site. Projectile points are often used as time markers used to define both temporal periods but also cultural groups (Clewlow 1967). This provides a useful way of assessing the chronological patterns of projectile points from the site in order to address the possibility of population continuity or pioneer groups. The Great Basin however is notorious for projectile point styles occurring over long periods of time and multiple styles occurring simultaneously (Aikens 1993). Therefore, it is not unreasonable to see some overlap in projectile point styles even if different groups occupied the Birch Creek Site.

With the Population Continuity Model the appearance and disappearance of projectile point types would be expected to occur gradually over time with a presence across adaptive strategies. The appearance or disappearance at the start or end of an adaptive strategy is taken here to indicate the occupation of the Birch Creek Site by a new group or pioneer population. These appearances by new groups would be expected at the same time as a rise in the frequency of obsidian in each assemblage. Table (5.7) provides a similar view of the presence and absence of projectile point types from Chapter 4, with the three adaptive strategies separated by lines.

As previously discussed earliest adaptive strategy presented does not likely begin with the first dated assemblage. Therefore, the chronology of projectile point typologies is likely to start earlier than what is presented in the earliest dated assemblage at 6,640±40 B.P. Focus will

Table 5.7 Projectile Point Chronology and Adaptive Strategies.

Assemblage #	Date	Elko Eared	Elko Corner	Humboldt Basal	Turkey Tail	Desert Side Notch	Northern Side Notch	Contracting Stemmed	Split Stemmed Pinto	Gatecliff Contracting Stem
4	2140±50	x								x
5	2190±40									
11	2430±60	x		x		x				
7	2620±40	x	x	x				x		x
8	2760±110		x	x				x		
6	2970±40									
13	3005±35				x					
2	3980±50			x			x		x	
3	3980±50									
9	4480±70									
1	6640±40						x	x		
12	845±40						x			

then be on the typologies that end with the transition into the next adaptive strategy. The focus of the next adaptive strategy (middle) will be both on the start and end of typologies within this time span. The final adaptive strategy (latest) will be analyzed only from its starting assemblage as the youngest assemblage at 2,140±50 B.P. may not date to the termination of this adaptive strategy. Younger assemblages not yet dated could be present in this adaptive strategy but the material is not available at this time. The fact that projectile points do not fall directly in with all of the starting and ending dates of adaptive strategies does not subtract from the argument for the PPM. As was discussed earlier it cannot be expected that the assemblages fall directly in place with the pioneering movement of a group into the Birch Creek Site. The adaptive strategies are ways to test whether there is actually movement of different groups into the site. Of importance here are the chronologies of the Northern Side Notched, Elko Eared, Gatecliff Contracting Stemmed, and Desert Side Notched typologies.

As was previously discussed, it is highly probable that Assemblage 12 dated to 845±40 actually falls into the range of 3,000 to 4,000 years B.P. based on the lithic frequency of obsidian. In this case, the range of Northern Side Notched points extends from 6,640±40 to a span of time between assemblages 3,980±50 B.P. and 3,005±35 B.P. As Assemblage 12 is somewhat of an anomaly within the first adaptive strategy, it will be associated with the earliest adaptive strategy. In this case, Northern Side Notched points appear temporally based to be associated solely with the earliest adaptive strategy and disappears with the start of the middle adaptive strategy.

Elko Eared first appear in Assemblage 7 at 2,620±40 B.P., the start of the latest adaptive strategy, and ends with the youngest assemblage (4) in the adaptive strategy at 2,140±50 B.P. This is intriguing, as it is clear evidence of the first use of a projectile point typology associated with a single adaptive strategy. A second projectile point typology that presents similar evidence is that of the Gatecliff Contracting Stemmed. It again first appears in Assemblage 7 and is present in the last and youngest, Assemblage 4. The fact that these two typologies appear with the start of the latest adaptive strategy is significant. This supports the hypothesis presented in the PPM along with the peak of obsidian frequency at the beginning of the latest adaptive strategy that a new group of people inhabited the Birch Creek Site. The presence of a single Desert Side Notch point towards the beginning of this adaptive strategy also lends support that a new group was present at the site.

Also significant is the fact that the two unknown points appear only in Assemblage 6 which is the start of the middle adaptive strategy. The fact that no other unknown points were identified in earlier or later assemblages is of importance here. These could indicate projectile types or behaviors in tool production of a new group that occupied the Birch Creek Site for a period of years associated with the middle adaptive strategy.

The projectile point chronology from the Birch Creek Site lends support to the PPM in that new groups of people was occupying the site at least at the start of the middle and latest adaptive strategies as well as the during the earliest adaptive strategy. Projectile point typologies have been demonstrated to be time sensitive at the Birch Creek Site with some overlap in styles. This is a strong indication that different adaptive strategies at the Birch Creek Site may have been associated with different cultural groups. The data here supports the trends and patterns expected from the PPM. Different groups with different lithic technologies appear to have occupied the site at different times.

Discussion and Conclusion

The different adaptive strategies support the hypothesis that different groups of people inhabited the Birch Creek Site around the times that a shift in adaptive strategies occurs. The three lines of evidence; raw material frequency, obsidian source utilization, and projectile point chronology all support the Pioneer Population Model. These lines of evidence were not explored to determine the actual strategies being practiced in terms of the behaviors taking place. Spikes in the relative frequency of obsidian at the start of the middle and latest adaptive strategy indicate that more exotic material was brought to the site at the beginning of the adaptive strategy while later times show a decline in frequency. The decline in relative obsidian frequencies of these assemblages indicates there was a greater utilization of local cherts. This shift to local raw material is to be expected when a group new to the area becomes familiar with the landscape and is able to take advantage of these resources rather than a reliance on exotic material. Utilization of different obsidian sources during the different adaptive strategies is also indicative of different groups. While one group may know about certain sources, another may not. When a new group moves into an area, the group will exploit those resources that are familiar which may differ from the previous inhabitants. There are distinct associations of certain sources with each of the adaptive strategies which support the PPM. In addition, the use of projectile point typologies in the Birch Creek chronology signifies the occupation by different groups. The appearance and disappearance of certain typologies supports the conclusion that different groups with different technologies inhabited the Birch Creek Site during the Archaic period.

Chapter 6

Archaic Occupation of the Birch Creek Site 35ML181: Summary & Future Research

The analysis of thirteen radiocarbon dated archaeological assemblages allowed for the Archaic Period at the Birch Creek Site (35ML181) to be broken down into thin slices of time. While a majority of these assemblages (11) dated to the Middle Archaic depending on the chronology used, one dated to the Early Archaic. The final assemblage dated well into the Late Archaic but it is believed to have come from a contaminated sample. Thus the focus of this thesis was on breaking up the Middle Archaic and analyzing the chipped stone assemblage.

A central question regarding the Birch Creek Site is that of continuity. Was the site occupied by a group of associated people for over 4,000 dated years, or were there occupations at the Birch Creek Site from groups of people new to the area? It would be expected that adaptive strategies and behaviors from a group of people new to the region would differ from those of the previous population. This can be expected until the landscape was explored enough to became familiar with resource locations. These changes in adaptive strategies and behaviors should be present in the archaeological record through the recognition of any differences between assemblages.

Testing for continuity started with the assemblage of all cultural material associated with one of the thirteen radiocarbon dates. This resulted in three significant clusters of assemblages that also corresponded to three blocks of time; 6,640 B.P. to 3,005 B.P., 2,970 B.P. to 2,760 B.P., and 2,620 B.P. to 2,140 B.P. All of the chipped stone assemblage was then analyzed which can be found in the attached appendices. I attempt to explain the three clusters of assemblages with competing hypothesis of land use models. These models are the Population Continuity Model and the Pioneer Population Model. The raw material frequency, difference in obsidian sources, and the projectile point chronology were then used to test the plausibility of the two models. Based on the results I was able to reject the null hypothesis or Population Continuity Model while providing evidence that supports the Pioneer Population Model. Based on the three lines of evidence it appears that at least two times during the Middle Archaic at 2,970±40 B.P. and 2,620±40 B.P. the Birch Creek Site was inhabited by a group new to the region.

Future Research

The Birch Creek Site still has much to reveal about prehistoric life in the Northern Great Basin. This is possible in a number of ways. One is through the expansion of excavations at the site. More excavations associated with the already dated assemblages would be extremely helpful in expanding the already dated assemblages. Not only would this increase the artifact count and help discern activity areas but it would also increase the number of diagnostic hafted bifaces. This would help establish a more statistically sound chronology of the Birch Creek Site that could then be applied to other sites in the region.

Simply excavating more material is not even needed to expand the knowledge we can gather from the Birch Creek Site. More dating of assemblages from the site that lie stratigraphically above those used in this study would be extremely interesting. This would allow not only for a better temporal comparison with an increased number of assemblages, but it would also make it possible to look for spatial patterning across the site. This study focused on temporal patterning, but it would be worthwhile to see if areas across the site differed in activities or adaptive strategies.

The exploration of cultural transmission at the site to see how this transitional area was utilized is another step in understanding the occupational history of the site. It could also indicate what the adaptive strategies were, and who the groups were that inhabited the site throughout the Middle Archaic. This might also provide insight into where these different groups were coming from and how this fits with the times proposed as periods of movement of new groups into the Birch Creek Site.

Finally, a pedestrian survey to locate more of the unknown obsidian sources in the area around the site would be valuable. This would simply allow for a more definitive explanation of the various sources utilized by the inhabitants. Of course the XRF sourcing of existing and new obsidian materials from the site is always interesting and provides a way of interpreting mobility patterns of the regional occupants.

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APPENDIX A

GRID SYSTEM REVISMENTS

Appendix A: Grid System Revisions

Original system Unit N	 E=+/W=-	New 2001 system Unit N	 E
0005	0000	1005	1000
0006	0000	1006	1000
0009	0012	1009	1012
0014	-0007	1014	0993
0014	-0006	1014	0994
0015	-0008	1015	0992
0015	-0007	1015	0993
0015	-0006	1015	0994
0015	-0005	1015	0995
0015	-0004	1015	0996
0015	-0001	1015	0999
0016	-0009	1016	0991
0016	-0008	1016	0992
0016	-0007	1016	0993
0016	-0006	1016	0994
0016	-0005	1016	0995
0016	-0004	1016	0996
0016	-0003	1016	0997
0016	-0001	1016	0999
0017	-0009	1017	0991
0017	-0008	1017	0992
0017	-0007	1017	0993
0017	-0006	1017	0994
0017	-0005	1017	0995
0017	-0004	1017	0996
0017	-0003	1017	0997
0019	-0009	1019	0991
0019	-0008	1019	0992
0019	-0007	1019	0993
0019	-0006	1019	0994
0019	-0005	1019	0995
0019	-0004	1019	0996
0019	-0003	1019	0997
0020	-0009	1020	0991
0020	-0008	1020	0992
0020	-0007	1020	0993

Appendix A: Grid System Revisions

Original system		New 2001 system	
Unit		Unit	
N	E=+/W=-	N	E
0020	-0006	1020	0994
0020	-0005	1020	0995
0020	-0004	1020	0996
0020	-0003	1020	0997
0021	-0009	1021	0991
0021	-0008	1021	0992
0021	-0007	1021	0993
0021	-0006	1021	0994
0021	-0005	1021	0995
0021	-0004	1021	0996
0021	-0003	1021	0997
0022	-0009	1022	0991
0022	-0008	1022	0992
0022	-0007	1022	0993
0022	-0006	1022	0994
0022	-0005	1022	0995
0022	-0004	1022	0996
0022	-0003	1022	0997
0023	-0009	1023	0991
0023	-0008	1023	0992
0023	-0007	1023	0993
0023	-0006	1023	0994
0023	-0005	1023	0995
0023	-0004	1023	0996
0023	-0003	1023	0997
0024	-0015	1024	0985
0024	-0014	1024	0986
0024	-0013	1024	0987
0024	-0012	1024	0988
0024	-0011	1024	0989
0024	-0010	1024	0990
0024	-0009	1024	0991
0024	-0008	1024	0992
0024	-0007	1024	0993
0024	-0006	1024	0994
0024	-0005	1024	0995

Appendix A: Grid System Revisions

Original system Unit		New 2001 system Unit	
N	E=+/W=-	N	E
0024	-0004	1024	0996
0024	-0003	1024	0997
0024	-0002	1024	0998
0024	-0001	1024	0999
0025	-0001	1025	0999
0025	0000	1025	1000
0025	0001	1025	1001
0026	-0001	1026	0999
0026	0000	1026	1000
0026	0001	1026	1001
0027	-0001	1027	0999
0027	0000	1027	1000
0029	-0015	1029	0985
0030	-0025	1030	0975
0030	-0015	1030	0985
0031	-0015	1031	0985
0035	-0001	1035	0999
0036	-0001	1036	0999
0045	0000	1045	1000
0050	-0016	1050	0984
0050	-0015	1050	0985
0051	-0016	1051	0984
0051	-0015	1051	0985

APPENDIX B

ASSEMBLAG UNITS AND LEVELS

Appendix B: Units and Levels

Assemblage	Unit	Level
1	N1057 E980	30
1	N1057 E980	31
1	N1057 E980	32
1	N1057 E981	26
1	N1057 E981	27
1	N1057 E981	28
1	N1057 E982	29
1	N1057 E982	30
1	N1057 E982	31
1	N1057 E982	32
1	N1057 E982	33
1	N1057 E984	23
1	N1057 E985	24
1	N1057 E986	25
1	N1057 E987	26
1	N1057 E988	27
1	N1057 E989	28
1	N1057 E990	29
2	N1017 E996	24
2	N1017 E996	25
2	N1017 E996	26
2	N1017 E995	22
2	N1017 E995	23
2	N1017 E994	32
2	N1017 E994	33
2	N1017 E994	34
2	N1017 E994	35
2	N1017 E993	34
2	N1017 E993	35
2	N1017 E993	36
2	N1017 E993	37
2	N1017 E993	38
3	N1057 E979	22
3	N1057 E979	23
3	N1057 E979	24
3	N1057 E979	25
3	N1057 E980	23

Appendix B: Units and Levels

Assemblage	Unit	Level
3	N1057 E980	24
3	N1057 E980	25
3	N1057 E981	24
3	N1057 E981	25
3	N1057 E981	26
4	N1050 E984	8
4	N1050 E984	9
4	N1050 E984	10
4	N1050 E984	11
4	N1050 E984	12
4	N1050 E985	6
4	N1050 E985	7
4	N1050 E985	8
4	N1050 E985	9
4	N1050 E985	10
4	N1050 E985	11
4	N1050 E985	12
4	N1051 E984	7
4	N1051 E984	8
4	N1051 E984	9
4	N1051 E984	10
4	N1051 E984	11
4	N1051 E984	12
5	N1026 E1000	7
5	N1026 E1000	8
5	N1026 E1000	9
5	N1026 E999	6
5	N1026 E999	7
5	N1026 E999	8
5	N1025 E999	5
5	N1025 E999	6
5	N1025 E999	7
5	N1025 E999	8
6	N1024 E991	8
6	N1024 E991	9
6	N1024 E991	10
6	N1024 E991	11
6	N1024 E992	9

Appendix B: Units and Levels

Assemblage	Unit	Level
6	N1024 E992	10
6	N1024 E992	11
6	N1024 E992	12
6	N1024 E993	10
6	N1024 E993	11
6	N1024 E993	12
6	N1024 E993	13
6	N1024 E993	14
7	N1017 E992	3
7	N1017 E992	4
7	N1017 E992	5
7	N1017 E992	6
7	N1017 E992	7
7	N1017 E993	5
7	N1017 E993	6
7	N1017 E993	7
7	N1017 E993	8
7	N1017 E994	3
7	N1017 E994	4
7	N1017 E994	5
7	N1017 E994	6
7	N1017 E994	7
7	N1017 E995	3
7	N1017 E995	4
7	N1017 E996	3
7	N1017 E996	4
7	N1017 E996	5
7	N1016 E992	4
7	N1016 E992	5
7	N1016 E992	6
7	N1016 E993	4
7	N1016 E993	5
7	N1016 E993	6
7	N1016 E993	7
7	N1016 E993	8
7	N1016 E994	3
7	N1016 E994	4
7	N1016 E994	5

Appendix B: Units and Levels

Assemblage	Unit	Level
7	N1016 E995	2
7	N1016 E995	3
7	N1016 E995	4
7	N1016 E995	5
8	N1019 E993	15
8	N1019 E993	16
8	N1019 E993	17
8	N1019 E993	18
8	N1019 E994	15
8	N1019 E994	16
8	N1019 E994	17
8	N1019 E995	13
8	N1019 E995	14
8	N1019 E995	15
8	N1019 E995	16
8	N1019 E995	17
8	N1019 E995	18
8	N1019 E995	19
8	N1019 E995	20
8	N1019 E995	21
8	N1019 E995	22
8	N1019 E995	23
8	N1019 E995	24
8	N1019 E995	25
9	N1017 E996	50
9	N1017 E996	51
9	N1017 E996	52
9	N1017 E996	53
9	N1017 E993	52
10&11	N1017 E993	9
10&11	N1017 E993	10
10&11	N1017 E993	11
10&11	N1017 E993	12
10&11	N1017 E993	13
10&11	N1017 E992	7
10&11	N1017 E992	8
10&11	N1017 E992	9
10&11	N1017 E992	10

Appendix B: Units and Levels

Assemblage	Unit	Level
10&11	N1017 E992	11
10&11	N1017 E994	8
10&11	N1017 E994	9
10&11	N1017 E994	10
10&11	N1017 E994	11
10&11	N1017 E994	12
10&11	N1017 E994	13
10&11	N1017 E995	4
10&11	N1017 E995	5
10&11	N1017 E995	6
10&11	N1017 E995	7
10&11	N1017 E995	8
10&11	N1017 E995	9
10&11	N1017 E995	10
10&11	N1017 E995	11
10&11	N1017 E995	12
10&11	N1017 E995	13
10&11	N1017 E996	5
10&11	N1017 E996	6
10&11	N1017 E996	7
10&11	N1017 E996	8
10&11	N1017 E996	9
10&11	N1017 E996	10
10&11	N1016 E992	7
10&11	N1016 E992	8
10&11	N1016 E993	9
10&11	N1016 E993	10
10&11	N1016 E993	11
10&11	N1016 E994	8
10&11	N1016 E994	9
10&11	N1016 E994	10
10&11	N1016 E994	11
10&11	N1016 E994	12
10&11	N1016 E995	7
10&11	N1016 E995	8
10&11	N1016 E995	9
10&11	N1016 E995	10
12	N1057 E975	29

Appendix B: Units and Levels

Assemblage	Unit	Level
12	N1057 E975	30
12	N1057 E975	31
12	N1057 E975	32
12	N1057 E975	33
12	N1057 E976	29
12	N1057 E976	30
12	N1057 E976	31
12	N1057 E976	32
12	N1057 E976	33
12	N1057 E976	34
12	N1057 E977	30
12	N1057 E977	31
12	N1057 E977	32
12	N1057 E977	33
12	N1057 E977	34
12	N1057 E978	30
12	N1057 E978	31
12	N1057 E978	32
12	N1057 E979	31
12	N1057 E979	32
12	N1057 E979	33
12	N1057 E980	32
12	N1057 E980	33
12	N1057 E980	34
12	N1057 E981	30
12	N1057 E981	31
12	N1057 E981	32
12	N1057 E981	33
12	N1057 E981	34
12	N1057 E982	34
12	N1057 E982	35
12	N1057 E982	36
12	N1057 E982	37
12	N1057 E982	38
12	N1057 E982	39
12	N1057 E982	40
12	N1057 E983	31
12	N1057 E983	32

Appendix B: Units and Levels

Assemblage	Unit	Level
12	N1057 E983	33
12	N1057 E983	34
12	N1057 E983	35
12	N1057 E983	36
12	N1057 E984	30
12	N1057 E984	31
12	N1057 E984	32
12	N1057 E984	33
13	N1057 E972	18
13	N1057 E972	19
13	N1057 E972	20
13	N1057 E972	21
13	N1057 E973	17
13	N1057 E973	18
13	N1057 E973	19
13	N1057 E973	20
13	N1057 E973	21
13	N1057 E974	20
13	N1057 E974	21
13	N1057 E974	22
13	N1057 E974	23
13	N1057 E974	24
13	N1057 E975	17
13	N1057 E975	18
13	N1057 E975	19
13	N1057 E975	20
13	N1057 E975	21
13	N1057 E975	22
13	N1057 E975	23
13	N1057 E975	24
13	N1057 E975	25
13	N1057 E976	17
13	N1057 E976	18
13	N1057 E976	19
13	N1057 E976	20
13	N1057 E976	21
13	N1057 E976	22
13	N1057 E976	23

Appendix B: Units and Levels

Assemblage	Unit	Level
13	N1057 E976	24
13	N1057 E976	25
13	N1057 E977	18
13	N1057 E977	19
13	N1057 E977	20
13	N1057 E977	21
13	N1057 E978	18
13	N1057 E978	19
13	N1057 E978	20
13	N1057 E978	21
13	N1057 E978	22

APPENDIX C

LIST OF CODES

Appendix C: List of Codes

OG-Object Group	OT-Object Types	RM-Raw Material
CS-Chipped Stone	01-Point	10-Obsidian
	02-Hafted Drill	30-Cryptocrystalline/Cherts
	03-Point tip or Midsection	
	04-Preform	
	05-Other Biface	
	06-Endscraper	
	07-Side Scraper	
	08-Flake Drill or Perforator	
	09-Composite Scraper	
	14-Flake debitage with cortex (with bulb and part of platform)	
	15-Flake debitage with no cortex (with bulb and part of platform)	
	17-Flake shatter (designated as flakes without bulbs or platforms)	
	18-Blocky shatter (shatter that cannot be identified as being part of a broken flake)	
	22-Unimarginal retouch on flake	
	23-Bimarginal retouch on flake	
	24-Uni/bimarginal retouch on flake	

APPENDIX D

SHATTER

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
1	23909	N1057-E980	31	CS	17	10	18	0.1	153
1	23910	N1057-E980	31	CS	17	30	10	2.3	153
1	23658	N1057-E982	32	CS	17	30	21	1	148
1	23661	N1057-E982	32	CS	17	10	1	0	148
1	20461	N1057-E984	26	CS	17	30	15	10.3	88
1	21695	N1057-E984	27	CS	17	30	11	0.7	93
1	23491	N1057-E980	30	CS	17	30	9	0.8	124
1	23493	N1057-E980	30	CS	17	10	12	0.1	124
1	25262	N1057-E980	30	CS	17	10	2	0	206
1	24002	N1057-E980	32	CS	17	30	4	1.7	153
1	22558	N1057-E981	28	CS	17	30	19	8.9	112
1	22560	N1057-E981	28	CS	17	10	2	0.5	112
1	24537	N1057-E981	28	CS	17	30	24	1.6	157
1	20341	N1057-E981	26	CS	17	10	34	0.9	88
1	21412	N1057-E981	26	CS	17	30	460	71.4	92
1	20389	N1057-E981	27	CS	17	10	14	0.1	88
1	21624	N1057-E981	27	CS	17	30	240	40.2	93
1	24487	N1057-E982	29	CS	17	30	285	30.2	161
1	24566	N1057-E982	29	CS	17	10	4	0	161
1	22338	N1057-E982	30	CS	17	30	106	8.2	119
1	22341	N1057-E982	30	CS	17	10	6	0.1	119
1	22342	N1057-E982	30	CS	17	32	1	0.1	119
1	22392	N1057-E982	31	CS	17	30	30	1.9	119
1	22395	N1057-E982	31	CS	17	10	1	0	119
1	24496	N1057-E982	33	CS	17	30	4	11.9	161
1	21139	N1057-E984	23	CS	17	30	63	12.5	91
1	20518	N1057-E984	24	CS	17	10	3	0.4	89
1	21191	N1057-E984	24	CS	17	30	46	12.1	91
1	21223	N1057-E984	25	CS	17	30	41	8.9	91
1	23237	N1057-E984	29	CS	17	30	24	0.4	141
1	23239	N1057-E984	29	CS	17	10	1	0	141
1	23659	N1057-E982	32	CS	18	30	8	1.7	148
1	23662	N1057-E982	32	CS	18	10	1	1.3	148
1	21117	N1057-E984	26	CS	18	30	3	0.5	91
1	23492	N1057-E980	30	CS	18	30	2	0.6	124
1	22559	N1057-E981	28	CS	18	30	34	5	112
1	20344	N1057-E981	26	CS	18	30	20	12	88
1	20387	N1057-E981	27	CS	18	30	17	21	88

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
1	24488	N1057-E982	29	CS	18	30	17	18	161
1	22339	N1057-E982	30	CS	18	30	8	3	119
1	22391	N1057-E982	31	CS	18	30	4	0.6	119
1	25242	N1057-E982	33	CS	18	30	4	0.1	206
1	21140	N1057-E984	23	CS	18	30	19	2.5	91
1	21192	N1057-E984	24	CS	18	30	11	1.7	91
1	20336	N1057-E984	25	CS	18	30	8	9.6	88
1	23238	N1057-E984	29	CS	18	30	11	0.9	141
2	13230	N17-W4	24	CS	17	10	8	0.2	72
2	13231	N17-W4	24	CS	17	30	125	64.4	72
2	14156	N17-W4	25	CS	17	10	3	0.2	75
2	14161	N17-W4	25	CS	17	30	103	17.7	75
2	17261	N17-W4	25	CS	17	30	4	0.3	81
2	13380	N17-W4	26	CS	17	10	6	0.1	72
2	13384	N17-W4	26	CS	17	30	40	7.7	72
2	13129	N17-W5	22	CS	17	30	162	48.6	72
2	13130	N17-W5	22	CS	17	10	13	0.5	72
2	17718	N17-W5	22	CS	17	30	3	0.1	82
2	7912	N17-W5	23	CS	17	10	12	3	10
2	7913	N17-W5	23	CS	17	30	197	32.4	10
2	18169	N17-W5	23	CS	17	30	7	0.3	83
2	13042	N17-W6	32	CS	17	30	10	3.7	72
2	16727	N17-W6	32	CS	17	30	1	0.1	81
2	13174	N17-W6	33	CS	17	30	111	33.7	72
2	13175	N17-W6	33	CS	17	10	10	1.1	72
2	16102	N17-W6	33	CS	17	10	1	0	80
2	16104	N17-W6	33	CS	17	30	6	0.1	80
2	7542	N17-W6	34	CS	17	10	2	0.1	10
2	7546	N17-W6	34	CS	17	32	1	1.7	10
2	7547	N17-W6	34	CS	17	30	92	17.9	10
2	12366	N17-W6	35	CS	17	30	11	2.2	70
2	12367	N17-W6	35	CS	17	10	1	0	70
2	15089	N17-W7	34	CS	17	10	2	0.1	77
2	15091	N17-W7	34	CS	17	30	43	14.3	77
2	14631	N17-W7	35	CS	17	30	14	4.5	76
2	14634	N17-W7	35	CS	17	10	1	0.1	76
2	12774	N17-W7	36	CS	17	30	72	20.8	71
2	12775	N17-W7	36	CS	17	10	7	0.2	71

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
2	16670	N17-W7	36	CS	17	20	1	0.2	81
2	16671	N17-W7	36	CS	17	30	1	0	81
2	12924	N17-W7	37	CS	17	30	26	24.2	71
2	14150	N17-W7	38	CS	17	10	5	0.1	75
2	14152	N17-W7	38	CS	17	30	44	8.9	75
2	16849	N17-W7	38	CS	17	30	1	0	81
2	13232	N17-W4	24	CS	18	30	18	11.8	72
2	13234	N17-W4	24	CS	18	20	4	3.9	72
2	14157	N17-W4	25	CS	18	30	51	47.7	75
2	14162	N17-W4	25	CS	18	30	1	72.5	75
2	13385	N17-W4	26	CS	18	30	2	1	72
2	13131	N17-W5	22	CS	18	30	24	81.5	72
2	7915	N17-W5	23	CS	18	30	60	9.9	10
2	13043	N17-W6	32	CS	18	30	11	2	
2	13046	N17-W6	32	CS	18	20	1	0.6	72
2	13047	N17-W6	32	CS	18	32	1	0.3	72
2	13177	N17-W6	33	CS	18	30	38	28.6	72
2	7540	N17-W6	34	CS	18	30	79	7.5	10
2	12364	N17-W6	35	CS	18	30	6	0.3	70
2	15092	N17-W7	34	CS	18	30	1	0	77
2	14632	N17-W7	35	CS	18	30	18	15.5	76
2	12776	N17-W7	36	CS	18	30	53	14	71
2	12923	N17-W7	37	CS	18	30	59	19	71
2	16032	N17-W7	37	CS	18	20	1	0.4	80
2	14153	N17-W7	38	CS	18	30	68	9.3	75
3	22715	N1057-E980	23	CS	17	30	86	20.5	140
3	22718	N1057-E980	23	CS	17	10	2	0	140
3	24189	N1057-E979	22	CS	17	30	66	12.7	156
3	24251	N1057-E979	22	CS	17	10	1	0	156
3	23575	N1057-E979	23	CS	17	30	45	3.1	148
3	23579	N1057-E979	23	CS	17	10	9	0.4	148
3	24177	N1057-E979	24	CS	17	10	4	0.2	156
3	24179	N1057-E979	24	CS	17	30	57	26.7	156
3	24180	N1057-E979	24	CS	17	32	1	3.2	156
3	23142	N1057-E979	25	CS	17	30	29	5	141
3	23146	N1057-E979	25	CS	17	10	2	0	141
3	24630	N1057-E980	24	CS	17	30	148	10.1	161
3	24635	N1057-E980	24	CS	17	10	4	0	161

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
3	24762	N1057-E980	25	CS	17	30	12	1	179
3	20483	N1057-E981	24	CS	17	10	6	0.4	88
3	21107	N1057-E981	24	CS	17	30	132	16.8	91
3	20497	N1057-E981	25	CS	17	10	20	2.6	88
3	21128	N1057-E981	25	CS	17	30	262	27.9	205
3	25248	N1057-E981	25	CS	17	10	23	1.7	206
3	25250	N1057-E981	25	CS	17	32	1	0.1	206
3	20341	N1057-E981	26	CS	17	10	34	0.9	88
3	21412	N1057-E981	26	CS	17	30	460	71.3	92
3	22716	N1057-E980	23	CS	18	30	27	8.2	140
3	24190	N1057-E979	22	CS	18	30	2	0.9	156
3	23577	N1057-E979	23	CS	18	30	13	1.3	148
3	23143	N1057-E979	25	CS	18	30	21	5.3	141
3	24631	N1057-E980	24	CS	18	30	15	2.8	161
3	24636	N1057-E980	24	CS	18	30	1	10.6	161
3	24763	N1057-E980	25	CS	18	30	17	8.2	179
3	21104	N1057-E981	24	CS	18	10	2	0	91
3	21105	N1057-E981	24	CS	18	30	34	12.6	91
3	21129	N1057-E981	25	CS	18	30	89	10.2	91
3	21130	N1057-E981	25	CS	18	10	6	0.8	91
3	20344	N1057-E981	26	CS	18	30	20	12.4	88
4	10976	N50-W16	10	CS	17	10	14	0.7	15
4	10985	N50-W16	10	CS	17	30	103	59.9	15
4	9816	N50-W16	11	CS	17	30	32	21.8	13
4	9819	N50-W16	11	CS	17	10	8	0.8	13
4	9872	N50-W16	12	CS	17	10	21	0.7	13
4	9873	N50-W16	12	CS	17	30	94	61.7	13
4	10380	N50-W15	8	CS	17	30	42	40.2	14
4	10384	N50-W15	8	CS	17	10	17	0.6	14
4	10032	N50-W15	9	CS	17	20	2	0.3	14
4	10034	N50-W15	9	CS	17	10	36	1.6	14
4	10038	N50-W15	9	CS	17	30	136	50.2	14
4	11000	N50-W15	10	CS	17	30	58	13.7	16
4	11001	N50-W15	10	CS	17	10	14	1	16
4	10954	N50-W15	11	CS	17	10	11	1.2	15
4	10957	N50-W15	11	CS	17	30	54	21.7	15
4	10103	N51-W16	11	CS	17	10	4	0.6	14
4	10105	N51-W16	11	CS	17	30	14	37.5	14

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
4	9982	N51-W16	12	CS	17	10	10	1.4	13
4	9985	N51-W16	12	CS	17	30	77	101.5	13
4	9962	N50-W16	8	CS	17	30	49	47.1	13
4	9967	N50-W16	8	CS	17	10	9	0.7	13
4	11012	N50-W16	9	CS	17	10	25	3.8	16
4	11016	N50-W16	9	CS	17	30	112	45.5	16
4	984	N50-W15	6	CS	17	30	12	0.3	1
4	993	N50-W15	6	CS	17	30	98	19.2	1
4	10123	N50-W15	7	CS	17	10	27	3.2	14
4	10129	N50-W15	7	CS	17	30	112	36.6	14
4	10089	N50-W15	12	CS	17	10	19	2.4	14
4	10092	N50-W15	12	CS	17	30	72	35	14
4	7586	N51-W16	7	CS	17	30	1	0	10
4	10242	N51-W16	7	CS	17	10	16	2.7	14
4	10244	N51-W16	7	CS	17	30	108	0.5	14
4	10843	N51-W16	9	CS	17	10	9	0.3	15
4	10848	N51-W16	9	CS	17	30	35	21.3	15
4	9951	N51-W16	10	CS	17	30	52	43.6	13
4	9958	N51-W16	10	CS	17	10	8	1.8	13
4	10981	N50-W16	10	CS	18	10	6	0.9	15
4	10986	N50-W16	10	CS	18	30	64	28.7	15
4	9821	N50-W16	11	CS	18	10	2	0	13
4	9822	N50-W16	11	CS	18	30	47	10.2	13
4	9876	N50-W16	12	CS	18	10	3	0	13
4	9877	N50-W16	12	CS	18	30	125	205.2	13
4	10378	N50-W15	8	CS	18	10	4	1.7	14
4	10381	N50-W15	8	CS	18	30	88	44.5	14
4	10033	N50-W15	9	CS	18	10	4	0	14
4	10037	N50-W15	9	CS	18	30	176	90.8	14
4	10999	N50-W15	10	CS	18	10	4	0	15
4	11004	N50-W15	10	CS	18	30	121	41.4	16
4	10958	N50-W15	11	CS	18	30	73	37.2	15
4	10102	N51-W16	11	CS	18	30	14	22.8	14
4	9978	N51-W16	12	CS	18	30	78	162.3	13
4	9965	N50-W16	8	CS	18	30	57	82.3	13
4	9968	N50-W16	8	CS	18	10	1	0.1	13
4	11013	N50-W16	9	CS	18	10	2	0	16
4	11017	N50-W16	9	CS	18	30	73	97	16

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
4	994	N50-W15	6	CS	18	10	3	0.5	1
4	995	N50-W15	6	CS	18	30	87	38.1	1
4	10122	N50-W15	7	CS	18	10	2	0	14
4	10130	N50-W15	7	CS	18	30	63	13.9	14
4	10094	N50-W15	12	CS	18	30	12	4.5	14
4	10241	N51-W16	7	CS	18	10	1	1.3	14
4	10243	N51-W16	7	CS	18	30	36	28.2	14
4	10841	N51-W16	9	CS	18	30	30	7.7	15
4	10845	N51-W16	9	CS	18	10	3	0.9	15
4	9953	N51-W16	10	CS	18	10	2	0.2	13
4	9955	N51-W16	10	CS	18	30	25	33.7	13
5	10328	N26-E0	7	CS	17	30	32	5	14
5	10330	N26-E0	7	CS	17	10	8	0.3	14
5	10568	N26-E0	8	CS	17	10	15	0.5	15
5	10572	N26-E0	8	CS	17	30	40	2.3	15
5	10431	N26-E0	9	CS	17	10	3	0	14
5	10433	N26-E0	9	CS	17	30	5	0.5	14
5	4028	N26-W1	6	CS	17	10	19	4.4	5
5	4030	N26-W1	6	CS	17	30	204	56.1	5
5	9675	N26-W1	7	CS	17	10	21	0.8	13
5	9676	N26-W1	7	CS	17	30	45	67.1	13
5	4975	N26-W1	8	CS	17	10	6	0.1	5
5	4976	N26-W1	8	CS	17	30	31	31.2	5
5	10413	N25-W1	6	CS	17	10	11	0.4	14
5	10416	N25-W1	6	CS	17	30	53	39.9	14
5	9769	N25-W1	7	CS	17	10	10	0.3	13
5	9770	N25-W1	7	CS	17	30	55	26.4	13
5	9904	N25-W1	8	CS	17	30	56	51.3	13
5	9905	N25-W1	8	CS	17	10	15	0.5	13
5	10329	N26-E0	7	CS	18	30	17	2.4	14
5	10335	N26-E0	7	CS	18	10	2	0.1	14
5	10567	N26-E0	8	CS	18	10	3	0.1	15
5	10571	N26-E0	8	CS	18	30	33	3.2	15
5	10430	N26-E0	9	CS	18	30	14	2.6	14
5	4029	N26-W1	6	CS	18	30	54	27.1	5
5	9674	N26-W1	7	CS	18	30	49	33.8	13
5	9677	N26-W1	7	CS	18	10	1	0	13
5	4974	N26-W1	8	CS	18	10	1	1.4	5

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
5	4977	N26-W1	8	CS	18	30	13	29.8	5
5	10417	N25-W1	6	CS	18	30	30	21.2	14
5	9766	N25-W1	7	CS	18	10	1	0	13
5	9768	N25-W1	7	CS	18	30	43	10.7	13
5	9901	N25-W1	8	CS	18	30	43	73.7	13
5	9906	N25-W1	8	CS	18	10	1	0	13
6	11606	N24-W9	9	CS	17	10	19	0.9	16
6	11608	N24-W9	9	CS	17	30	19	8.5	16
6	12655	N24-W9	9	CS	17	10	15	0.4	71
6	12657	N24-W9	9	CS	17	30	58	13.8	71
6	17114	N24-W8	10	CS	17	30	28	3.9	81
6	17117	N24-W8	10	CS	17	10	26	1.7	81
6	17119	N24-W8	10	CS	17	20	1	0	81
6	12692	N24-W7	12	CS	17	30	67	9.4	71
6	12693	N24-W7	12	CS	17	10	51	3.7	71
6	13006	N24-W7	13	CS	17	10	54	4.5	72
6	13007	N24-W7	13	CS	17	30	45	8.2	72
6	16228	N24-W7	13	CS	17	20	2	0.3	80
6	16230	N24-W7	13	CS	17	30	7	0.8	80
6	17145	N24-W9	8	CS	17	30	47	9.4	81
6	17148	N24-W9	8	CS	17	10	53	8.8	81
6	15463	N24-W9	11	CS	17	10	91	2.7	78
6	15466	N24-W9	11	CS	17	30	49	6.8	78
6	17064	N24-W8	9	CS	17	10	51	2.6	81
6	17065	N24-W8	9	CS	17	30	83	12.2	81
6	16930	N24-W8	11	CS	17	10	27	0.8	81
6	16931	N24-W8	11	CS	17	30	41	7.7	81
6	15691	N24-W8	12	CS	17	10	85	8	79
6	15694	N24-W8	12	CS	17	30	70	32.8	79
6	12989	N24-W7	10	CS	17	30	123	25.7	71
6	12991	N24-W7	10	CS	17	10	31	5.8	71
6	16003	N24-W7	10	CS	17	10	1	0	80
6	12978	N24-W7	11	CS	17	30	129	24.2	71
6	12981	N24-W7	11	CS	17	10	38	4.2	71
6	15801	N24-W7	11	CS	17	10	3	0.1	79
6	15802	N24-W7	11	CS	17	30	9	0.3	79
6	12968	N24-W7	14	CS	17	10	52	2.6	71
6	12969	N24-W7	14	CS	17	30	66	9	71

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
6	17230	N24-W7	14	CS	17	10	2	0	81
6	17235	N24-W7	14	CS	17	30	5	0.1	81
6	11607	N24-W9	9	CS	18	10	11	0.7	16
6	11610	N24-W9	9	CS	18	30	32	16.4	16
6	12658	N24-W9	9	CS	18	30	21	9.9	71
6	17115	N24-W8	10	CS	18	30	79	8.6	81
6	17116	N24-W8	10	CS	18	10	8	2.9	81
6	17120	N24-W8	10	CS	18	20	11	0.8	81
6	12690	N24-W7	12	CS	18	10	6	0.5	71
6	12691	N24-W7	12	CS	18	30	130	23.9	71
6	13008	N24-W7	13	CS	18	30	111	11.7	72
6	13011	N24-W7	13	CS	18	10	13	0.3	72
6	16231	N24-W7	13	CS	18	50	3	0.3	80
6	17144	N24-W9	8	CS	18	30	102	38.8	81
6	17149	N24-W9	8	CS	18	10	12	1.6	81
6	15464	N24-W9	11	CS	18	10	5	0.5	78
6	15467	N24-W9	11	CS	18	30	27	14.9	78
6	17066	N24-W8	9	CS	18	10	2	0	81
6	17067	N24-W8	9	CS	18	30	46	6.4	81
6	16932	N24-W8	11	CS	18	30	35	4.4	81
6	15692	N24-W8	12	CS	18	10	5	0.6	79
6	15695	N24-W8	12	CS	18	30	51	18	79
6	12990	N24-W7	10	CS	18	30	132	28.3	71
6	12992	N24-W7	10	CS	18	10	11	1.1	71
6	12980	N24-W7	11	CS	18	30	223	48.6	71
6	12982	N24-W7	11	CS	18	10	19	0.8	71
6	12970	N24-W7	14	CS	18	10	22	16.2	71
6	12971	N24-W7	14	CS	18	30	149	18.8	71
7	8033	N17-W8	4	CS	17	10	232	16.4	11
7	8036	N17-W8	4	CS	17	30	267	93	11
7	7495	N17-W8	5	CS	17	30	83	21.7	9
7	7501	N17-W8	5	CS	17	10	5	0.7	10
7	4340	N17-W8	6	CS	17	30	7	1.7	5
7	7958	N17-W8	6	CS	17	10	1	0.1	10
7	7960	N17-W8	6	CS	17	30	88	40.9	10
7	7474	N17-W7	6	CS	17	10	14	2.2	9
7	7475	N17-W7	6	CS	17	30	74	38.8	9
7	4481	N17-W7	7	CS	17	30	52	18.5	5

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
7	4482	N17-W7	7	CS	17	10	17	1.4	5
7	5809	N17-W4	4	CS	17	30	170	165.2	6
7	5812	N17-W4	4	CS	17	10	11	0.8	6
7	7092	N16-W8	5	CS	17	10	4	0.1	9
7	7094	N16-W8	5	CS	17	30	7	4.3	9
7	4356	N16-W8	6	CS	17	30	3	0.1	5
7	7436	N16-W7	5	CS	17	10	22	2.5	9
7	7445	N16-W7	5	CS	17	30	50	23.4	9
7	4467	N16-W7	6	CS	17	30	38	10.5	5
7	4468	N16-W7	6	CS	17	10	19	0.7	5
7	6683	N16-W7	7	CS	17	30	41	10.5	8
7	6684	N16-W7	7	CS	17	10	8	0.9	8
7	7140	N16-W6	4	CS	17	30	63	35.1	9
7	7141	N16-W6	4	CS	17	10	13	2.6	9
7	5558	N16-W5	3	CS	17	30	109	35.7	6
7	6931	N16-W5	3	CS	17	10	16	4.9	8
7	6935	N16-W5	3	CS	17	30	58	68.6	8
7	6867	N16-W5	4	CS	17	30	55	30.2	8
7	6870	N16-W5	4	CS	17	10	10	4	8
7	8215	N17-W8	3	CS	17	30	175	52.1	11
7	8221	N17-W8	3	CS	17	10	34	3.8	11
7	5126	N17-W8	7	CS	17	10	7	0.9	6
7	5127	N17-W8	7	CS	17	30	85	42.4	6
7	7411	N17-W7	5	CS	17	10	21	2	9
7	7414	N17-W7	5	CS	17	30	78	33.7	9
7	4866	N17-W7	8	CS	17	30	23	12.1	5
7	5162	N17-W7	8	CS	17	10	3	0.1	6
7	6792	N17-W7	8	CS	17	10	34	5.9	8
7	6796	N17-W7	8	CS	17	30	204	69.7	8
7	7010	N17-W6	3	CS	17	30	287	154.7	9
7	7019	N17-W6	3	CS	17	10	138	28	9
7	7447	N17-W6	6	CS	17	10	28	3.3	9
7	7452	N17-W6	6	CS	17	30	77	51.3	9
7	5261	N17-W6	7	CS	17	30	78	23.7	6
7	5262	N17-W6	7	CS	17	10	18	4.4	6
7	7169	N17-W5	3	CS	17	30	306	212.7	9
7	7175	N17-W5	3	CS	17	10	69	10.5	9
7	7177	N17-W5	3	CS	17	32	1	0.8	9

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
7	4742	N17-W5	4	CS	17	10	2	0	5
7	4744	N17-W5	4	CS	17	30	53	11.6	5
7	6764	N17-W5	4	CS	17	10	45	27.2	8
7	6766	N17-W5	4	CS	17	30	245	61	8
7	6567	N17-W4	3	CS	17	10	14	1.2	7
7	6572	N17-W4	3	CS	17	30	152	53.5	7
7	9497	N17-W4	5	CS	17	10	6	0.1	12
7	9513	N17-W4	5	CS	17	30	242	125.4	12
7	6825	N16-W8	4	CS	17	10	54	3.2	8
7	6826	N16-W8	4	CS	17	30	68	30.9	8
7	7076	N16-W7	4	CS	17	30	2	1.1	9
7	7079	N16-W7	4	CS	17	10	13	0.9	9
7	7080	N16-W7	4	CS	17	30	20	4.6	9
7	7466	N16-W7	8	CS	17	10	19	2.1	9
7	7471	N16-W7	8	CS	17	30	49	18.2	9
7	3350	N16-W6	3	CS	17	30	219	196.5	4
7	3352	N16-W6	3	CS	17	10	72	14.2	4
7	6781	N16-W6	5	CS	17	30	48	33.4	8
7	6790	N16-W6	5	CS	17	10	23	3.5	8
7	6899	N16-W5	2	CS	17	30	86	61.3	8
7	6901	N16-W5	2	CS	17	10	36	6.8	8
7	7183	N16-W5	5	CS	17	30	2	9.4	9
7	8035	N17-W8	4	CS	18	30	91	17.6	11
7	8037	N17-W8	4	CS	18	10	8	3.1	11
7	7496	N17-W8	5	CS	18	30	37	13.6	9
7	4341	N17-W8	6	CS	18	30	5	2.3	5
7	7957	N17-W8	6	CS	18	30	43	38.6	10
7	7477	N17-W7	6	CS	18	30	128	59	9
7	7478	N17-W7	6	CS	18	10	2	0.8	9
7	4484	N17-W7	7	CS	18	30	15	5.8	5
7	5808	N17-W4	4	CS	18	30	172	128.6	6
7	5904	N17-W4	4	CS	18	30	36	5.3	6
7	7095	N16-W8	5	CS	18	30	17	0.8	9
7	4357	N16-W8	6	CS	18	30	1	0.3	5
7	7437	N16-W7	5	CS	18	10	5	1	9
7	7438	N16-W7	5	CS	18	30	66	13.2	9
7	4465	N16-W7	6	CS	18	10	2	0	5
7	4466	N16-W7	6	CS	18	30	39	1.7	5

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
7	6681	N16-W7	7	CS	18	30	15	54	8
7	7142	N16-W6	4	CS	18	30	50	21.7	9
7	5557	N16-W5	3	CS	18	30	95	14.8	6
7	6932	N16-W5	3	CS	18	10	2	1.6	8
7	6934	N16-W5	3	CS	18	30	84	27.7	8
7	6866	N16-W5	4	CS	18	30	60	26.7	8
7	8233	N17-W8	3	CS	18	10	5	3.9	11
7	8234	N17-W8	3	CS	18	30	45	25.8	11
7	5128	N17-W8	7	CS	18	30	20	8.1	6
7	7409	N17-W7	5	CS	18	10	6	0	9
7	7415	N17-W7	5	CS	18	30	53	25.7	9
7	5158	N17-W7	8	CS	18	30	2	1.9	6
7	6793	N17-W7	8	CS	18	10	3	0.1	8
7	6795	N17-W7	8	CS	18	30	95	108.4	8
7	7011	N17-W6	3	CS	18	30	227	70.9	9
7	7018	N17-W6	3	CS	18	10	14	3.3	9
7	7451	N17-W6	6	CS	18	30	70	77.2	9
7	5260	N17-W6	7	CS	18	30	78	28.8	6
7	7170	N17-W5	3	CS	18	30	281	179.3	9
7	7176	N17-W5	3	CS	18	10	8	1.2	9
7	4743	N17-W5	4	CS	18	30	24	22.1	5
7	6763	N17-W5	4	CS	18	10	9	0.6	8
7	6765	N17-W5	4	CS	18	30	302	126.5	8
7	6771	N17-W5	4	CS	18	20	5	0.2	8
7	6570	N17-W4	3	CS	18	30	97	92.3	7
7	6574	N17-W4	3	CS	18	10	5	0.1	7
7	9473	N17-W4	5	CS	18	10	1	0.1	12
7	9498	N17-W4	5	CS	18	20	2	1.5	12
7	9514	N17-W4	5	CS	18	30	61	84	12
7	6824	N16-W8	4	CS	18	10	11	0.4	8
7	6827	N16-W8	4	CS	18	30	41	21.5	8
7	7072	N16-W7	4	CS	18	10	4	0.1	9
7	7081	N16-W7	4	CS	18	30	26	12.6	9
7	7468	N16-W7	8	CS	18	10	5	0.7	9
7	7470	N16-W7	8	CS	18	30	79	25.6	9
7	3344	N16-W6	3	CS	18	10	3	0	4
7	3351	N16-W6	3	CS	18	30	66	58.7	4
7	6779	N16-W6	5	CS	18	30	34	46.1	8

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
7	6791	N16-W6	5	CS	18	10	5	4	8
7	6900	N16-W5	2	CS	18	10	2	0.4	8
7	6911	N16-W5	2	CS	18	30	94	54.5	8
8	14424	N19-W7	15	CS	17	10	39	1.7	75
8	14425	N19-W7	15	CS	17	30	245	68.9	75
8	17745	N19-W7	15	CS	17	10	1	0	82
8	17747	N19-W7	15	CS	17	30	1	0.1	82
8	14394	N19-W7	16	CS	17	10	14	1.1	75
8	14395	N19-W7	16	CS	17	30	97	24.6	75
8	16488	N19-W7	16	CS	17	30	4	0.1	80
8	14145	N19-W7	17	CS	17	10	9	0.4	75
8	14146	N19-W7	17	CS	17	20	2	0.8	75
8	14147	N19-W7	17	CS	17	30	22	3	75
8	13106	N19-W7	18	CS	17	10	7	0.9	72
8	13107	N19-W7	18	CS	17	30	21	3.1	72
8	16873	N19-W7	18	CS	17	10	1	0	81
8	16874	N19-W7	18	CS	17	20	1	0	81
8	7754	N19-W6	15	CS	17	30	194	39.2	10
8	7756	N19-W6	15	CS	17	10	16	1.3	10
8	14079	N19-W6	15	CS	17	30	409	146.6	74
8	14083	N19-W6	15	CS	17	10	38	2	74
8	16810	N19-W6	15	CS	17	30	3	0.2	81
8	14544	N19-W6	16	CS	17	10	14	0.8	76
8	14545	N19-W6	16	CS	17	30	104	30.2	76
8	15382	N19-W6	16	CS	17	20	1	0.2	78
8	15384	N19-W6	16	CS	17	30	6	0.3	78
8	15394	N19-W6	16	CS	17	10	1	0.1	78
8	15395	N19-W6	16	CS	17	30	9	1.8	78
8	7762	N19-W6	17	CS	17	10	5	0.2	10
8	7766	N19-W6	17	CS	17	30	48	14.4	10
8	16521	N19-W6	17	CS	17	30	1	0	81
8	14313	N19-W5	13	CS	17	30	184	77	75
8	14314	N19-W5	13	CS	17	10	18	2.5	75
8	14181	N19-W5	14	CS	17	10	23	2.8	75
8	14192	N19-W5	14	CS	17	30	442	114.1	75
8	17048	N19-W5	14	CS	17	30	3	0.1	81
8	16036	N19-W5	15	CS	17	10	1	0	80
8	14221	N19-W5	16	CS	17	10	32	1	75

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
8	14228	N19-W5	16	CS	17	30	525	103.7	75
8	16284	N19-W5	16	CS	17	30	1	0.1	80
8	14337	N19-W5	17	CS	17	10	38	2.1	75
8	14345	N19-W5	17	CS	17	30	488	123.2	75
8	16078	N19-W5	17	CS	17	10	3	0	80
8	16080	N19-W5	17	CS	17	30	4	0.5	80
8	7669	N19-W5	18	CS	17	10	28	1.2	10
8	7670	N19-W5	18	CS	17	30	310	96.5	10
8	17711	N19-W5	18	CS	17	10	1	0	82
8	17712	N19-W5	18	CS	17	30	2	0	82
8	14347	N19-W5	19	CS	17	30	375	104.3	75
8	14357	N19-W5	19	CS	17	10	28	1.1	75
8	17867	N19-W5	19	CS	17	10	3	0	83
8	17869	N19-W5	19	CS	17	30	11	0.6	83
8	14232	N19-W5	20	CS	17	10	21	0.7	75
8	14236	N19-W5	20	CS	17	30	219	83.5	75
8	15820	N19-W5	20	CS	17	30	2	0.2	79
8	14067	N19-W5	21	CS	17	30	194	33.3	74
8	14072	N19-W5	21	CS	17	10	19	0.8	74
8	16716	N19-W5	21	CS	17	30	1	0	81
8	7675	N19-W5	22	CS	17	30	102	11.1	10
8	7679	N19-W5	22	CS	17	10	13	0.4	10
8	16838	N19-W5	22	CS	17	30	1	0	81
8	14301	N19-W5	23	CS	17	30	136	32.2	75
8	14309	N19-W5	23	CS	17	10	19	0.7	75
8	16644	N19-W5	23	CS	17	30	2	0.1	81
8	14611	N19-W5	24	CS	17	10	5	1.1	76
8	14614	N19-W5	24	CS	17	30	150	21.8	76
8	14063	N19-W5	25	CS	17	10	10	1	74
8	14064	N19-W5	25	CS	17	30	139	26.7	74
8	15368	N19-W5	25	CS	17	20	2	1.1	78
8	15369	N19-W5	25	CS	17	30	2	0	78
8	14426	N19-W7	15	CS	18	10	6	0.3	75
8	14427	N19-W7	15	CS	18	30	71	10.8	75
8	14396	N19-W7	16	CS	18	30	45	11.4	75
8	14148	N19-W7	17	CS	18	30	7	0.4	75
8	13108	N19-W7	18	CS	18	10	1	0.1	72
8	13109	N19-W7	18	CS	18	30	15	2	72

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
8	7738	N19-W6	15	CS	18	30	253	85.5	10
8	7739	N19-W6	15	CS	18	10	2	0.2	10
8	14075	N19-W6	15	CS	18	30	220	80.8	74
8	16811	N19-W6	15	CS	18	20	2	0.3	81
8	14546	N19-W6	16	CS	18	30	33	11.7	76
8	14547	N19-W6	16	CS	18	20	2	0.6	76
8	15385	N19-W6	16	CS	18	30	10	0.3	78
8	15396	N19-W6	16	CS	18	30	2	1.7	78
8	7758	N19-W6	17	CS	18	30	51	22.6	10
8	7761	N19-W6	17	CS	18	10	1	0.1	10
8	14312	N19-W5	13	CS	18	30	131	36.3	75
8	16772	N19-W5	13	CS	18	30	2	0.1	81
8	14182	N19-W5	14	CS	18	10	3	0.1	75
8	14183	N19-W5	14	CS	18	20	2	0.2	75
8	14191	N19-W5	14	CS	18	30	271	40	75
8	14222	N19-W5	16	CS	18	10	7	0.9	75
8	14229	N19-W5	16	CS	18	30	219	54.5	75
8	14336	N19-W5	17	CS	18	10	2	0.2	75
8	14339	N19-W5	17	CS	18	30	147	48.9	75
8	16081	N19-W5	17	CS	18	30	1	0	80
8	7671	N19-W5	18	CS	18	10	4	0	10
8	7672	N19-W5	18	CS	18	30	269	41.2	10
8	14348	N19-W5	19	CS	18	30	97	36.8	75
8	14233	N19-W5	20	CS	18	10	3	0.1	75
8	14235	N19-W5	20	CS	18	30	122	25.8	75
8	14065	N19-W5	21	CS	18	30	135	32.6	74
8	7676	N19-W5	22	CS	18	30	37	4.7	10
8	7680	N19-W5	22	CS	18	10	3	0	10
8	14304	N19-W5	23	CS	18	30	50	30.7	75
8	16643	N19-W5	23	CS	18	30	2	0.1	81
8	14612	N19-W5	24	CS	18	10	1	0	76
8	14615	N19-W5	24	CS	18	30	83	13	76
8	17059	N19-W5	24	CS	18	50	4	1.1	81
8	14062	N19-W5	25	CS	18	30	59	54.3	74
8	15370	N19-W5	25	CS	18	30	5	0.1	78
9	5583	N17-W4	51	CS	17	30	1	0.2	6
9	17260	N17-W4	52	CS	17	30	2	0.2	81
9	12778	N17-W4	53	CS	17	10	1	0.1	71

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
9	12780	N17-W4	53	CS	17	30	9	1.3	71
9	5584	N17-W4	51	CS	18	30	1	0	6
9	12777	N17-W4	53	CS	18	10	3	0.3	71
9	12779	N17-W4	53	CS	18	30	3	9.9	71
10&11	9166	N17-W7	10	CS	17	30	103	18.5	12
10&11	9167	N17-W7	10	CS	17	10	32	2.5	12
10&11	5940	N17-W7	11	CS	17	30	41	20.2	6
10&11	5941	N17-W7	11	CS	17	10	10	0.5	6
10&11	7153	N17-W7	12	CS	17	30	24	9.5	9
10&11	7157	N17-W7	12	CS	17	10	6	0.5	9
10&11	8858	N17-W7	13	CS	17	10	1	0	11
10&11	8860	N17-W7	13	CS	17	30	18	16	11
10&11	6409	N17-W8	9	CS	17	30	27	15.5	7
10&11	6415	N17-W8	9	CS	17	10	5	0.1	7
10&11	10271	N17-W8	10	CS	17	30	23	4.6	14
10&11	8951	N17-W6	9	CS	17	10	16	1.2	11
10&11	8986	N17-W6	9	CS	17	30	89	55.6	11
10&11	9161	N17-W6	10	CS	17	10	21	3.9	12
10&11	9162	N17-W6	10	CS	17	30	74	22.7	12
10&11	8360	N17-W6	11	CS	17	10	13	1.4	11
10&11	8363	N17-W6	11	CS	17	30	71	12.2	11
10&11	6975	N17-W6	12	CS	17	30	58	53.1	8
10&11	6978	N17-W6	12	CS	17	10	6	2.8	8
10&11	9009	N17-W6	13	CS	17	10	1	0.1	12
10&11	9025	N17-W6	13	CS	17	30	36	48.2	12
10&11	6187	N17-W5	6	CS	17	30	75	44.7	7
10&11	6241	N17-W5	6	CS	17	10	9	1.5	7
10&11	6661	N17-W5	6	CS	17	30	77	22.8	8
10&11	6663	N17-W5	6	CS	17	10	24	4.5	8
10&11	5648	N17-W5	7	CS	17	30	39	9.6	6
10&11	5651	N17-W5	7	CS	17	50	1	1.9	6
10&11	5653	N17-W5	7	CS	17	10	3	0.3	6
10&11	7103	N17-W5	7	CS	17	10	25	1.1	9
10&11	7108	N17-W5	7	CS	17	30	121	39.9	9
10&11	6095	N17-W5	8	CS	17	10	18	1.9	7
10&11	6112	N17-W5	8	CS	17	30	191	61.1	7
10&11	8767	N17-W5	9	CS	17	10	20	1.3	11
10&11	8769	N17-W5	9	CS	17	30	1	0.9	11

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
10&11	8772	N17-W5	9	CS	17	30	229	81.1	11
10&11	6697	N17-W5	10	CS	17	30	215	122.2	8
10&11	6701	N17-W5	10	CS	17	10	18	3.9	8
10&11	6582	N17-W4	6	CS	17	10	2	0.5	7
10&11	6583	N17-W4	6	CS	17	30	87	36.8	7
10&11	5507	N16-W7	10	CS	17	30	22	15	6
10&11	5509	N16-W7	10	CS	17	10	4	1	6
10&11	8841	N16-W7	11	CS	17	30	12	10.4	11
10&11	8842	N16-W7	11	CS	17	10	2	0	11
10&11	8369	N16-W6	10	CS	17	30	75	93.5	11
10&11	8373	N16-W6	10	CS	17	10	16	2.7	11
10&11	8596	N16-W6	11	CS	17	10	5	11.8	11
10&11	8598	N16-W6	11	CS	17	30	44	10.7	11
10&11	6965	N16-W6	12	CS	17	30	4	9.6	8
10&11	6966	N16-W6	12	CS	17	10	2	0.3	8
10&11	5528	N16-W5	8	CS	17	10	9	1	6
10&11	5531	N16-W5	8	CS	17	30	97	26.2	6
10&11	5675	N16-W5	9	CS	17	30	46	12.8	6
10&11	5679	N16-W5	9	CS	17	10	7	1.5	6
10&11	8514	N17-W7	9	CS	17	10	21	1.4	11
10&11	8517	N17-W7	9	CS	17	30	69	26.8	11
10&11	5126	N17-W8	7	CS	17	10	11	1.2	6
10&11	5127	N17-W8	7	CS	17	30	85	42.4	6
10&11	4691	N17-W8	8	CS	17	30	48	10.8	5
10&11	4717	N17-W8	8	CS	17	10	1	0	5
10&11	14600	N17-W8	11	CS	17	10	43	5.1	76
10&11	14603	N17-W8	11	CS	17	10	25	2	76
10&11	14606	N17-W8	11	CS	17	30	39	44.7	76
10&11	16086	N17-W8	11	CS	17	10	1	0.1	80
10&11	16087	N17-W8	11	CS	17	10	2	0.1	80
10&11	16090	N17-W8	11	CS	17	10	1	0	80
10&11	16092	N17-W8	11	CS	17	30	1	0	80
10&11	4360	N17-W6	8	CS	17	30	25	7.6	5
10&11	4362	N17-W6	8	CS	17	10	7	0.6	5
10&11	5447	N17-W6	8	CS	17	30	317	79.4	6
10&11	5449	N17-W6	8	CS	17	10	65	3.8	6
10&11	4742	N17-W5	4	CS	17	10	2	0	5
10&11	4744	N17-W5	4	CS	17	30	53	11.6	5

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
10&11	6764	N17-W5	4	CS	17	10	45	27.3	8
10&11	6766	N17-W5	4	CS	17	30	245	64	8
10&11	5621	N17-W5	5	CS	17	30	65	36.5	6
10&11	5622	N17-W5	5	CS	17	10	5	0.1	6
10&11	6402	N17-W5	5	CS	17	10	4	0	7
10&11	6407	N17-W5	5	CS	17	30	16	2.2	7
10&11	9255	N17-W5	11	CS	17	30	190	41.7	12
10&11	9260	N17-W5	11	CS	17	10	12	0.4	12
10&11	9326	N17-W5	11	CS	17	10	4	0.3	12
10&11	8021	N17-W5	12	CS	17	30	279	74.9	11
10&11	8023	N17-W5	12	CS	17	10	23	1.6	11
10&11	9035	N17-W5	13	CS	17	10	3	0.1	12
10&11	9058	N17-W5	13	CS	17	10	2	0.1	12
10&11	9060	N17-W5	13	CS	17	32	3	50.4	12
10&11	9062	N17-W5	13	CS	17	30	87	48.1	12
10&11	9497	N17-W4	5	CS	17	10	6	0.2	12
10&11	9513	N17-W4	5	CS	17	30	242	126.1	12
10&11	8872	N17-W4	7	CS	17	10	1	1.2	11
10&11	8905	N17-W4	7	CS	17	10	8	0.5	11
10&11	9517	N17-W4	8	CS	17	30	105	68.8	12
10&11	9563	N17-W4	8	CS	17	10	9	0.3	12
10&11	8612	N17-W4	9	CS	17	10	10	0.3	11
10&11	8613	N17-W4	9	CS	17	30	145	76.8	11
10&11	8614	N17-W4	9	CS	17	50	1	0.8	11
10&11	8645	N17-W4	9	CS	17	30	1	0.9	11
10&11	8687	N17-W4	9	CS	17	30	1	5.8	11
10&11	9359	N17-W4	10	CS	17	32	1	0.2	12
10&11	9361	N17-W4	10	CS	17	32	1	0	12
10&11	9409	N17-W4	10	CS	17	10	4	0	12
10&11	9418	N17-W4	10	CS	17	30	119	122.8	12
10&11	5136	N16-W8	7	CS	17	30	6	1.3	6
10&11	4867	N16-W8	8	CS	17	30	3	0	5
10&11	5592	N16-W7	9	CS	17	30	17	3.2	6
10&11	5595	N16-W7	9	CS	17	10	9	0.6	6
10&11	6983	N16-W6	8	CS	17	30	137	57.8	8
10&11	6986	N16-W6	8	CS	17	10	23	2.1	8
10&11	5740	N16-W6	9	CS	17	10	9	0.6	6
10&11	5746	N16-W6	9	CS	17	30	51	22.2	6

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
10&11	6151	N16-W5	7	CS	17	30	34	8.2	7
10&11	6152	N16-W5	7	CS	17	10	3	0.1	7
10&11	8811	N16-W5	10	CS	17	10	10	0.5	11
10&11	8812	N16-W5	10	CS	17	30	62	17.7	11
10&11	9168	N17-W7	10	CS	18	30	127	29.8	12
10&11	5939	N17-W7	11	CS	18	30	47	16.5	6
10&11	7155	N17-W7	12	CS	18	30	24	5	9
10&11	8859	N17-W7	13	CS	18	10	1	0	11
10&11	8861	N17-W7	13	CS	18	30	7	1.8	11
10&11	6414	N17-W8	9	CS	18	30	27	11.5	7
10&11	6416	N17-W8	9	CS	18	10	1	1.8	7
10&11	10260	N17-W8	10	CS	18	30	12	1.9	14
10&11	8987	N17-W6	9	CS	18	30	74	17.8	11
10&11	9163	N17-W6	10	CS	18	30	77	51.8	12
10&11	8361	N17-W6	11	CS	18	10	2	0.1	11
10&11	8364	N17-W6	11	CS	18	30	97	24.7	11
10&11	6977	N17-W6	12	CS	18	30	82	29.2	8
10&11	6188	N17-W5	6	CS	18	30	120	30.4	7
10&11	6662	N17-W5	6	CS	18	30	59	14.6	8
10&11	6665	N17-W5	6	CS	18	10	2	0.5	8
10&11	5652	N17-W5	7	CS	18	10	1	0	6
10&11	5654	N17-W5	7	CS	18	30	36	7.9	6
10&11	7104	N17-W5	7	CS	18	10	3	0.1	9
10&11	7109	N17-W5	7	CS	18	30	77	26.8	9
10&11	6101	N17-W5	8	CS	18	10	1	0	7
10&11	6113	N17-W5	8	CS	18	30	131	85.5	7
10&11	8739	N17-W5	9	CS	18	10	1	0.1	11
10&11	8771	N17-W5	9	CS	18	30	87	138.9	11
10&11	6704	N17-W5	10	CS	18	30	216	109.6	8
10&11	6578	N17-W4	6	CS	18	30	61	18.8	7
10&11	5508	N16-W7	10	CS	18	30	20	46.1	6
10&11	8840	N16-W7	11	CS	18	30	7	1.1	11
10&11	8368	N16-W6	10	CS	18	30	92	16.5	11
10&11	8374	N16-W6	10	CS	18	10	3	0	11
10&11	8597	N16-W6	11	CS	18	30	16	1.3	11
10&11	6964	N16-W6	12	CS	18	30	2	10.7	8
10&11	5527	N16-W5	8	CS	18	10	2	0.3	6
10&11	5530	N16-W5	8	CS	18	30	24	42.5	6

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
10&11	5676	N16-W5	9	CS	18	30	24	33.4	6
10&11	8518	N17-W7	9	CS	18	30	78	17.9	11
10&11	5128	N17-W8	7	CS	18	30	20	8.4	6
10&11	4714	N17-W8	8	CS	18	30	26	5.4	5
10&11	14601	N17-W8	11	CS	18	10	26	3.3	76
10&11	14604	N17-W8	11	CS	18	10	54	2	76
10&11	14607	N17-W8	11	CS	18	30	72	76.1	76
10&11	16091	N17-W8	11	CS	18	20	1	0.3	80
10&11	4361	N17-W6	8	CS	18	30	23	6.4	5
10&11	5446	N17-W6	8	CS	18	30	66	46.6	6
10&11	5448	N17-W6	8	CS	18	10	2	0.1	6
10&11	4743	N17-W5	4	CS	18	30	24	22.1	5
10&11	6763	N17-W5	4	CS	18	10	9	0.6	8
10&11	6765	N17-W5	4	CS	18	30	302	129.4	8
10&11	6771	N17-W5	4	CS	18	20	5	0.1	8
10&11	5620	N17-W5	5	CS	18	30	41	79.2	6
10&11	6406	N17-W5	5	CS	18	30	15	0.9	7
10&11	9254	N17-W5	11	CS	18	30	138	60.8	12
10&11	8020	N17-W5	12	CS	18	30	264	295.8	11
10&11	8026	N17-W5	12	CS	18	10	1	0	11
10&11	9061	N17-W5	13	CS	18	30	86	54.7	12
10&11	9473	N17-W4	5	CS	18	10	1	0	12
10&11	9498	N17-W4	5	CS	18	20	2	1.5	12
10&11	9514	N17-W4	5	CS	18	30	61	84.3	12
10&11	9519	N17-W4	8	CS	18	30	93	89.3	12
10&11	9555	N17-W4	8	CS	18	30	1	28.8	12
10&11	8616	N17-W4	9	CS	18	30	89	85.9	11
10&11	9411	N17-W4	10	CS	18	30	60	37	12
10&11	5155	N16-W8	8	CS	18	30	6	0.4	6
10&11	5591	N16-W7	9	CS	18	30	17	2	6
10&11	5594	N16-W7	9	CS	18	10	3	0.4	6
10&11	6984	N16-W6	8	CS	18	30	84	45.3	8
10&11	6987	N16-W6	8	CS	18	10	4	0.3	8
10&11	5745	N16-W6	9	CS	18	30	40	77.4	6
10&11	6149	N16-W5	7	CS	18	30	30	110.3	7
10&11	8813	N16-W5	10	CS	18	30	18	51.1	11
12	23866	N1057-E975	32	CS	17	30	14	1.4	149
12	23784	N1057-E976	33	CS	17	30	9	4	149

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
12	23874	N1057-E976	33	CS	17	30	12	2.1	153
12	22848	N1057-E978	31	CS	17	30	36	10.2	138
12	22851	N1057-E978	31	CS	17	10	4	0.6	138
12	23813	N1057-E978	31	CS	17	30	7	26.4	153
12	23815	N1057-E978	31	CS	17	10	1	0	153
12	24007	N1057-E979	32	CS	17	30	7	1.5	153
12	23954	N1057-E981	32	CS	17	30	13	1.2	153
12	23506	N1057-E982	38	CS	17	30	1	1.5	122
12	22736	N1057-E982	39	CS	17	30	1	0	138
12	22116	N1057-E983	34	CS	17	30	2	0.6	115
12	22029	N1057-E983	35	CS	17	30	4	0.2	113
12	23120	N1057-E975	29	CS	17	30	13	2.9	140
12	23186	N1057-E975	30	CS	17	30	17	9.3	137
12	23982	N1057-E975	31	CS	17	30	5	0.3	153
12	23932	N1057-E976	29	CS	17	30	24	38.9	155
12	23996	N1057-E976	30	CS	17	30	8	5.8	153
12	25238	N1057-E976	30	CS	17	30	3	0.4	206
12	23963	N1057-E976	31	CS	17	30	10	0.7	153
12	23775	N1057-E976	32	CS	17	30	14	1	149
12	24565	N1057-E976	34	CS	17	30	2	0.9	157
12	24583	N1057-E976	34	CS	17	10	1	0	157
12	23087	N1057-E977	30	CS	17	30	17	3.6	137
12	23103	N1057-E977	31	CS	17	30	23	14	138
12	24585	N1057-E977	32	CS	17	30	30	11.8	157
12	24588	N1057-E977	32	CS	17	10	2	0.2	157
12	24771	N1057-E978	30	CS	17	30	29	56.1	179
12	24772	N1057-E978	30	CS	17	10	3	3.9	179
12	23902	N1057-E978	32	CS	17	30	6	1.5	153
12	23925	N1057-E979	31	CS	17	30	17	5.8	155
12	23928	N1057-E979	31	CS	17	10	5	0.1	155
12	24002	N1057-E980	32	CS	17	30	4	1.7	153
12	24044	N1057-E980	33	CS	17	10	3	0	155
12	24046	N1057-E980	33	CS	17	30	12	9.5	155
12	22625	N1057-E981	30	CS	17	30	5	0.3	123
12	24154	N1057-E981	31	CS	17	10	2	0.9	154
12	24155	N1057-E981	31	CS	17	30	8	1.7	154
12	25245	N1057-E981	31	CS	17	10	3	0	206
12	24014	N1057-E981	34	CS	17	30	7	1.4	155

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
12	24384	N1057-E982	34	CS	17	30	14	1.2	156
12	24398	N1057-E983	31	CS	17	10	1	0	161
12	24400	N1057-E983	31	CS	17	30	23	2.6	161
12	24261	N1057-E983	32	CS	17	30	10	3.1	156
12	24356	N1057-E983	32	CS	17	30	3	0.3	156
12	22109	N1057-E983	33	CS	17	30	11	0.8	113
12	22107	N1057-E983	36	CS	17	30	2	0.8	113
12	23282	N1057-E984	30	CS	17	30	4	0.1	122
12	23284	N1057-E984	30	CS	17	10	1	0	122
12	24310	N1057-E984	31	CS	17	30	1	0	157
12	23518	N1057-E984	33	CS	17	30	2	0	119
12	23867	N1057-E975	32	CS	18	30	14	12.9	153
12	23875	N1057-E976	33	CS	18	30	28	14.5	153
12	22849	N1057-E978	31	CS	18	30	14	6.2	138
12	23812	N1057-E978	31	CS	18	30	3	1.2	153
12	24008	N1057-E979	32	CS	18	30	3	2.5	153
12	23955	N1057-E981	32	CS	18	30	1	1.9	153
12	22647	N1057-E982	35	CS	18	30	1	0.7	123
12	22117	N1057-E983	34	CS	18	30	2	2.1	115
12	22030	N1057-E983	35	CS	18	30	7	8.9	113
12	23121	N1057-E975	29	CS	18	30	8	7.8	140
12	23188	N1057-E975	30	CS	18	30	3	1.5	137
12	23981	N1057-E975	31	CS	18	30	7	1.5	153
12	23933	N1057-E976	29	CS	18	30	21	10.3	155
12	25237	N1057-E976	30	CS	18	30	6	3	206
12	23962	N1057-E976	31	CS	18	30	3	1.2	153
12	24581	N1057-E976	34	CS	18	30	4	3.3	157
12	23088	N1057-E977	30	CS	18	30	28	5.9	137
12	23105	N1057-E977	31	CS	18	30	16	7.4	138
12	24586	N1057-E977	32	CS	18	30	19	12.2	157
12	24773	N1057-E978	30	CS	18	30	10	13.7	179
12	24774	N1057-E978	30	CS	18	10	1	3.9	179
12	23923	N1057-E979	31	CS	18	30	4	3.9	155
12	23918	N1057-E979	33	CS	18	30	1	4.9	153
12	23891	N1057-E980	34	CS	18	30	2	0.3	153
12	22626	N1057-E981	30	CS	18	30	5	0.6	123
12	25228	N1057-E981	31	CS	18	30	7	1.4	206
12	24013	N1057-E981	34	CS	18	30	3	5	155

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
12	25241	N1057-E983	31	CS	18	30	2	0.3	206
12	22110	N1057-E983	33	CS	18	30	10	0.6	113
12	23283	N1057-E984	30	CS	18	30	1	0	122
13	22744	N1057-E972	19	CS	17	30	3	3	137
13	22688	N1057-E972	20	CS	17	30	6	0.4	137
13	23593	N1057-E973	19	CS	17	10	1	0.2	124
13	23259	N1057-E973	20	CS	17	30	4	0	122
13	23279	N1057-E973	21	CS	17	30	7	4.8	122
13	23503	N1057-E974	21	CS	17	30	4	0.8	122
13	23505	N1057-E974	21	CS	17	10	1	0	122
13	22936	N1057-E974	22	CS	17	30	20	4.3	141
13	22917	N1057-E974	23	CS	17	30	3	0.2	141
13	24540	N1057-E975	18	CS	17	10	2	0	157
13	24542	N1057-E975	18	CS	17	30	10	1.4	157
13	23318	N1057-E976	20	CS	17	10	1	0	122
13	23320	N1057-E976	20	CS	17	30	15	1.6	122
13	23272	N1057-E976	21	CS	17	30	24	1.6	137
13	22966	N1057-E976	22	CS	17	30	6	2.1	139
13	22921	N1057-E976	23	CS	17	30	12	2	137
13	22824	N1057-E976	24	CS	17	30	22	6.1	137
13	22899	N1057-E976	24	CS	17	30	10	2.5	138
13	23346	N1057-E977	20	CS	17	30	4	1.2	122
13	22429	N1057-E978	21	CS	17	30	13	2.1	112
13	22748	N1057-E972	18	CS	17	30	7	0.4	138
13	23487	N1057-E972	21	CS	17	30	14	2.4	122
13	23489	N1057-E972	21	CS	17	10	2	0	122
13	22941	N1057-E973	17	CS	17	30	9	1.1	138
13	22760	N1057-E973	18	CS	17	30	14	1.2	138
13	23173	N1057-E974	20	CS	17	30	2	3.5	122
13	23175	N1057-E974	20	CS	17	10	1	0	122
13	22876	N1057-E974	24	CS	17	10	18	4.1	140
13	22879	N1057-E974	24	CS	17	10	1	0	140
13	24287	N1057-E975	17	CS	17	30	59	14	156
13	24290	N1057-E975	17	CS	17	10	2	0.8	156
13	22857	N1057-E975	19	CS	17	30	10	2.6	138
13	23047	N1057-E975	20	CS	17	30	8	0.8	122
13	23050	N1057-E975	20	CS	17	10	2	0	122
13	23180	N1057-E975	21	CS	17	30	16	2.5	124

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Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
13	23091	N1057-E975	22	CS	17	30	16	4.2	137
13	23231	N1057-E975	23	CS	17	30	13	0.7	140
13	22808	N1057-E975	24	CS	17	30	10	1.5	139
13	22837	N1057-E975	25	CS	17	30	16	2.9	138
13	22801	N1057-E976	17	CS	17	30	27	16.7	139
13	22804	N1057-E976	17	CS	17	10	2	0.7	139
13	23230	N1057-E976	18	CS	17	30	26	21.1	124
13	23533	N1057-E976	18	CS	17	10	5	0.4	124
13	23434	N1057-E976	19	CS	17	30	7	2.6	122
13	23435	N1057-E976	19	CS	17	10	1	0	122
13	23312	N1057-E977	19	CS	17	10	1	0	122
13	23315	N1057-E977	19	CS	17	30	9	2.9	122
13	24613	N1057-E977	21	CS	17	30	11	0.6	161
13	23945	N1057-E978	18	CS	17	30	16	4.2	154
13	24039	N1057-E978	19	CS	17	30	26	6.1	154
13	24036	N1057-E978	20	CS	17	30	16	2	154
13	23596	N1057-E978	22	CS	17	30	15	2.3	148
13	22745	N1057-E972	19	CS	18	30	5	2.5	137
13	22689	N1057-E972	20	CS	18	30	7	5.8	137
13	23594	N1057-E973	19	CS	18	30	21	15.5	124
13	23260	N1057-E973	20	CS	18	30	24	12.9	122
13	23281	N1057-E973	21	CS	18	30	5	1.5	122
13	23504	N1057-E974	21	CS	18	30	5	1.2	122
13	22937	N1057-E974	22	CS	18	30	17	17.6	141
13	22918	N1057-E974	23	CS	18	30	3	1.4	141
13	24543	N1057-E975	18	CS	18	30	5	2.4	157
13	23561	N1057-E976	20	CS	18	30	14	2	122
13	23273	N1057-E976	21	CS	18	30	4	0.5	137
13	22967	N1057-E976	22	CS	18	30	19	7.3	139
13	22922	N1057-E976	23	CS	18	30	8	0.8	137
13	22825	N1057-E976	24	CS	18	30	7	1.3	137
13	22900	N1057-E976	24	CS	18	30	3	2.8	138
13	23347	N1057-E977	20	CS	18	30	6	16.3	122
13	22430	N1057-E978	21	CS	18	30	7	1.3	112
13	22749	N1057-E972	18	CS	18	30	1	0.2	138
13	22750	N1057-E972	18	CS	18	10	1	0.1	138
13	23488	N1057-E972	21	CS	18	30	15	13.3	122
13	22942	N1057-E973	17	CS	18	30	8	2.8	138

Appendix D: Shatter Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Count	Weight (g)	Box
13	22761	N1057-E973	18	CS	18	30	13	4.3	138
13	23174	N1057-E974	20	CS	18	30	1	0.6	122
13	22877	N1057-E974	24	CS	18	10	13	4.9	140
13	24288	N1057-E975	17	CS	18	30	12	6.8	156
13	22858	N1057-E975	19	CS	18	30	13	5.8	138
13	23048	N1057-E975	20	CS	18	30	2	6.4	122
13	23181	N1057-E975	21	CS	18	30	8	7.1	124
13	23092	N1057-E975	22	CS	18	30	18	18.6	137
13	23232	N1057-E975	23	CS	18	30	8	3.3	140
13	22809	N1057-E975	24	CS	18	30	1	0	139
13	22838	N1057-E975	25	CS	18	30	16	11.8	138
13	22802	N1057-E976	17	CS	18	30	11	1.7	139
13	23531	N1057-E976	18	CS	18	30	43	18.3	124
13	23436	N1057-E976	19	CS	18	30	4	4	122
13	23316	N1057-E977	19	CS	18	30	8	4	122
13	24612	N1057-E977	21	CS	18	30	7	0.7	161
13	23946	N1057-E978	18	CS	18	30	1	0.3	154
13	24040	N1057-E978	19	CS	18	30	2	0.1	154
13	24037	N1057-E978	20	CS	18	30	5	1.7	154
13	23595	N1057-E978	22	CS	18	30	7	1.2	148

APPENDIX E

PROXIMAL FLAKE DATA

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
1	21411.13	N1057-E981	26	CS	14	30	1	34.12	10.78	2.83	5.28	1.59	N	N	92
1	21411.60	N1057-E981	26	CS	14	30	0.1	10.97	9.67	0.93	2.72	0.88	N	Y	92
1	21411.74	N1057-E981	26	CS	14	30	0.1	14.79	10.37	1.1	3.3	1.45	N	Y	92
1	21411.93	N1057-E981	26	CS	14	30	0.4	20.53	11.01	1.38	4.22	1.56	N	Y	92
1	21411.112	N1057-E981	26	CS	14	30	0.4	14.53	16.74	1.48	4.22	1.3	N	N	92
1	21411.115	N1057-E981	26	CS	14	30	0.3	18.43	12.45	1.18	4.41	1.57	N	Y	92
1	21411.136	N1057-E981	26	CS	14	30	0	5.22	8.22	0.98	2.15	0.71	N	N	92
1	21411.138	N1057-E981	26	CS	14	30	0.1	14.13	6.31	1.46	2.72	1.58	N	N	92
1	21411.163	N1057-E981	26	CS	14	30	0	8.84	6.23	0.79	3.03	1.27	N	Y	92
1	21411.196	N1057-E981	26	CS	14	30	0	6.12	7.86	0.83	3.02	0.8	N	Y	92
1	21411.220	N1057-E981	26	CS	14	30	0	5.32	6.31	1.07	3.53	0.88	N	Y	92
1	21411.226	N1057-E981	26	CS	14	30	0	6.11	6.32	0.54	4.48	1.04	N	N	92
1	21625.42	N1057-E981	27	CS	14	30	0.2	13.47	10.9	1.3	7.1	2.61	N	N	93
1	21625.87	N1057-E981	27	CS	14	30	0.2	14.43	9.63	1.68	4.49	2.21	N	N	93
1	21625.110	N1057-E981	27	CS	14	30	0	9.21	10.01	1.46	2.73	2.38	N	N	93
1	21625.151	N1057-E981	27	CS	14	30	0.4	14.51	12.35	1.51	3.15	1.34	N	Y	93
1	21625.162	N1057-E981	27	CS	14	30	0.6	11.57	17.23	1.93	8.33	2.01	N	Y	93
1	22337.8	N1057-E982	30	CS	14	30	0.2	11.82	10.66	1.49	5.35	1.93	N	Y	119
1	22337.11	N1057-E982	30	CS	14	30	0	5.78	5.4	0.49	2.78	1.02	N	Y	119
1	22337.27	N1057-E982	30	CS	14	30	0.1	9.84	10.11	1.7	4.07	1.18	N	Y	119
1	22337.30	N1057-E982	30	CS	14	30	0	7.05	6.8	0.54	3.37	1.34	N	Y	119
1	22337.31	N1057-E982	30	CS	14	30	0	7.93	7.57	0.93	1.87	0.83	N	Y	119
1	21138.11	N1057-E984	23	CS	14	30	1.8	24.08	29.23	2.27	7.59	2.1	N	Y	91
1	21138.29	N1057-E984	23	CS	14	30	0	6.28	6.38	0.93	3.75	1.16	N	N	91
1	21138.30	N1057-E984	23	CS	14	30	0.1	9.16	13.93	1.04	6.65	1.17	N	Y	91
1	21138.63	N1057-E984	23	CS	14	30	0.2	14.66	9.69	1.25	4.3	1.37	N	N	91
1	21138.67	N1057-E984	23	CS	14	30	1	28.34	17.05	1.99	4.31	1.38	N	Y	91

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
1	21190.3	N1057-E984	24	CS	14	30	1.3	23.21	18.45	2.94	6.84	1.97	N	Y	91
1	21190.16	N1057-E984	24	CS	14	30	0.7	10.72	22.09	2.84	4.11	1.23	N	N	91
1	21190.24	N1057-E984	24	CS	14	30	0.1	12.86	9.75	0.91	6.89	1.56	N	Y	91
1	21190.30	N1057-E984	24	CS	14	30	0	8.63	8.53	0.57	5.21	0.87	N	Y	91
1	21190.40	N1057-E984	24	CS	14	30	0.5	14.38	19.1	2.11	4.48	1.2	N	Y	91
1	21224.4	N1057-E984	25	CS	14	30	2.6	35.81	22.11	3.07	5.57	1.61	N	N	91
1	21224.29	N1057-E984	25	CS	14	30	0.2	15.86	9.72	1.46	5.29	1.71	N	N	91
1	23907.2	N1057-E980	31	CS	15	30	0	8.58	6.74	0.72	3.5	1.25	N	N	153
1	25258.2	N1057-E984	26	CS	15	30	0.4	24.18	9.6	1.73	2.92	0.98	N	Y	206
1	24486.26	N1057-E982	29	CS	15	30	1.7	34.37	17.33	2.54	6.2	1.82	N	N	161
1	24486.70	N1057-E982	29	CS	15	30	0.6	14.93	17.79	2.6	6.2	2.12	Y	Y	161
1	24486.73	N1057-E982	29	CS	15	30	0	12.79	6.1	0.9	4.85	1.45	N	N	161
1	24486.94	N1057-E982	29	CS	15	30	3.1	20	33.61	4.7	11.54	2.82	N	Y	161
1	24486.113	N1057-E982	29	CS	15	30	0.1	10.89	7.73	1.59	2.55	1.15	N	Y	161
1	24486.149	N1057-E982	29	CS	15	30	0	5.29	6.28	1.26	3.27	1.43	N	Y	161
1	24486.152	N1057-E982	29	CS	15	30	0.3	15.46	8.14	1.92	3.66	1.23	N	Y	161
1	24486.168	N1057-E982	29	CS	15	30	0	4.57	6.45	1.13	2.04	0.67	N	Y	161
1	24486.170	N1057-E982	29	CS	15	30	0	11.05	5.69	1.14	3.82	0.9	N	N	161
1	24486.174	N1057-E982	29	CS	15	30	0.1	12.27	6.17	0.93	3.57	1.43	Y	N	161
1	24486.250	N1057-E982	29	CS	15	30	0.8	19.58	22.5	1.49	6.23	1.48	N	Y	161
1	24486.252	N1057-E982	29	CS	15	30	0	11.98	6.92	0.8	3.43	1.29	N	N	161
1	24486.268	N1057-E982	29	CS	15	30	0.1	9.31	7.2	1.59	4.54	1.4	N	Y	161
1	24486.272	N1057-E982	29	CS	15	30	0.6	25.89	9.32	2.37	5.76	1.71	N	Y	161
1	23236.2	N1057-E984	29	CS	15	30	0.1	8.6	9.15	1.73	6.24	1.06	N	N	141
1	25230.8	N1057-E984	29	CS	15	30	0	5.6	4.46	0.38	2.65	0.9	N	N	206
1	21116.12	N1057-E984	26	CS	14	30	0.2	15.28	9.77	1.29	4.37	1.5	N	Y	91
1	21411.29	N1057-E981	26	CS	14	30	1	24.59	16.91	2.42	5.78	1.39	N	N	92

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
1	21411.130	N1057-E981	26	CS	14	30	0.3	20.79	7.39	1.07	4.36	2.08	N	Y	92
1	21411.243	N1057-E981	26	CS	14	30	0.6	21.41	16.45	1.71	2.98	1.08	N	Y	92
1	21411.253	N1057-E981	26	CS	14	30	0.1	12.53	5.83	1.43	4.04	1.38	N	N	92
1	21625.54	N1057-E981	27	CS	14	30	0.1	11.26	9.47	0.97	4.87	1.6	N	Y	93
1	21625.84	N1057-E981	27	CS	14	30	0.2	18.06	12.25	1.03	4.38	1.32	N	Y	93
1	21625.139	N1057-E981	27	CS	14	30	0	8.41	6.41	1.08	2.95	1.41	N	N	93
1	22393.3	N1057-E982	31	CS	14	30	0.3	12.85	12.05	1.99	6.79	2	N	Y	119
1	21224.2	N1057-E984	25	CS	14	30	0.5	19.36	10.97	2.77	3.44	1.06	N	N	91
1	24486.153	N1057-E982	29	CS	15	30	3.2	45.14	26.68	2.52	6.7	2.41	N	Y	161
1	21116.8	N1057-E984	26	CS	14	30	0.6	16.51	17.58	1.73	4.31	1.61	N	Y	91
1	22557.3	N1057-E981	28	CS	14	30	0	4.93	4.64	0.61	1.91	1	N	N	112
1	21625.109	N1057-E981	27	CS	14	30	0	8.01	6.52	0.81	3.51	0.81	N	Y	93
1	21625.140	N1057-E981	27	CS	14	30	0	6.52	7.3	1.26	5.27	2.13	N	Y	93
1	22337.28	N1057-E982	30	CS	14	30	0	7.01	6.19	0.77	3.25	0.96	N	Y	119
1	23907.3	N1057-E980	31	CS	15	30	0	7.27	5.23	0.57	2.26	0.76	N	N	153
1	24486.108	N1057-E982	29	CS	15	30	0.1	13.86	6.61	1.49	6.38	1.49	Y	Y	161
1	24486.136	N1057-E982	29	CS	15	30	0	6.52	5.68	0.85	3.89	1.14	N	N	161
1	24486.208	N1057-E982	29	CS	15	30	0	5.27	3.45	0.6	3.1	0.41	N	N	161
1	24486.232	N1057-E982	29	CS	15	30	0.1	11.18	7	1.65	4.92	1.46	N	N	161
1	21411.42	N1057-E981	26	CS	14	30	0.3	24.01	9.6	1.62	4.14	1.66	N	Y	92
1	21411.117	N1057-E981	26	CS	14	30	0.1	10.98	8	1.11	3.16	1.06	N	N	92
1	21625.65	N1057-E981	27	CS	14	30	0.1	15.17	6.08	0.93	5.21	1.27	N	N	93
1	21625.93	N1057-E981	27	CS	14	30	0.7	28.39	13.49	1.41	5.06	1.37	N	Y	93
1	21625.123	N1057-E981	27	CS	14	30	5.1	29.84	22.38	3.76	22.18	8.43	N	Y	93
1	22337.47	N1057-E982	30	CS	14	30	1	16.05	18.64	2.43	6.67	2.51	Y	N	119
1	22393.1	N1057-E982	31	CS	14	30	0	7.63	5.78	0.87	4.03	1.22	N	Y	119
1	21224.32	N1057-E984	25	CS	14	30	0.1	9.55	7.95	1.96	2.35	1.04	N	Y	91

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
1	24536.1	N1057-E981	28	CS	15	30	0.1	15.07	7.58	1.1	3.93	1.21	N	N	157
1	24536.19	N1057-E981	28	CS	15	30	0	9.48	5.35	1.21	2.96	1.14	N	N	157
1	24486.225	N1057-E982	29	CS	15	30	0.1	9.03	11.64	1.79	5.36	1.86	N	Y	161
1	21411.7	N1057-E981	26	CS	14	30	2.7	33.27	20.82	2.45	8.16	1.85	N	Y	92
1	21411.27	N1057-E981	26	CS	14	30	2	31.64	24.74	2.27	6.17	1.26	N	N	92
1	21411.85	N1057-E981	26	CS	14	30	0.1	8.33	12.47	1.45	3.51	1.43	N	Y	92
1	21411.169	N1057-E981	26	CS	14	30	2.6	24.64	28.43	3.06	5.51	2.37	Y	N	92
1	21411.198	N1057-E981	26	CS	14	30	0.7	22.31	13.33	1.18	4.15	1.07	N	Y	92
1	21411.204	N1057-E981	26	CS	14	30	0.1	7.66	12.92	1.52	7.61	2.42	N	Y	92
1	21411.257	N1057-E981	26	CS	14	30	1.4	21.5	20.76	2.13	7.93	1.71	Y	Y	92
1	21138.33	N1057-E984	23	CS	14	30	0.3	12.66	13.3	2.28	7.19	1.58	N	N	91
1	21190.47	N1057-E984	24	CS	14	30	2.1	36.06	22.9	2.64	6.79	2.8	N	Y	91
1	24486.178	N1057-E982	29	CS	15	30	0	6.44	5.65	0.71	3.08	0.64	N	Y	161
1	22557.8	N1057-E981	28	CS	14	30	0	8.22	7.59	1.06	2.7	0.97	N	Y	112
1	22557.12	N1057-E981	28	CS	14	30	0	8.98	6.45	0.76	3.49	0.93	N	Y	112
1	21411.110	N1057-E981	26	CS	14	30	0	11.59	7.89	1.01	3.3	1.16	N	Y	92
1	21411.114	N1057-E981	26	CS	14	30	1	15.59	22.38	2.29	7.77	1.25	N	Y	92
1	21411.192	N1057-E981	26	CS	14	30	0.2	11.82	10.73	1.54	3.12	1.43	N	Y	92
1	21625.37	N1057-E981	27	CS	14	30	0	5.6	3.84	0.84	3.78	1.01	N	Y	93
1	21625.57	N1057-E981	27	CS	14	30	0.1	12.81	6.33	1.07	6.3	1.42	N	N	93
1	21190.36	N1057-E984	24	CS	14	30	0.1	9.24	10.27	1.23	4.04	1.02	N	N	91
1	24536.3	N1057-E981	28	CS	15	30	0	7.03	6.3	0.91	3.1	0.64	N	Y	157
1	24536.10	N1057-E981	28	CS	15	30	0	10.47	6.92	0.5	3.54	0.53	Y	N	157
1	24486.88	N1057-E982	29	CS	15	30	0.1	13.01	7.62	1.75	4.76	1.36	N	Y	161
1	24490.7	N1057-E982	29	CS	15	10	0.1	12.34	6.83	0.94	2.98	1.05	N	Y	161
1	21622.1	N1057-E981	27	CS	14	10	0	5.93	5.08	0.68	3.65	1.05	N	Y	93
1	20340.1	N1057-E981	26	CS	14	10	0.1	12.54	5.57	1.01	2.84	1.2	N	Y	88

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
1	23908.4	N1057-E980	31	CS	15	10	0	10.68	6.66	0.88	2.21	0.75	N	Y	153
1	20340.27	N1057-E981	26	CS	14	10	0	6.3	3.95	0.51	2.47	0.71	N	Y	88
1	20340.6	N1057-E981	26	CS	14	10	0	8.2	5.77	0.83	2.51	0.8	N	Y	88
1	24004.1	N1057-E980	32	CS	15	10	0	6.13	6.39	0.5	2.78	0.56	N	Y	153
1	23908.2	N1057-E980	31	CS	15	10	0	6.22	4.33	0.75	2.02	0.68	N	Y	153
1	21622.4	N1057-E981	27	CS	14	10	0.1	11.06	6.77	1.24	4.31	1.37	N	Y	93
1	20340.32	N1057-E981	26	CS	14	10	0	8	4.4	0.64	2.08	0.79	N	Y	88
1	20340.36	N1057-E981	26	CS	14	10	0	8.53	5.27	0.78	2.12	1	N	Y	88
2	7918.17	N17-W5	23	CS	14	30	1.1	24.9	18.61	2.06	3.17	1.42	Y	N	10
2	13134.8	N17-W5	22	CS	14	30	0	7.88	9.15	1.17	4.14	1.2	N	Y	72
2	7543.4	N17-W6	34	CS	14	30	2.7	36.21	18.49	3.14	5.45	1.16	N	Y	10
2	13233.37	N17-W4	24	CS	14	30	2.2	43.38	20.27	2.26	9.5	1.67	N	Y	72
2	14159.8	N17-W4	25	CS	14	30	0.1	12.87	8.59	1.06	2.06	0.87	N	Y	75
2	13134.15	N17-W5	22	CS	14	30	0	11.85	7.19	0.97	2.31	0.83	N	N	72
2	7543.68	N17-W6	34	CS	14	30	0	15.4	5.42	1.22	2.72	0.93	N	Y	10
2	12922.4	N17-W7	37	CS	14	30	1.8	28.61	24.29	2.96	5.61	1.46	N	N	71
2	14151.24	N17-W7	38	CS	14	30	0.3	13.61	11.37	2.94	3.7	1.29	N	Y	75
2	13383.16	N17-W4	26	CS	14	30	0	8.74	6.44	0.7	2.54	1.09	N	Y	72
2	7543.1	N17-W6	34	CS	14	30	0	7.28	6.77	1.68	2.39	0.63	N	N	10
2	13233.32	N17-W4	24	CS	14	30	0.1	8.42	8.15	1.17	3.93	1.22	N	Y	72
2	12365.2	N17-W6	35	CS	14	30	0.3	15.53	11.73	1.67	5.19	1.42	N	N	70
2	7543.66	N17-W6	34	CS	14	30	0.7	18.51	11.05	2.5	7.65	3.46	N	N	10
2	13233.42	N17-W4	24	CS	14	30	0.4	18.72	12.45	1.77	6.15	1.12	N	N	72
2	7918.21	N17-W5	23	CS	14	30	0	8.46	7.28	0.78	2.34	0.98	N	N	10
2	13233.3	N17-W4	24	CS	14	30	0	9.33	6.45	1.02	3.56	1.18	N	N	72
2	12922.40	N17-W7	37	CS	14	30	0	6.76	9.83	1.18	4.98	1.29	N	Y	71
2	14630.5	N17-W7	35	CS	14	30	1.5	17.99	20.6	3.87	5.99	1.62	N	Y	76

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
2	7543.24	N17-W6	34	CS	14	30	0.1	12.66	6.77	1.27	2.88	1.16	N	N	10
2	7918.8	N17-W5	23	CS	14	30	0.1	10.86	10.17	1.49	3.94	1.71	Y	Y	10
2	14159.2	N17-W4	25	CS	14	30	2.5	36.6	34.41	2.37	4.69	1.32	N	N	75
2	14151.34	N17-W7	38	CS	14	30	0	6.45	7.27	1.19	4.02	1.56	N	Y	75
2	14151.31	N17-W7	38	CS	14	30	0.1	10.82	8.27	1.22	2.29	0.71	N	Y	75
2	14151.6	N17-W7	38	CS	14	30	0	5.64	3.54	0.56	2.4	0.75	N	Y	75
2	7543.52	N17-W6	34	CS	14	30	1.7	22.9	19.78	2.92	6.89	1.53	N	Y	10
2	13173.3	N17-W6	33	CS	14	30	4.4	35.43	27.3	3.59	4.75	1.18	N	Y	72
2	7543.53	N17-W6	34	CS	14	30	0.1	11.46	9.42	1.29	1.9	1.33	N	Y	10
2	7543.57	N17-W6	34	CS	14	30	0	8.55	10.77	0.98	2.25	0.93	N	Y	10
2	13134.29	N17-W5	22	CS	14	30	0	7.42	9.76	1.66	2.01	1.06	N	Y	72
2	14159.7	N17-W4	25	CS	14	30	0	7.24	8.32	1.27	4.03	1.64	N	Y	75
2	13233.36	N17-W4	24	CS	14	30	1	20.12	22.72	2.32	6.69	2.35	Y	Y	72
2	7543.9	N17-W6	34	CS	14	30	0	5.11	5.21	0.79	1.8	0.83	N	Y	10
2	13134.2	N17-W5	22	CS	14	30	0.1	11.21	8.06	1.11	5.03	1.32	N	N	72
2	12922.33	N17-W7	37	CS	14	30	0	7.75	6.25	1.13	2.24	1	N	Y	71
2	14151.26	N17-W7	38	CS	14	30	3.8	31.29	28.13	3.26	9.9	3.01	N	Y	75
2	13173.21	N17-W6	33	CS	14	30	0.3	22.12	6.08	1.48	3.79	1.35	N	Y	72
2	7543.35	N17-W6	34	CS	14	30	0.9	22.77	15.89	1.85	5.85	1.21	N	Y	10
2	13173.9	N17-W6	33	CS	14	30	0	6.03	10.94	1.73	7.06	2.43	N	N	72
2	12922.44	N17-W7	37	CS	14	30	0	5.17	3.75	0.41	2.26	0.89	N	N	71
2	13383.12	N17-W4	26	CS	14	30	0	7.6	6.03	1.16	4.19	1.1	N	Y	72
2	12773.8	N17-W7	36	CS	14	30	0.3	17.43	8.77	1.94	3.73	1.37	N	Y	71
2	7543.32	N17-W6	34	CS	14	30	0	8.66	5.21	0.81	3.6	0.95	N	N	10
2	14151.35	N17-W7	38	CS	14	30	0.1	9.18	7.17	1.83	5.49	2.26	N	N	75
2	7543.86	N17-W6	34	CS	14	30	0	6.16	6.49	0.74	1.64	0.76	N	Y	10
2	7543.93	N17-W6	34	CS	14	30	0.4	16.23	11.91	1.95	3.62	0.99	N	Y	10

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
2	16726	N17-W6	32	CS	14	10	0	5.12	4.01	0.38	1.7	0.44	N	Y	81
2	7541.8	N17-W6	34	CS	14	10	0	9.62	7.18	0.79	2.88	0.71	N	Y	10
2	13041	N17-W6	32	CS	14	10	0	7.34	10.72	0.62	2.8	0.7	N	Y	72
2	7541.15	N17-W6	34	CS	14	10	0.3	20.56	10.69	1.29	2.34	0.82	N	N	10
2	14149.2	N17-W7	38	CS	14	10	0.3	15.28	12.2	1.13	2.72	1	N	Y	75
2	12925.13	N17-W7	37	CS	14	10	0	8.06	6.5	0.86	2.01	0.91	N	Y	71
2	15088.2	N17-W7	34	CS	14	10	0	5.13	4.95	0.51	2.47	0.7	N	Y	77
3	23141.16	N1057-E979	25	CS	14	30	0.1	14.05	7.86	0.93	2.84	0.68	N	N	141
3	21106.39	N1057-E981	24	CS	14	30	1	23.59	19.47	2.17	8.46	2.06	Y	Y	91
3	21106.53	N1057-E981	24	CS	14	30	0	9.96	8.67	0.83	5.33	1.23	N	Y	91
3	21106.72	N1057-E981	24	CS	14	30	0.3	16.71	11.11	1.74	4.04	1.28	N	Y	91
3	21106.91	N1057-E981	24	CS	14	30	0	9.5	8.05	1.22	2.21	0.73	N	Y	91
3	21106.94	N1057-E981	24	CS	14	30	0	7.23	5.71	0.89	2.25	0.77	N	Y	91
3	21106.115	N1057-E981	24	CS	14	30	0.7	25.76	13.69	2.17	3.1	0.76	N	Y	91
3	21106.117	N1057-E981	24	CS	14	30	0	6.91	7.26	0.89	4.5	1.18	N	Y	91
3	21127.19	N1057-E981	25	CS	14	30	0.7	15.56	21.8	2.09	4.97	1.46	N	Y	205
3	21127.52	N1057-E981	25	CS	14	30	0.3	8.43	12.93	2.74	5.67	1.91	N	Y	205
3	21127.76	N1057-E981	25	CS	14	30	0.1	7.83	11.95	1.46	2.77	0.81	N	Y	205
3	21127.82	N1057-E981	25	CS	14	30	0	8.77	8.09	1.41	2.98	0.9	N	N	205
3	21127.173	N1057-E981	25	CS	14	30	0	5.19	5.38	0.75	2.41	0.65	N	Y	205
3	24188.4	N1057-E979	22	CS	15	30	1	16.28	21.62	1.85	3.8	2.46	Y	Y	156
3	23578.6	N1057-E979	23	CS	15	30	0.5	16.74	14.44	1.7	6.46	2.38	N	Y	148
3	23578.16	N1057-E979	23	CS	15	30	0	9.61	8.9	0.97	4.42	1.88	N	N	148
3	23578.27	N1057-E979	23	CS	15	30	0.6	16.52	12.97	2.58	4.12	2.17	Y	Y	148
3	24629.15	N1057-E980	24	CS	15	30	1.3	24.19	26.19	2.12	9.31	1.77	N	Y	161
3	24629.27	N1057-E980	24	CS	15	30	0.3	10.68	12.43	1.11	4.63	1.29	N	Y	161
3	22714.12	N1057-E980	23	CS	14	30	0.7	23.28	16.09	1.79	4.2	1.61	N	N	140

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
3	21106.8	N1057-E981	24	CS	14	30	0.3	19.62	13.61	1.47	2.94	1.05	N	Y	91
3	21106.109	N1057-E981	24	CS	14	30	0.1	7.05	11.84	1.16	5.42	0.8	N	Y	91
3	23578.25	N1057-E979	23	CS	15	30	0.2	15.15	10.02	1.08	4.66	1.92	N	Y	148
3	22714.8	N1057-E980	23	CS	14	30	0	9.97	7.22	0.78	2.29	0.85	N	N	140
3	22714.29	N1057-E980	23	CS	14	30	2.8	33.02	24.39	2.91	9.13	2.92	N	Y	140
3	21127.99	N1057-E981	25	CS	14	30	0	5.52	4.87	0.49	3.33	0.62	N	Y	205
3	21127.109	N1057-E981	25	CS	14	30	0	5.96	8.19	1.7	2.64	0.9	N	Y	205
3	21106.21	N1057-E981	24	CS	14	30	0.9	23.5	23.87	1.73	9.01	2.51	N	Y	91
3	24629.26	N1057-E980	24	CS	15	30	0.1	8.4	11.85	1.18	4.14	0.88	N	Y	161
3	23141.10	N1057-E979	25	CS	14	30	2.3	19.76	29.47	2.4	5.59	1.55	N	Y	141
3	21106.6	N1057-E981	24	CS	14	30	0.1	8.93	10.23	1.79	4.45	1.23	N	N	91
3	21106.96	N1057-E981	24	CS	14	30	0	6.7	7.67	0.64	1.77	0.94	N	Y	91
3	21127.60	N1057-E981	25	CS	14	30	0	6.29	7.57	0.95	4.52	1.35	Y	Y	205
3	21127.113	N1057-E981	25	CS	14	30	0	9.37	7.59	0.63	4.2	1.12	Y	Y	205
3	23578.23	N1057-E979	23	CS	15	30	2.1	27.91	30.42	3.15	8.18	1.4	N	Y	148
3	24629.18	N1057-E980	24	CS	15	30	1.1	19.55	20.17	2.69	5.67	1.27	N	Y	161
3	22714.34	N1057-E980	23	CS	14	30	0	5.64	10.4	1.16	4.49	1.49	N	Y	140
3	21106.64	N1057-E981	24	CS	14	30	0.2	11.88	11.61	1.37	4.52	1.65	N	N	91
3	21106.93	N1057-E981	24	CS	14	30	0	9.93	6.6	1.05	4.82	1.07	N	Y	91
3	21127.25	N1057-E981	25	CS	14	30	0.5	18.84	10.83	2.51	3.86	1.77	N	Y	205
3	21127.48	N1057-E981	25	CS	14	30	0.7	11.3	22.82	3.08	8.03	4.3	Y	N	205
3	21127.54	N1057-E981	25	CS	14	30	0.1	8.05	7.96	1.16	4.82	1.2	N	Y	205
3	23578.12	N1057-E979	23	CS	15	30	0.1	12.27	8.4	1.81	3.61	1.57	N	Y	148
3	22714.1	N1057-E980	23	CS	14	30	0.3	14.48	13.63	1.07	3.04	1.19	N	Y	140
3	20482.3	N1057-E981	24	CS	14	10	0	4.06	4.5	0.82	2.53	0.82	N	Y	88
3	20498.4	N1057-E981	25	CS	15	10	0	5.5	2.82	0.51	3.04	0.49	N	Y	88
3	20498.1	N1057-E981	25	CS	15	10	0	5.84	6.75	0.85	4.47	1.38	N	Y	88

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
4	10127.12	N50-W15	7	CS	14	30	0.1	8.22	10.11	1.79	5.27	1.65	N	Y	14
4	9963.16	N50-W16	8	CS	14	30	0.1	11.23	13.45	1.02	1.74	0.71	N	Y	13
4	10127.23	N50-W15	7	CS	14	30	0	5.13	4.23	0.7	3.04	0.84	N	Y	14
4	9963.14	N50-W16	8	CS	14	30	0.6	20.66	19.54	1.41	5.94	1.36	N	Y	13
4	9977.15	N51-W16	12	CS	14	30	3.5	25.52	36.18	3.89	7.74	2.88	N	Y	13
4	10041.19	N50-W15	9	CS	14	30	2	32.22	16.06	3.55	3.94	1.86	N	Y	14
4	10236.41	N51-W16	7	CS	14	30	0.1	6.36	11.8	0.9	4.5	1.1	N	Y	14
4	9874.47	N50-W16	12	CS	14	30	1.4	21.25	27	2.89	9.81	3.3	N	N	13
4	10097.14	N51-W16	11	CS	14	30	1.6	28.13	21.02	2.25	3.85	1.44	N	Y	14
4	11018.96	N50-W16	9	CS	14	30	2.9	39.04	17.69	3.35	6.7	2.03	N	N	16
4	9963.21	N50-W16	8	CS	14	30	0	8.1	7.19	1.15	4.96	1.7	N	Y	13
4	11018.79	N50-W16	9	CS	14	30	0.9	29.02	17.78	1.47	3.04	1.07	N	Y	16
4	10379.24	N50-W15	8	CS	14	30	0.6	24.61	15.51	1.25	3.12	0.77	N	Y	14
4	11003.9	N50-W15	10	CS	14	30	0.9	25.98	15.68	2.21	2.97	1.57	N	Y	16
4	10379.19	N50-W15	8	CS	14	30	0	4.86	4.02	0.88	3	0.86	N	Y	14
4	11018.1	N50-W16	9	CS	14	30	0.1	11.47	10.83	1.37	3.48	0.42	Y	Y	16
4	11018.61	N50-W16	9	CS	14	30	0	6.46	10.65	1.29	2.26	0.82	N	Y	16
4	1040	N50-W15	6	CS	14	30	0	4.27	4.45	0.55	4.24	0.85	N	Y	2
4	9874.21	N50-W16	12	CS	14	30	0	6.9	4.39	0.62	1.43	0.63	N	Y	13
4	10236.7	N51-W16	7	CS	14	30	0	6.79	10.36	1.15	3.34	1.15	N	Y	14
4	10097.16	N51-W16	11	CS	14	30	0.1	8.19	12.38	1.7	4.31	1.29	N	Y	14
4	11003.44	N50-W15	10	CS	14	30	0	5.48	9.26	1.32	3.24	1.36	N	Y	16
4	10041.6	N50-W15	9	CS	14	30	0	8.16	8.46	1.56	1.89	0.87	N	Y	14
4	9954.23	N51-W16	10	CS	14	30	8.2	40.72	34.01	6.84	9.66	3.36	Y	Y	13
4	11003.8	N50-W15	10	CS	14	30	0.1	11.63	7.63	0.94	2.26	0.56	N	Y	16
4	9874.3	N50-W16	12	CS	14	30	0.5	21.66	13.62	1.32	3.94	1.33	N	Y	13
4	11018.9	N50-W16	9	CS	14	30	5.5	26.31	38.7	4.8	6.87	2.96	N	Y	16

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
4	11018.87	N50-W16	9	CS	14	30	1.4	17.85	24.44	2.88	6.04	1.88	N	Y	16
4	11018.44	N50-W16	9	CS	14	30	1.4	34.88	18.49	1.93	5.94	1.7	N	Y	16
4	10127.5	N50-W15	7	CS	14	30	2.3	27.7	22.62	4.06	5.05	1.86	N	Y	14
4	11018.46	N50-W16	9	CS	14	30	0.6	12.83	26.4	1.42	6.84	1.44	N	Y	16
4	11018.48	N50-W16	9	CS	14	30	0.1	12.5	11.49	0.83	3.43	1.31	N	Y	16
4	1039	N50-W15	6	CS	14	30	0.1	11.59	8.55	1.14	3.18	0.61	N	Y	2
4	10041.39	N50-W15	9	CS	14	30	1.4	16.14	23.15	3.64	5.57	2.19	N	Y	14
4	11018.10	N50-W16	9	CS	14	30	0.6	16.5	24.58	1.7	4.79	1.15	N	Y	16
4	9977.35	N51-W16	12	CS	14	30	0.4	22.97	11.07	0.97	3.32	1.07	N	Y	13
4	964	N50-W15	6	CS	14	30	0.1	9.56	10.96	1.01	1.64	0.81	N	Y	1
4	10849.8	N51-W16	9	CS	14	30	0.3	14.58	10.11	1.9	2.72	0.94	Y	Y	15
4	10041.62	N50-W15	9	CS	14	30	1.4	20.06	24.53	1.4	5.8	1.35	N	Y	14
4	1019	N50-W15	6	CS	14	30	0	3.84	3.74	1.13	2.14	0.9	N	Y	2
4	11018.86	N50-W16	9	CS	14	30	0	10.17	8.51	1.01	3.25	0.9	N	Y	16
4	9977.17	N51-W16	12	CS	14	30	0	8.51	4.41	0.95	2.66	0.65	N	N	13
4	10041.9	N50-W15	9	CS	14	30	0	8.26	7.8	1.3	2.65	0.85	N	Y	14
4	10041.68	N50-W15	9	CS	14	30	1.4	18.58	27.48	3.4	5.65	2.17	Y	Y	14
4	9977.29	N51-W16	12	CS	14	30	1.2	27.73	31.13	1.37	3.61	1.71	N	Y	13
4	1005	N50-W15	6	CS	14	30	0	5.13	4.94	1.05	3.93	1.37	N	Y	2
4	11018.45	N50-W16	9	CS	14	30	0.5	21.27	11.2	1.32	4.14	0.78	N	Y	16
4	11018.54	N50-W16	9	CS	14	30	0.3	8.72	12.08	1.44	8.57	3.04	N	Y	16
4	9977.54	N51-W16	12	CS	14	30	0.9	22.95	14.1	1.71	11.37	3.93	N	Y	13
4	10041.15	N50-W15	9	CS	14	30	0.4	15.51	14.55	1.85	3.28	1.44	Y	Y	14
4	9954.25	N51-W16	10	CS	14	30	0.6	18.59	11.38	2.98	7.46	3.66	N	N	13
4	10041.55	N50-W15	9	CS	14	30	0	8	6.94	0.94	1.74	0.72	N	Y	14
4	10127.41	N50-W15	7	CS	14	30	0	7.35	5.22	0.82	3.03	0.51	N	Y	14
4	9824.6	N50-W16	11	CS	14	30	0.1	8.69	11.86	1.15	5.36	1.87	N	Y	13

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
4	11018.17	N50-W16	9	CS	14	30	0.5	21.81	13.64	1.1	3.86	0.74	N	Y	16
4	10041.27	N50-W15	9	CS	14	30	0	6.16	6.06	0.92	1.61	0.74	N	Y	14
4	1030	N50-W15	6	CS	14	30	0	9.19	6.29	0.94	5.2	1.19	N	Y	2
4	10379.12	N50-W15	8	CS	14	30	0.9	16.41	19.85	2.1	7.31	1.38	N	Y	14
4	10236.33	N51-W16	7	CS	14	30	0.2	10.7	10.98	2.22	5.33	1.23	N	N	14
4	9977.3	N51-W16	12	CS	14	30	0	5.98	8.49	0.77	2.15	0.7	N	N	13
4	10097.1	N51-W16	11	CS	14	30	1.4	17.21	20.33	4.13	5.4	2.03	N	N	14
4	11018.99	N50-W16	9	CS	14	30	0	10.19	8	1.21	4.25	0.88	N	Y	16
4	10097.15	N51-W16	11	CS	14	30	0.6	19.93	17.74	1.28	6.44	1.75	N	Y	14
4	11018.8	N50-W16	9	CS	14	30	0.4	21.21	9.27	1.88	3.38	0.92	N	N	16
4	10127.29	N50-W15	7	CS	14	30	0.4	13.71	8.03	2.51	2.83	0.99	N	N	14
4	11003.2	N50-W15	10	CS	14	30	0.3	18.38	7.76	1.43	4.64	1.46	N	Y	16
4	10127.27	N50-W15	7	CS	14	30	0	7.95	6.67	0.85	1.6	0.66	N	N	14
4	9874.30	N50-W16	12	CS	14	30	0	5.4	5.1	0.51	2.18	0.5	N	Y	13
4	10097.6	N51-W16	11	CS	14	30	0	8.55	11.08	0.73	4.35	0.88	Y	N	14
4	10379.25	N50-W15	8	CS	14	30	0	8.71	8.85	0.73	3.97	0.83	N	Y	14
4	10091.5	N50-W15	12	CS	14	30	0	10.41	7.9	0.67	2.62	0.93	N	Y	14
4	10041.44	N50-W15	9	CS	14	30	0.6	18.65	16.59	1.65	5.04	1.36	N	Y	14
4	10041.45	N50-W15	9	CS	14	30	0.1	14.84	7.74	1.15	6.59	1.83	N	N	14
4	980	N50-W15	6	CS	14	30	0.4	12.05	13.82	3.73	2.21	1.02	N	Y	1
4	10959.12	N50-W15	11	CS	14	30	0.6	14.02	17.47	1.94	6.14	1.79	N	N	15
4	10041.28	N50-W15	9	CS	14	30	0	5.51	5.76	0.61	2.28	0.97	N	Y	14
4	898	N50-W15	6	CS	14	30	0	4.62	4.74	0.38	1.88	0.62	N	Y	1
4	9954.13	N51-W16	10	CS	14	30	0.1	8.76	15.05	1.17	4.76	1.32	N	Y	13
4	9981.8	N51-W16	12	CS	14	10	0.3	17.91	13.12	1.27	2.33	1.29	N	Y	13
4	9964.13	N50-W16	8	CS	14	10	0.9	25	18.29	2.33	2.53	2.04	Y	N	13
4	10240.7	N51-W16	7	CS	14	10	0	6.07	5.84	0.64	3	1.06	N	Y	14

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
4	11007.15	N50-W16	9	CS	14	10	0.1	9.04	7.81	1.46	1.87	1.54	N	Y	16
4	11007.18	N50-W16	9	CS	14	10	0	5.76	3.5	0.54	1.68	0.95	N	N	16
4	11007.16	N50-W16	9	CS	14	10	0	10.33	5.39	1.16	3.41	1.04	N	Y	16
4	10035.29	N50-W15	9	CS	14	10	0	8.16	7.84	1.32	3.19	1.27	N	N	14
4	11007.3	N50-W16	9	CS	14	10	0.1	9.72	7.94	1.18	2.92	0.71	N	Y	16
4	10035.9	N50-W15	9	CS	14	10	0.5	18.34	21.06	0.98	3.76	1.16	N	Y	14
4	10842.1	N51-W16	9	CS	14	10	0.1	14.28	9.84	1.05	3.74	1.21	Y	Y	15
4	9981.5	N51-W16	12	CS	14	10	0	8.27	6.13	1.04	1.94	0.56	N	Y	13
4	10955.4	N50-W15	11	CS	14	10	0.4	16.73	12.6	1.4	3.31	0.97	N	Y	15
4	10087.7	N50-W15	12	CS	14	10	0	10.48	5.49	1.02	1.9	0.7	N	Y	14
4	11007.29	N50-W16	9	CS	14	10	0	8.88	6.71	0.95	3.48	1.36	N	Y	16
4	10842.13	N51-W16	9	CS	14	10	0	6.46	7.08	0.99	2.55	1.03	N	Y	15
4	11007.9	N50-W16	9	CS	14	10	0	7.61	4.35	0.65	2.55	0.8	N	Y	16
4	9964.9	N50-W16	8	CS	14	10	0	4.89	6.95	0.91	2.14	0.62	N	Y	13
4	10120.2	N50-W15	7	CS	14	10	0	6.09	6.58	0.72	2.25	0.85	N	Y	14
4	11007.2	N50-W16	9	CS	14	10	0	9.65	8.37	1.14	2.44	1.08	N	Y	16
4	9820.9	N50-W16	11	CS	14	10	0.1	11.62	6.32	1.15	3.35	0.96	N	Y	13
4	9820.15	N50-W16	11	CS	14	10	0	11.44	5.87	1.04	2.62	1.72	N	Y	13
4	10955.2	N50-W15	11	CS	14	10	0	8.63	6.2	0.93	2.82	0.66	N	N	15
4	10120.2	N50-W15	7	CS	14	10	0	10.61	6.73	0.96	2.93	1.25	N	Y	14
4	10120.19	N50-W15	7	CS	14	10	0	9.75	5.7	0.51	3.02	0.66	N	N	14
4	9964.18	N50-W16	8	CS	14	10	0	9.09	7.44	0.83	3.04	0.77	N	Y	13
4	10087.1	N50-W15	12	CS	14	10	0	6.58	3.53	0.48	1.71	0.45	N	Y	14
4	10382.25	N50-W15	8	CS	14	10	0.2	16.23	7.32	1.24	3.23	0.78	N	Y	14
4	11007.36	N50-W16	9	CS	14	10	0	9.33	5.97	0.83	3.02	0.62	N	Y	16
4	1000	N50-W15	6	CS	14	10	0	6.27	7.21	0.89	3.23	0.98	N	Y	2
4	11002.14	N50-W15	10	CS	14	10	0.5	21.08	11.47	1.9	2.03	1.31	Y	Y	16

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
4	11007.4	N50-W16	9	CS	14	10	0	8.8	8.14	0.97	2.51	0.99	N	Y	16
4	10382.6	N50-W15	8	CS	14	10	0	8.03	7.74	1.14	3.27	0.84	N	Y	14
5	4948	N26-W1	8	CS	14	30	0.2	12.3	9.97	0.95	4.43	1.47	N	Y	5
5	9672.3	N26-W1	7	CS	14	30	4.7	37.43	34.05	3.26	3.68	1.47	Y	N	13
5	9771.4	N25-W1	7	CS	14	30	7	36.37	36.73	4.86	9.74	4.46	Y	N	13
5	9900.17	N25-W1	8	CS	14	30	0.8	12.51	23.84	2.82	4.8	1.49	N	Y	13
5	9771.43	N25-W1	7	CS	14	30	0	5.1	3.15	0.35	1.39	0.43	N	Y	13
5	4063	N26-W1	6	CS	14	30	0.1	10.42	9.85	0.9	7.36	2.11	N	Y	5
5	9672.28	N26-W1	7	CS	14	30	2	23.8	24.45	2.04	11.9	4.07	Y	N	13
5	9672.13	N26-W1	7	CS	14	30	0	7.24	4.58	0.48	2.51	0.61	N	Y	13
5	10396	N25-W1	6	CS	14	30	0.1	11.1	9.96	0.57	4.2	1.44	N	Y	14
5	9900.38	N25-W1	8	CS	14	30	0.3	18.25	12	1.21	3.9	1.41	N	Y	13
5	10388	N25-W1	6	CS	14	30	0.4	13.27	16.53	1.98	3.52	1.58	N	N	14
5	9900.22	N25-W1	8	CS	14	30	0	6.4	4.53	0.64	2.53	0.75	N	Y	13
5	9771.25	N25-W1	7	CS	14	30	2.2	23.15	32.18	3.41	5.71	1.28	Y	Y	13
5	9672.12	N26-W1	7	CS	14	30	0.9	29.13	24.07	0.79	6.66	2.27	N	Y	13
5	4790	N26-W1	8	CS	14	30	10.2	49.27	29.09	6.65	9.87	4.72	Y	N	5
5	10570.1	N26-E0	8	CS	14	30	0.2	11.91	14.61	1.36	4.16	1.42	N	Y	15
5	9771.42	N25-W1	7	CS	14	30	0	8.76	5.26	0.74	2.71	0.84	N	Y	13
5	9900.4	N25-W1	8	CS	14	30	2.4	28.1	32.99	3.24	7.42	2.36	N	N	13
5	10570.7	N26-E0	8	CS	14	30	0	9.16	5.64	0.9	2.2	0.79	N	Y	15
5	10404	N25-W1	6	CS	14	30	0	8.07	6.12	0.64	2.93	1.03	N	Y	14
5	4071	N26-W1	6	CS	14	30	0.2	11.39	12.1	1.01	4.08	1.2	N	Y	5
5	9672.19	N26-W1	7	CS	14	30	0	7.79	9.4	1	2.98	1.19	N	Y	13
5	4960	N26-W1	8	CS	14	30	0	7.18	8.63	0.83	2.89	0.68	N	Y	5
5	9771.3	N25-W1	7	CS	14	30	0.1	11.92	8.5	1.16	3.82	1.1	N	Y	13
5	9900.28	N25-W1	8	CS	14	30	0.2	13.05	12.57	0.96	3.66	1.23	N	N	13

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
5	9900.12	N25-W1	8	CS	14	30	0.1	11.04	8.3	0.76	2.98	0.79	N	Y	13
5	9903.4	N25-W1	8	CS	14	10	0	10.5	8.41	1.44	2.28	0.99	N	Y	13
5	4047	N26-W1	6	CS	14	10	0	4.88	4.69	0.97	2.65	1.08	N	Y	5
5	4968	N26-W1	8	CS	14	10	0	5.48	4.86	0.41	2.36	0.75	N	Y	5
5	9681.3	N26-W1	7	CS	14	10	0	10.62	6.85	0.75	3.65	1.73	N	Y	13
5	9903.7	N25-W1	8	CS	14	10	0	6.51	5.16	0.99	1.7	0.67	N	N	13
5	10569.8	N26-E0	8	CS	14	10	0	8.82	5.65	0.86	3.34	1.26	N	N	15
5	4050	N26-W1	6	CS	14	10	0	5.89	5.6	0.46	1.77	0.76	N	N	5
5	4034	N26-W1	6	CS	14	10	0	3.88	3.58	0.41	2.36	0.54	N	Y	5
6	17146.3	N24-W9	8	CS	14	30	0.6	22.79	11.45	2.43	6.43	1.93	N	Y	81
6	17146.29	N24-W9	8	CS	14	30	0	10.72	7.15	1.24	2.69	0.95	N	Y	81
6	17063.9	N24-W8	9	CS	14	30	1.2	22.03	17.12	1.87	6.06	1.71	Y	N	81
6	17146.2	N24-W9	8	CS	14	30	0.4	16.75	10.62	1.64	3.56	1.48	N	N	81
6	12967.2	N24-W7	14	CS	14	30	0.3	13.47	14.38	1.27	6.81	2.73	N	Y	71
6	12688.6	N24-W7	12	CS	14	30	2.3	36.72	17.76	3.38	5.97	1.99	N	Y	71
6	15693.34	N24-W8	12	CS	14	30	0.1	9.49	11.59	1.13	2.95	1.15	N	Y	79
6	17113.17	N24-W8	10	CS	14	30	0.3	13.28	10.66	1.46	2.84	1.04	N	Y	81
6	12988.14	N24-W7	10	CS	14	30	0.5	19.73	13.6	1.58	7.01	3.16	Y	N	71
6	12988.95	N24-W7	10	CS	14	30	0.2	15.98	9.84	1.39	4.56	1.81	N	N	71
6	12979.52	N24-W7	11	CS	14	30	0.7	12.69	19.48	4.02	5.48	2.82	N	Y	71
6	17146.4	N24-W9	8	CS	14	30	0	9.86	10.49	1.05	3.41	1.03	N	Y	81
6	13010.29	N24-W7	13	CS	14	30	3.6	26.84	30.3	4.97	10.46	3.85	N	N	72
6	17113.15	N24-W8	10	CS	14	30	0	5.15	4.55	0.33	2.27	0.65	N	Y	81
6	17063.33	N24-W8	9	CS	14	30	0	10.45	9.91	0.8	4.54	1.08	N	Y	81
6	13010.11	N24-W7	13	CS	14	30	0	12.66	10.15	0.89	6.68	1.52	N	Y	72
6	12979.71	N24-W7	11	CS	14	30	0.5	17.45	9.04	3.29	2.55	1.07	N	N	71
6	12688.58	N24-W7	12	CS	14	30	0.3	20.56	14.6	1	4.27	1.28	N	Y	71

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
6	17113.21	N24-W8	10	CS	14	30	0.1	12.03	6.75	1.13	2.27	0.7	N	Y	81
6	12967.35	N24-W7	14	CS	14	30	0	7.66	5.08	0.87	3.21	0.88	N	Y	71
6	12979.65	N24-W7	11	CS	14	30	0	9.34	7.17	0.71	4.44	1.35	N	Y	71
6	12988.12	N24-W7	10	CS	14	30	0	7.67	4.78	0.78	3.61	1.02	N	N	71
6	12988.28	N24-W7	10	CS	14	30	0	10.11	7.97	1.12	2.65	0.99	N	Y	71
6	13010.4	N24-W7	13	CS	14	30	0.4	18.51	10.68	1.34	7.38	2.3	N	N	72
6	11609.9	N24-W9	9	CS	14	30	0.4	29.05	9.01	1.29	4.05	1.33	N	Y	16
6	12988.18	N24-W7	10	CS	14	30	0.3	19.23	11.87	1.39	6.35	2.34	N	Y	71
6	12979.56	N24-W7	11	CS	14	30	0.2	12.62	8.68	1.88	4.32	1.07	N	Y	71
6	12656.8	N24-W9	9	CS	14	30	0	7.07	5.58	1.63	2.62	1.56	N	Y	71
6	12967.13	N24-W7	14	CS	14	30	0.1	9.27	7.74	1.05	3.34	0.82	N	Y	71
6	12688.76	N24-W7	12	CS	14	30	0	8.72	8.03	0.83	1.96	0.89	N	Y	71
6	12656.11	N24-W9	9	CS	14	30	0.1	12.81	7.25	0.82	2.28	0.79	N	Y	71
6	12967.37	N24-W7	14	CS	14	30	0.3	16.03	9.97	1.97	3.58	1.18	N	N	71
6	12656.12	N24-W9	9	CS	14	30	0.1	8.45	11.67	1.05	2.46	1.09	N	Y	71
6	12988.69	N24-W7	10	CS	14	30	0	6.09	7.91	0.63	3.61	0.88	N	Y	71
6	17063.16	N24-W8	9	CS	14	30	2.1	36.44	21.43	2.38	3.83	1.04	Y	Y	81
6	15465.2	N24-W9	11	CS	14	30	0.1	9.78	9.13	1.08	3.82	1.6	N	Y	78
6	12988.43	N24-W7	10	CS	14	30	0	8.48	6.08	1.58	3.17	1.5	Y	Y	71
6	17063.3	N24-W8	9	CS	14	30	0	7.12	5.69	0.89	3.09	0.78	N	Y	81
6	12688.4	N24-W7	12	CS	14	30	0.8	25.09	18.74	1.95	6.44	1.82	N	N	71
6	17063.14	N24-W8	9	CS	14	30	0	10.57	7.35	1.06	5.83	2.05	N	N	81
6	12988.16	N24-W7	10	CS	14	30	0.1	18	9.33	1.33	2.65	0.76	N	N	71
6	12988.26	N24-W7	10	CS	14	30	0	5.45	7.18	0.66	2.24	0.54	N	Y	71
6	11609.32	N24-W9	9	CS	14	30	0.4	15.26	18.18	1.38	5.03	1.29	N	Y	16
6	12688.16	N24-W7	12	CS	14	30	0	6.2	7.12	1.25	2.54	0.9	N	Y	71
6	11609.4	N24-W9	9	CS	14	30	0	5.91	5.49	0.62	2.4	0.74	N	N	16

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
6	12988.96	N24-W7	10	CS	14	30	2.6	20.98	29.83	2.69	11.85	3.43	Y	Y	71
6	12979.5	N24-W7	11	CS	14	30	1.6	18.17	24.28	3.27	6.57	1.51	N	Y	71
6	15465.18	N24-W9	11	CS	14	30	0.4	15.54	17.69	1.27	4.71	0.75	N	Y	78
6	12988.17	N24-W7	10	CS	14	30	0.1	9.19	10.41	1.36	3.97	1.45	N	Y	71
6	17063.25	N24-W8	9	CS	14	30	0.3	15.75	12.51	1.69	4.26	2.1	N	Y	81
6	12967.23	N24-W7	14	CS	14	30	2	24.18	21.36	3.67	10.14	3.95	N	Y	71
6	17146.12	N24-W9	8	CS	14	30	0	6.97	9.11	0.74	4.67	1.66	N	Y	81
6	15465.11	N24-W9	11	CS	14	30	0	6.54	6.47	0.45	3.04	0.78	N	N	78
6	12979.73	N24-W7	11	CS	14	30	0	9.66	9.95	1.32	2.17	0.51	Y	N	71
6	12688.33	N24-W7	12	CS	14	30	0.6	26.38	12.67	1.55	2.89	1.67	N	Y	71
6	12967.29	N24-W7	14	CS	14	30	0	6.59	6.93	0.74	3.39	0.94	N	Y	71
6	17063.2	N24-W8	9	CS	14	30	0.4	11.7	16.6	1.86	6.18	1.42	Y	Y	81
6	17113.25	N24-W8	10	CS	14	30	0.2	15.86	11.28	1.69	3.92	1.48	N	N	81
6	15693.17	N24-W8	12	CS	14	30	0	7.23	5.24	0.72	2.11	0.7	N	Y	79
6	17063.2	N24-W8	9	CS	14	30	0	5.8	4.27	0.48	3.71	0.97	N	Y	81
6	12979.3	N24-W7	11	CS	14	30	0.1	9.34	7.55	2.7	3.38	1.21	N	Y	71
6	17063.21	N24-W8	9	CS	14	30	0	8.18	7.18	1.3	2.52	0.72	N	Y	81
6	12967.45	N24-W7	14	CS	14	30	0.3	9.77	9.64	1.88	4.09	1.25	N	Y	71
6	17063.8	N24-W8	9	CS	14	30	0	9.16	4.06	1.21	1.9	0.79	N	N	81
6	12983.39	N24-W7	11	CS	14	10	0.9	22.65	17.68	2.68	2.89	0.88	N	Y	71
6	12694.39	N24-W7	12	CS	14	10	0	13.5	6.4	0.63	2.25	0.5	N	N	71
6	12694.53	N24-W7	12	CS	14	10	0	6.83	5.32	0.65	2.1	0.63	N	N	71
6	13009.18	N24-W7	13	CS	14	10	1	18.08	23.12	2.31	1.86	1.09	N	Y	72
6	13009.37	N24-W7	13	CS	14	10	0	9.56	8.36	1.54	1.76	0.93	N	Y	72
6	15690.3	N24-W8	12	CS	14	10	0.1	12.13	8.48	0.98	3.17	1.15	N	Y	79
6	15690.9	N24-W8	12	CS	14	10	0	6.82	6.14	0.61	2.17	0.79	N	Y	79
6	12972.23	N24-W7	14	CS	14	10	0	10.45	7.98	0.94	2.01	0.63	N	Y	71

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
6	17147.21	N24-W9	8	CS	14	10	0.1	9.38	14.27	1.17	3.16	1.11	N	Y	81
6	13009.4	N24-W7	13	CS	14	10	0	8.69	5.13	0.8	2.67	0.62	N	Y	72
6	17147.19	N24-W9	8	CS	14	10	0	6.56	5.33	0.56	3.28	0.98	N	N	81
6	17062.6	N24-W8	9	CS	14	10	0.1	11.47	8.31	1.05	4.23	1.08	N	Y	81
6	17118.23	N24-W8	10	CS	14	10	0.4	13.19	21.78	1.44	5.11	1.72	N	Y	81
6	17147.46	N24-W9	8	CS	14	10	0	7.23	4.97	0.63	3.41	0.57	N	Y	81
6	12972.2	N24-W7	14	CS	14	10	0	5.7	4.02	0.73	1.83	0.63	N	Y	71
6	11605.12	N24-W9	9	CS	14	10	0	10.68	5.2	0.98	2.33	0.75	N	Y	16
6	12694.8	N24-W7	12	CS	14	10	0	11.04	6.27	1.3	1.77	1	N	Y	71
6	12983.51	N24-W7	11	CS	14	10	0	10.88	7.63	0.87	3.19	0.97	N	Y	71
6	17147.13	N24-W9	8	CS	14	10	2.2	27.93	17.1	3.55	5.84	1.71	N	Y	81
6	12987.11	N24-W7	10	CS	14	10	0.1	14.91	6.64	1.15	3.01	0.94	N	N	71
6	12987.21	N24-W7	10	CS	14	10	0	8.4	5.93	1.1	2.25	0.97	N	Y	71
6	12654.4	N24-W9	9	CS	14	10	0.2	10.97	12.09	1.66	2.65	1.3	N	Y	71
6	11605.8	N24-W9	9	CS	14	10	0	5.28	5.98	0.78	1.66	0.83	N	Y	16
6	12972.29	N24-W7	14	CS	14	10	0.5	21.4	13.53	2.18	4.08	0.91	N	Y	71
6	12972.1	N24-W7	14	CS	14	10	0	7.21	4.58	1.01	2.33	0.84	N	Y	71
6	12694.21	N24-W7	12	CS	14	10	0	11.55	8.21	0.81	3.36	1.21	N	Y	71
6	13009.42	N24-W7	13	CS	14	10	0	6.89	8.57	0.82	2.04	0.52	N	Y	72
6	12694.6	N24-W7	12	CS	14	10	0	9.21	6.16	1.04	2.66	0.85	N	Y	71
6	17118.17	N24-W8	10	CS	14	10	0	7.02	7.2	0.63	2.15	0.5	N	Y	81
6	12987.25	N24-W7	10	CS	14	10	0	5.7	9.41	0.46	3.23	1.07	N	Y	71
6	17062.8	N24-W8	9	CS	14	10	0	13.13	7.28	0.97	2.72	0.79	N	Y	81
6	13009.1	N24-W7	13	CS	14	10	0	5.87	5.01	0.63	2.69	0.69	N	Y	72
6	15462.4	N24-W9	11	CS	14	10	0.2	14.92	9.94	1.23	3.52	1.45	N	Y	78
6	12654.9	N24-W9	9	CS	14	10	0	8.35	4.58	0.82	2.43	0.77	N	Y	71
6	17062.2	N24-W8	9	CS	14	10	0	7.57	6.51	0.83	2.14	0.7	N	Y	81

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
6	13009.39	N24-W7	13	CS	14	10	0	8.17	6.02	1.12	2.86	0.87	N	Y	72
6	13009.35	N24-W7	13	CS	14	10	0	7.61	5.6	0.8	2.88	0.93	N	Y	72
6	12983.34	N24-W7	11	CS	14	10	0	7	4.99	0.86	1.92	0.84	N	Y	71
6	12983.54	N24-W7	11	CS	14	10	0	8.2	8.73	0.68	2.46	0.9	N	N	71
6	17118.4	N24-W8	10	CS	14	10	0	4.68	7.03	0.91	1.44	0.51	N	Y	81
6	12983.24	N24-W7	11	CS	14	10	0.1	11.39	6.35	1.07	2.82	1	N	Y	71
6	11605.6	N24-W9	9	CS	14	10	0	12.87	4.41	0.87	2.1	0.51	N	N	16
6	17147.6	N24-W9	8	CS	14	10	0	7.19	4.34	0.65	2.2	0.76	N	Y	81
7	8034.28	N17-W8	4	CS	14	30	0.4	18.32	10.12	1.48	5.92	1.48	N	N	11
7	8034.35	N17-W8	4	CS	14	30	1.1	19.36	18.61	1.31	9.53	3.05	Y	Y	11
7	8034.50	N17-W8	4	CS	14	30	0.1	16.99	8.2	1.21	2.83	0.73	N	N	11
7	8034.52	N17-W8	4	CS	14	30	2.8	38.04	18.35	3.06	7.02	3.06	N	N	11
7	7512	N17-W8	5	CS	14	30	0	11.03	4.23	1.03	5.95	2.02	N	N	10
7	7523	N17-W8	5	CS	14	30	0.8	14.26	10.48	2.3	6.05	1.62	N	Y	10
7	7969	N17-W8	6	CS	14	30	0	6.46	6.39	0.42	2.56	0.82	N	N	10
7	8004	N17-W8	6	CS	14	30	0	8.59	6.87	1.06	4.97	0.89	N	N	11
7	7480.15	N17-W7	6	CS	14	30	0.3	12.31	15.59	0.96	8.76	1.37	N	N	9
7	7480.32	N17-W7	6	CS	14	30	0	5.21	5.87	1.02	3.91	1.61	N	N	9
7	4504	N17-W7	7	CS	14	30	0.1	9.57	8.22	1.79	3.69	1.14	N	N	5
7	4513	N17-W7	7	CS	14	30	0	5.07	6.06	1.6	1.95	0.64	N	Y	5
7	5832	N17-W4	4	CS	14	30	0.1	8.53	9.8	1.18	3.91	1.45	N	Y	6
7	5840	N17-W4	4	CS	14	30	0.6	26.19	11.68	1.6	5.79	0.9	N	Y	6
7	5859	N17-W4	4	CS	14	30	0.4	15.4	14.47	1.86	7.36	1.72	N	Y	6
7	5866	N17-W4	4	CS	14	30	10.9	51.72	47.34	4.95	5.55	2.49	Y	Y	6
7	5869	N17-W4	4	CS	14	30	0.2	16.81	12.84	1.08	3.37	0.87	N	Y	6
7	5870	N17-W4	4	CS	14	30	16	34.47	50.15	9.36	32.4	12.27	N	N	6
7	5878	N17-W4	4	CS	14	30	0.1	7.92	11.09	1.75	1.93	0.96	N	Y	6

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	5884	N17-W4	4	CS	14	30	0	8.03	4.15	1.02	2.27	0.81	N	Y	6
7	5891	N17-W4	4	CS	14	30	0	9.52	7.53	1.04	2.89	0.96	N	N	6
7	7439.18	N16-W7	5	CS	14	30	0.3	13.05	15.75	1.3	4.01	0.8	N	N	9
7	4456	N16-W7	6	CS	14	30	0	4.88	4.83	1.01	3.1	0.72	N	Y	5
7	7144.23	N16-W6	4	CS	14	30	2.3	33.56	27.14	2.95	8.89	2.07	N	N	9
7	7144.37	N16-W6	4	CS	14	30	1.3	39.56	18.4	2.13	5.8	1.8	N	N	9
7	6936.1	N16-W5	3	CS	14	30	6.7	52.2	29.01	5.27	10.18	3.42	Y	N	8
7	6936.24	N16-W5	3	CS	14	30	0.9	18.42	23.33	2.09	5.56	1.09	N	Y	8
7	6936.25	N16-W5	3	CS	14	30	0.2	13.36	12.06	1.07	4.83	0.96	N	N	8
7	6936.53	N16-W5	3	CS	14	30	0.7	19.02	15.23	1.61	5.79	1.7	N	Y	8
7	6865.13	N16-W5	4	CS	14	30	0.3	11.79	12.27	1.91	4.9	1.35	N	Y	8
7	6865.17	N16-W5	4	CS	14	30	0	6.63	6.62	0.61	1.91	0.8	N	N	8
7	6865.40	N16-W5	4	CS	14	30	1.6	24.81	21.33	3.41	7.66	2.07	Y	N	8
7	8231	N17-W8	3	CS	14	30	0.1	6.74	12.08	1.32	6.38	1.77	N	N	11
7	5080	N17-W8	7	CS	14	30	0	4.87	13.36	1.21	3.84	0.72	N	Y	6
7	5117	N17-W8	7	CS	14	30	0	6.26	9.04	0.72	3.68	0.98	N	N	6
7	5121	N17-W8	7	CS	14	30	0	8.4	10.74	1.16	4.24	0.71	N	N	6
7	7416.5	N17-W7	5	CS	14	30	0.7	24.26	16.86	1.33	5.2	1.77	N	N	9
7	7416.6	N17-W7	5	CS	14	30	0.3	14.41	10.9	1.37	6.56	2.2	N	N	9
7	7416.22	N17-W7	5	CS	14	30	0	6.57	8.99	1.13	4.2	0.87	N	Y	9
7	7416.23	N17-W7	5	CS	14	30	1.4	33.15	23.69	2.04	6.43	2.85	N	N	9
7	7416.34	N17-W7	5	CS	14	30	0	9.26	7.09	0.97	3.42	1.13	N	Y	9
7	7416.41	N17-W7	5	CS	14	30	4.7	41.83	25.78	3.17	9.18	5.56	N	N	9
7	7416.61	N17-W7	5	CS	14	30	1	29.32	16.99	1.5	3.82	1.12	N	Y	9
7	7416.70	N17-W7	5	CS	14	30	0	7.73	7.1	0.79	3.4	1.12	N	N	9
7	6797.23	N17-W7	8	CS	14	30	3.6	37.19	24.59	3.55	10.34	2.59	N	N	8
7	6797.37	N17-W7	8	CS	14	30	0.1	10.54	11.56	1.04	3.59	1.06	N	N	8

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	6797.40	N17-W7	8	CS	14	30	0	8.96	5.34	0.7	1.88	0.78	N	N	8
7	6797.48	N17-W7	8	CS	14	30	0.8	19.9	14.99	1.72	5.39	0.82	Y	Y	8
7	6797.52	N17-W7	8	CS	14	30	0	10.17	6.99	0.87	4.81	1.35	N	N	8
7	6797.81	N17-W7	8	CS	14	30	0.4	19.63	12.83	1.31	5.43	1.44	N	N	8
7	6797.86	N17-W7	8	CS	14	30	0.2	13.52	10.34	0.85	4.86	1.13	N	N	8
7	6797.91	N17-W7	8	CS	14	30	0.3	11.74	14.1	1.82	4.22	1	N	Y	8
7	6797.102	N17-W7	8	CS	14	30	0	9.85	6.55	1.27	2.33	0.83	N	N	8
7	7021.4	N17-W6	3	CS	14	30	1.5	16.94	22.18	3.3	5.64	2.14	Y	N	9
7	7021.16	N17-W6	3	CS	14	30	0.5	21.23	14.52	1.43	4.1	1.37	N	N	9
7	7021.23	N17-W6	3	CS	14	30	0	12.48	7.37	1.33	3.06	1.12	N	N	9
7	7021.56	N17-W6	3	CS	14	30	0.1	12.45	11.32	1.42	4.3	0.89	N	N	9
7	7021.60	N17-W6	3	CS	14	30	1.2	25.1	24.85	1.98	7.03	2.41	Y	N	9
7	7453.26	N17-W6	6	CS	14	30	13.3	49.32	39.28	8.61	9.12	3.26	N	N	9
7	5271	N17-W6	7	CS	14	30	0.1	7.53	9.62	0.98	8.26	2.77	N	N	6
7	5273	N17-W6	7	CS	14	30	0	5.2	5.89	1.29	4.36	1.6	N	Y	6
7	5455	N17-W6	7	CS	14	30	0	11.51	6.95	0.75	4.36	1.81	N	N	6
7	5460	N17-W6	7	CS	14	30	0	8.34	8.31	0.61	4.29	1.36	N	Y	6
7	5478	N17-W6	7	CS	14	30	0.2	7.44	11.93	1.59	7.04	1.57	N	Y	6
7	7171.19	N17-W5	3	CS	14	30	2.4	30.71	33.12	2.53	8.85	2.78	N	Y	9
7	7171.55	N17-W5	3	CS	14	30	0	7.89	8.56	0.98	6.66	1.19	N	Y	9
7	7171.98	N17-W5	3	CS	14	30	0.3	15.14	16.21	0.99	5.52	1.63	N	N	9
7	7171.122	N17-W5	3	CS	14	30	0	10.09	5.46	0.68	3.02	0.83	N	N	9
7	7171.127	N17-W5	3	CS	14	30	0.7	27.19	9.85	2.69	3.76	0.74	N	N	9
7	7171.130	N17-W5	3	CS	14	30	3.2	29.26	20.6	4.57	6.49	5.38	Y	N	9
7	7171.147	N17-W5	3	CS	14	30	0.1	9.36	9.45	1.67	4.92	0.88	N	Y	9
7	6573.25	N17-W4	3	CS	14	30	0.1	12.67	7.87	1.31	3.08	1.18	N	Y	7
7	6573.70	N17-W4	3	CS	14	30	1.7	23.2	21.57	3.39	5.71	1.44	N	Y	7

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	9432	N17-W4	5	CS	14	30	1.4	16.15	22.93	3.71	5.7	1.95	N	Y	12
7	9458	N17-W4	5	CS	14	30	2.7	25.81	19.51	4.44	14.42	3.69	Y	N	12
7	9467	N17-W4	5	CS	14	30	0.6	13.8	10.66	3.39	9.96	2.55	Y	N	12
7	9483	N17-W4	5	CS	14	30	0.1	6.16	14.57	1.08	4.41	1.2	N	Y	12
7	6821.7	N16-W8	4	CS	14	30	0.7	15.11	21.44	1.74	7.97	1.73	N	Y	8
7	6821.21	N16-W8	4	CS	14	30	0.1	9.84	10.72	1.42	2.74	0.74	N	Y	8
7	6821.34	N16-W8	4	CS	14	30	0	6.96	5.04	0.66	1.27	0.93	N	Y	8
7	7071.5	N16-W7	4	CS	14	30	0	6.71	6.12	0.78	2.85	0.79	N	N	9
7	7071.6	N16-W7	4	CS	14	30	0.6	25.41	8.73	2.85	5.86	2.62	N	N	9
7	7472.44	N16-W7	8	CS	14	30	0.5	20.84	12.74	1.11	6.08	1.35	N	Y	9
7	3266	N16-W6	3	CS	14	30	0.8	21.29	16.04	1.68	15.17	3.91	N	Y	4
7	3288	N16-W6	3	CS	14	30	0.3	10.46	11.64	1.92	5.8	2.54	N	Y	4
7	3291	N16-W6	3	CS	14	30	0.7	26.65	15.82	1.67	5.44	2.08	N	Y	4
7	6782.11	N16-W6	5	CS	14	30	5.6	49.99	25.69	4.9	11.76	6.11	N	N	8
7	6782.20	N16-W6	5	CS	14	30	0.3	16.54	8.93	1.7	3.52	1.75	N	N	8
7	6782.51	N16-W6	5	CS	14	30	1.9	29.32	18.07	3.24	8.86	1.48	N	Y	8
7	7480.35	N17-W7	6	CS	14	30	1.7	37.4	25.9	2.01	7.5	1.89	N	N	9
7	5835	N17-W4	4	CS	14	30	3.9	38.41	27.83	3.98	5.52	1.53	Y	N	6
7	5859	N17-W4	4	CS	14	30	0.4	15.38	14.63	1.79	3.76	0.85	N	Y	6
7	5078	N17-W8	7	CS	14	30	0	9.19	6.01	1.66	4.62	0.94	Y	N	6
7	5116	N17-W8	7	CS	14	30	0	9.76	7.88	1.09	4.28	0.99	N	N	6
7	5118	N17-W8	7	CS	14	30	0.3	9.43	12.73	2.33	5.08	1.09	N	Y	6
7	7416.58	N17-W7	5	CS	14	30	0.1	14.33	11.47	0.6	3.03	0.94	N	N	9
7	6797.96	N17-W7	8	CS	14	30	2.4	31.81	30.41	2.42	7.7	2.04	N	N	8
7	7021.47	N17-W6	3	CS	14	30	0	9.51	9.88	1.06	2.92	0.71	N	N	9
7	7453.10	N17-W6	6	CS	14	30	1.1	18.04	19.43	2.66	6.48	1.5	N	Y	9
7	7171.105	N17-W5	3	CS	14	30	0.2	12.7	13.96	1.17	4.6	0.82	N	Y	9

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	7171.108	N17-W5	3	CS	14	30	0	6.62	6.55	0.39	4.55	1.55	N	N	9
7	6573.93	N17-W4	3	CS	14	30	0.3	13.96	13.24	1.9	4.33	1.66	N	Y	7
7	9435	N17-W4	5	CS	14	30	0.6	11.43	20.94	2.61	7.03	3.11	Y	N	12
7	9440	N17-W4	5	CS	14	30	7	39.75	47.77	5.53	13.65	3.17	N	Y	12
7	6782.37	N16-W6	5	CS	14	30	0.5	20.61	14.98	1.68	4.77	1.1	N	N	8
7	6912.28	N16-W5	2	CS	14	30	9.8	55.15	36.92	4.42	15.44	2.89	Y	N	8
7	6912.32	N16-W5	2	CS	14	30	0.2	11.22	10.04	2	3.57	0.72	N	N	8
7	7532	N17-W8	5	CS	14	30	0.2	13.5	8.95	1.42	6.35	1	N	Y	10
7	7480.55	N17-W7	6	CS	14	30	0.1	15.45	11.03	1.09	4.77	0.84	N	N	9
7	5850	N17-W4	4	CS	14	30	1.9	15.02	27.66	4.03	11.16	1.52	N	Y	6
7	5874	N17-W4	4	CS	14	30	1.9	25.73	24.77	2.5	8.51	1.54	N	N	6
7	8186	N17-W8	3	CS	14	30	0	7.34	5.6	0.82	1.98	0.89	N	N	11
7	8191	N17-W8	3	CS	14	30	1.1	18.37	24.49	3.43	1.93	1.13	N	Y	11
7	8236	N17-W8	3	CS	14	30	1.5	21.87	21.56	2.36	11.84	4.83	Y	Y	11
7	7416.8	N17-W7	5	CS	14	30	0.1	12.99	11.46	0.71	3.04	0.98	N	N	9
7	7021.128	N17-W6	3	CS	14	30	0	10.09	7.01	0.96	2.7	0.79	N	Y	9
7	7453.38	N17-W6	6	CS	14	30	0.2	15.52	12.09	1.03	5.25	1.7	N	Y	9
7	7171.80	N17-W5	3	CS	14	30	0	6.27	5.32	0.61	1.87	0.55	N	Y	9
7	7171.178	N17-W5	3	CS	14	30	7.5	44.36	36.22	3.59	7.94	2.13	N	N	9
7	9433	N17-W4	5	CS	14	30	0.5	10.27	22.86	2.4	3.86	0.73	N	Y	12
7	9436	N17-W4	5	CS	14	30	0.8	11.72	23.52	2.97	8.19	1.51	N	N	12
7	9437	N17-W4	5	CS	14	30	8.5	47.36	39.19	4.57	10.23	3.64	N	N	12
7	6782.39	N16-W6	5	CS	14	30	0.1	14.67	9.84	1	2.94	0.92	N	Y	8
7	6912.15	N16-W5	2	CS	14	30	1.4	23.32	25.73	2.57	6.71	1.37	N	Y	8
7	8034.38	N17-W8	4	CS	14	30	0	10.58	5.9	0.77	2.4	0.71	N	N	11
7	7535	N17-W8	5	CS	14	30	1.5	16	22.63	3.39	14.85	4.84	Y	Y	10
7	7997	N17-W8	6	CS	14	30	0.3	12.48	12.09	1.84	3.52	1.18	N	Y	10

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	7439.3	N16-W7	5	CS	14	30	0	16.61	6.77	0.86	4.3	1	N	N	9
7	7439.10	N16-W7	5	CS	14	30	0	5.43	4.26	0.71	2.88	0.86	N	Y	9
7	5103	N17-W8	7	CS	14	30	0.4	17.48	14.08	1.52	5.28	1.4	Y	Y	6
7	7416.44	N17-W7	5	CS	14	30	0	6.88	8.2	0.98	4.58	0.86	N	Y	9
7	6797.27	N17-W7	8	CS	14	30	1	33.11	17.22	1.84	8.65	2.21	N	N	8
7	6797.33	N17-W7	8	CS	14	30	0	11.61	9.28	0.9	3.81	1.47	N	N	8
7	7021.37	N17-W6	3	CS	14	30	0.4	13.01	19.48	1.4	3.66	1.15	N	Y	9
7	7453.39	N17-W6	6	CS	14	30	0	9.22	5.99	0.86	3.65	1.18	N	N	9
7	7453.43	N17-W6	6	CS	14	30	0.2	13.12	11.4	1.16	2.74	0.89	N	Y	9
7	7171.173	N17-W5	3	CS	14	30	0.5	25.16	13.54	1	4.04	1.36	Y	N	9
7	9480	N17-W4	5	CS	14	30	0	10.82	6.1	1.08	3.91	1.97	N	N	12
7	7071.16	N16-W7	4	CS	14	30	0.3	9.77	14.31	1.26	5.63	1.67	N	Y	9
7	7472.8	N16-W7	8	CS	14	30	0	13.39	9.27	0.74	3.09	1.11	N	N	9
7	3333	N16-W6	3	CS	14	30	0	9.26	5.42	0.81	4.65	1.78	N	Y	4
7	6912.12	N16-W5	2	CS	14	30	0	8.71	5.66	1.07	2.24	0.79	N	N	8
7	8034.44	N17-W8	4	CS	14	30	0.7	18.38	23.42	1.44	6.63	1.14	N	N	11
7	7518	N17-W8	5	CS	14	30	1.9	17.87	19.34	1.43	8.22	4.04	Y	Y	10
7	7480.8	N17-W7	6	CS	14	30	0	8.3	6.02	0.68	2.28	1.02	N	Y	9
7	5834	N17-W4	4	CS	14	30	0.9	21.94	20.22	1.75	3.95	1.62	N	Y	6
7	5871	N17-W4	4	CS	14	30	2.5	19.87	26.72	3.73	17.32	6.71	N	Y	6
7	7439.2	N16-W7	5	CS	14	30	1.5	22.12	29.27	2.64	6.07	1.39	N	N	9
7	8187	N17-W8	3	CS	14	30	0	5.08	3.33	0.59	3.21	0.69	N	Y	11
7	8229	N17-W8	3	CS	14	30	7.9	56.14	32.47	3.99	10.05	4.64	N	N	11
7	8261	N17-W8	3	CS	14	30	0	3.62	5.01	0.76	2.04	0.92	N	N	11
7	5072	N17-W8	7	CS	14	30	0.9	12.02	24.34	3.53	10.55	3.91	Y	N	6
7	6797.85	N17-W7	8	CS	14	30	3.8	50.03	27.11	1.98	13.96	3.14	N	N	8
7	6797.101	N17-W7	8	CS	14	30	0.3	16.98	9.68	1.55	5.38	1.64	N	Y	8

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	7021.146	N17-W6	3	CS	14	30	0	7.91	4.62	0.67	2.88	0.98	N	N	9
7	9426	N17-W4	5	CS	14	30	0.4	9.66	15.92	2.02	4.6	0.91	N	Y	12
7	9443	N17-W4	5	CS	14	30	2.9	20.53	32.17	2.18	13.75	5.25	Y	Y	12
7	3326	N16-W6	3	CS	14	30	7	55.25	34.36	3.91	6.43	1.6	N	N	4
7	6912.33	N16-W5	2	CS	14	30	0.1	12.25	9.92	1.6	3.78	1.06	N	N	8
7	6912.56	N16-W5	2	CS	14	30	0.1	10.37	9.18	1.05	6.22	1.13	N	Y	8
7	8034.60	N17-W8	4	CS	14	30	0.2	19.91	10.63	1.85	3.69	1.21	N	N	11
7	5588	N17-W8	5	CS	14	30	0.3	14.37	13.52	1.15	6.2	1.64	N	Y	6
7	4507	N17-W7	7	CS	14	30	0.1	17.78	8.44	1.36	2.89	1.83	N	N	5
7	5876	N17-W4	4	CS	14	30	1.2	25.82	27.25	1.68	9.75	3.02	N	N	6
7	5109	N17-W8	7	CS	14	30	0	7.65	6.86	0.72	3.83	0.95	N	Y	6
7	6797.131	N17-W7	8	CS	14	30	0	6.27	8.87	0.93	4.75	1.28	N	N	8
7	7021.10	N17-W6	3	CS	14	30	1.8	25.35	26.14	2.62	8.12	1.87	N	Y	9
7	7021.107	N17-W6	3	CS	14	30	1.8	31.14	17.85	3.38	6.05	1.43	N	Y	9
7	7021.119	N17-W6	3	CS	14	30	0.2	16.21	10.73	0.97	6.4	1.51	N	N	9
7	7453.21	N17-W6	6	CS	14	30	0.2	16.31	9.18	1.16	4.11	1.13	N	N	9
7	7171.48	N17-W5	3	CS	14	30	5.5	31.62	40.57	4.48	10.27	3.51	N	N	9
7	7171.59	N17-W5	3	CS	14	30	0.4	17.69	12.49	1.39	5.18	1.23	N	N	9
7	7171.100	N17-W5	3	CS	14	30	0	7.88	8.21	1.17	5.62	1.74	N	N	9
7	7171.125	N17-W5	3	CS	14	30	0.5	21.46	12.92	1.84	6.11	1.84	N	N	9
7	6573.46	N17-W4	3	CS	14	30	0	8.78	6.35	0.58	3.53	1.07	N	N	7
7	9445	N17-W4	5	CS	14	30	10.4	52.41	29.52	4.84	6.53	3.64	Y	N	12
7	3309	N16-W6	3	CS	14	30	0.1	7.38	12.08	1.89	6.05	1.31	N	Y	4
7	8034.1	N17-W8	4	CS	14	30	0.2	11.81	10.97	1.77	4.11	1.21	Y	Y	11
7	8034.2	N17-W8	4	CS	14	30	0	9.22	9.56	0.78	3.58	0.77	N	N	11
7	8034.3	N17-W8	4	CS	14	30	1	33.45	14.66	1.64	3.54	1.27	N	Y	11
7	8032.12	N17-W8	4	CS	14	10	0.1	13.52	8.1	1.19	2.85	1.27	N	Y	11

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	8032.57	N17-W8	4	CS	14	10	0	8.42	7.49	0.94	2.05	0.89	N	Y	11
7	8032.104	N17-W8	4	CS	14	10	0.3	13.42	17.1	2.03	1.82	0.89	N	Y	11
7	8032.118	N17-W8	4	CS	14	10	1.4	24.89	23.51	1.82	3.35	1.58	N	Y	11
7	8032.137	N17-W8	4	CS	14	10	0	6.94	3.44	0.45	2.26	0.94	N	N	11
7	8032.156	N17-W8	4	CS	14	10	0	6.38	6.34	0.72	2.64	0.5	N	Y	11
7	8032.159	N17-W8	4	CS	14	10	0	5.9	6.97	0.57	1.72	0.81	N	Y	11
7	7502	N17-W8	5	CS	14	10	0	7.72	7.57	0.73	1.44	0.93	N	Y	10
7	7504	N17-W8	5	CS	14	10	1.8	23.13	29.1	2.75	2.09	1.04	N	Y	10
7	7479.15	N17-W7	6	CS	14	10	0	7.61	5.25	0.88	3.27	0.68	N	Y	9
7	7435.15	N16-W7	5	CS	14	10	1	17.44	16.36	3.65	3.37	1.65	N	Y	9
7	6930.3	N16-W5	3	CS	14	10	0	9.22	5.75	0.62	2.08	0.65	N	Y	8
7	6930.9	N16-W5	3	CS	14	10	0	5.91	5.29	0.63	1.77	0.61	N	Y	8
7	6794.8	N17-W7	8	CS	14	10	3.6	36.94	22.24	3.75	5.79	4.67	Y	Y	8
7	7020.21	N17-W6	3	CS	14	10	0.3	17.81	26.33	1.12	2.26	1.12	N	Y	9
7	7020.24	N17-W6	3	CS	14	10	0	10.49	7.58	1.02	2.25	0.72	N	Y	9
7	7020.47	N17-W6	3	CS	14	10	0.4	17.09	14.05	1.48	2.74	1.32	N	Y	9
7	7448.12	N17-W6	6	CS	14	10	0	11.91	5.84	0.98	1.65	0.74	N	Y	9
7	7448.23	N17-W6	6	CS	14	10	0.1	9.59	10.06	1.32	2.51	0.72	N	Y	9
7	7179.6	N17-W5	3	CS	14	10	0.1	12.67	12.89	1.51	2.22	0.95	N	Y	9
7	7179.9	N17-W5	3	CS	14	10	0	10.31	6.39	0.82	1.61	0.68	N	Y	9
7	7179.25	N17-W5	3	CS	14	10	0.1	12.93	12.66	0.71	1.68	0.61	N	N	9
7	7179.28	N17-W5	3	CS	14	10	0	6.22	4.38	0.76	2.44	0.7	N	Y	9
7	7179.29	N17-W5	3	CS	14	10	0.7	23.88	17.17	1.49	2.75	0.92	N	Y	9
7	6769.5	N17-W5	4	CS	14	10	0.1	12.83	11.1	0.83	2.18	1.05	N	Y	8
7	6769.23	N17-W5	4	CS	14	10	0	7.56	5.89	0.71	2.24	1.02	N	Y	8
7	6769.24	N17-W5	4	CS	14	10	0	12.11	6.16	0.93	1.91	0.68	N	Y	8
7	9434	N17-W4	5	CS	14	10	0	8.19	6.65	1.43	1.78	0.98	N	Y	12

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	9460	N17-W4	5	CS	14	10	0.1	5.21	7.74	1.37	3.21	1.27	N	Y	12
7	9479	N17-W4	5	CS	14	10	0.4	13.55	13.24	1.64	2.47	1.38	N	Y	12
7	6822.11	N16-W8	4	CS	14	10	0.3	10.67	11.15	3.3	1.92	1	N	N	8
7	6822.19	N16-W8	4	CS	14	10	0.1	19.66	7.72	0.93	2.38	0.86	N	Y	8
7	6822.25	N16-W8	4	CS	14	10	0	9.17	5.54	0.78	1.9	0.75	N	Y	8
7	6822.35	N16-W8	4	CS	14	10	0	5.74	3.54	0.56	1.61	0.53	N	N	8
7	6822.46	N16-W8	4	CS	14	10	0.1	13.36	8.91	1.59	2.65	0.9	N	Y	8
7	7467.8	N16-W7	8	CS	14	10	0	9.85	7.2	0.93	2.5	1.16	N	Y	9
7	3255	N16-W6	3	CS	14	10	0.1	10.63	8.22	1.57	2.87	0.65	N	Y	4
7	3281	N16-W6	3	CS	14	10	0	6.16	6.49	0.75	1.96	1.04	N	Y	4
7	6902.20	N16-W5	2	CS	14	10	0	10.56	8.54	1.06	1.86	0.89	N	Y	8
7	8032.73	N17-W8	4	CS	14	10	0.1	10.27	8.07	1.6	3.44	1.15	N	Y	11
7	8032.174	N17-W8	4	CS	14	10	0	5.9	5.19	0.75	1.66	1.01	N	Y	11
7	8200	N17-W8	3	CS	14	10	0	8.2	13.71	0.81	1.75	0.68	N	Y	11
7	8270	N17-W8	3	CS	14	10	0	4.31	6.1	0.59	2.42	0.71	N	Y	11
7	6794.20	N17-W7	8	CS	14	10	0	5.42	6.18	0.75	2.11	0.94	N	Y	8
7	7020.76	N17-W6	3	CS	14	10	0.9	31.38	16.86	1.5	3.96	1.12	N	N	9
7	7179.49	N17-W5	3	CS	14	10	0	6.35	4.55	0.75	1.85	0.63	N	Y	9
7	6822.44	N16-W8	4	CS	14	10	0	6.78	6.1	0.33	2.06	0.54	N	Y	8
7	8032.8	N17-W8	4	CS	14	10	0	12.01	6.62	0.81	1.82	0.87	N	N	11
7	8032.29	N17-W8	4	CS	14	10	0	7.8	5.97	0.69	1.99	0.67	N	Y	11
7	7020.2	N17-W6	3	CS	14	10	0	5.69	5.48	0.87	2.38	0.63	N	Y	9
7	7020.30	N17-W6	3	CS	14	10	0	11.58	5.94	0.85	1.79	0.96	N	Y	9
7	7020.46	N17-W6	3	CS	14	10	0	7.03	4.75	0.71	2.07	0.71	N	Y	9
7	7448.1	N17-W6	6	CS	14	10	0	6.8	5.8	1.02	2.25	0.76	N	Y	9
7	7179.26	N17-W5	3	CS	14	10	0.3	17.28	16.56	1.36	2.24	0.91	N	Y	9
7	3254	N16-W6	3	CS	14	10	1	20.49	17.85	3.33	4.34	2.31	N	Y	4

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
7	8032.86	N17-W8	4	CS	14	10	0	7.13	3.41	0.67	2.19	0.59	N	Y	11
7	8032.161	N17-W8	4	CS	14	10	0.3	12.92	12.94	1.27	2.51	1.02	Y	Y	11
7	7020.60	N17-W6	3	CS	14	10	0	11.08	7.73	0.48	1.85	0.65	N	Y	9
7	7179.45	N17-W5	3	CS	14	10	0.4	20.22	13.39	1.16	2.39	0.81	N	N	9
7	7179.47	N17-W5	3	CS	14	10	0	10.34	6.85	0.98	1.79	1.09	N	Y	9
7	7467.11	N16-W7	8	CS	14	10	0	6.61	3.66	0.53	1.46	0.86	N	Y	9
7	3357	N16-W6	3	CS	14	10	0	8.23	6.68	0.5	2.89	0.43	N	N	4
7	8032.51	N17-W8	4	CS	14	10	0	9.5	7	1.31	1.94	0.8	N	Y	11
7	8032.71	N17-W8	4	CS	14	10	0	10.84	5.5	0.91	3.04	0.8	N	Y	11
7	4449	N16-W7	6	CS	14	10	0	4.18	6.48	0.54	1.22	0.81	N	Y	5
7	6682.3	N16-W7	7	CS	14	10	0	4.54	7.35	1.71	2.83	0.88	N	Y	8
7	8274	N17-W8	3	CS	14	10	0	5.34	7.74	1.1	1.66	0.95	N	Y	11
7	6769.27	N17-W5	4	CS	14	10	0	7.48	5.01	0.6	2.19	0.73	N	Y	8
7	6822.42	N16-W8	4	CS	14	10	0	7.54	3.94	0.37	1.97	0.7	N	N	8
7	3284	N16-W6	3	CS	14	10	0.1	10.23	11.81	0.86	4.3	1.79	N	Y	4
7	8032.34	N17-W8	4	CS	14	10	0.5	11.36	16.22	3.55	2.96	1.09	N	Y	11
7	8032.129	N17-W8	4	CS	14	10	0	8.24	9.43	1.05	1.62	0.62	N	Y	11
7	8032.154	N17-W8	4	CS	14	10	0	5.68	6.66	0.59	2.27	0.4	N	Y	11
7	8032.158	N17-W8	4	CS	14	10	0	10.9	6.69	1.3	1.95	0.85	N	N	11
7	4489	N17-W7	7	CS	14	10	0	10.73	7.31	0.93	3.07	0.8	N	Y	5
7	7435.11	N16-W7	5	CS	14	10	0.1	12.55	10.72	1.44	2.28	0.86	N	Y	9
7	6794.3	N17-W7	8	CS	14	10	0	8.97	6.61	1.1	1.82	0.87	N	Y	8
7	6822.31	N16-W8	4	CS	14	10	0.2	16.67	10.99	1.06	3.36	1.31	N	Y	8
8	14423.12	N19-W7	15	CS	14	30	6.1	36.55	28.55	5.6	7.4	2.57	Y	N	76
8	14423.57	N19-W7	15	CS	14	30	0.5	20.35	16.07	1.52	6.99	1.48	Y	N	76
8	14423.73	N19-W7	15	CS	14	30	0	6.19	4.64	0.52	2.72	0.66	N	N	76
8	14423.104	N19-W7	15	CS	14	30	0	6.95	6.49	1.02	3.84	1.11	N	Y	76

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14423.118	N19-W7	15	CS	14	30	0.2	12.25	13.01	1.35	2.34	0.62	Y	N	76
8	14393.5	N19-W7	16	CS	14	30	2	19.29	28.04	3.65	10.06	2.13	N	Y	75
8	14393.24	N19-W7	16	CS	14	30	0.6	10.49	17.68	1.91	4.39	1.29	N	N	75
8	14393.27	N19-W7	16	CS	14	30	0.1	11.59	11.3	1.21	3.95	0.66	N	Y	75
8	14393.48	N19-W7	16	CS	14	30	0.1	13.31	7.67	1.41	5.05	2.48	N	N	75
8	14393.50	N19-W7	16	CS	14	30	0	6.46	5.11	0.79	3.56	1.19	N	N	75
8	14144.3	N19-W7	17	CS	14	30	0	9.36	5.16	0.9	1.94	0.85	N	N	75
8	13105.12	N19-W7	18	CS	14	30	1.1	25.52	23.24	1.49	4.21	1.23	N	N	72
8	7737.23	N19-W6	15	CS	14	30	0.4	14.44	18.47	2.16	6.08	2.19	Y	N	10
8	7737.29	N19-W6	15	CS	14	30	0.1	11.69	9.64	0.89	8.47	1.58	N	Y	10
8	7737.120	N19-W6	15	CS	14	30	0	5.6	7.93	0.42	5.8	1.45	N	N	10
8	7737.162	N19-W6	15	CS	14	30	0.7	12.93	16.44	3.66	9.19	2.02	N	Y	10
8	7737.165	N19-W6	15	CS	14	30	1.8	27.65	21.45	4.23	6.88	2.54	Y	N	10
8	7737.188	N19-W6	15	CS	14	30	0	8.65	7.8	0.5	3.81	0.81	N	N	10
8	7737.229	N19-W6	15	CS	14	30	0	7.6	7.86	1.09	1.98	0.51	N	Y	10
8	7737.240	N19-W6	15	CS	14	30	0.5	18.49	14.9	2.01	4.61	0.77	N	Y	10
8	14076.7	N19-W6	15	CS	14	30	1.2	22.63	20.48	1.68	13.27	3.98	N	N	74
8	14076.10	N19-W6	15	CS	14	30	0.1	11.52	9.88	0.97	3.9	0.88	N	Y	74
8	14076.26	N19-W6	15	CS	14	30	0.5	12.88	15.59	1.65	9.37	2.39	N	Y	74
8	14076.29	N19-W6	15	CS	14	30	0.9	16.02	21.29	2.47	4.43	1.88	N	Y	74
8	14076.30	N19-W6	15	CS	14	30	0	8.32	7	0.86	2.87	0.84	N	N	74
8	14076.50	N19-W6	15	CS	14	30	0.2	13.4	13.04	1.38	7.3	1.59	N	Y	74
8	14076.74	N19-W6	15	CS	14	30	0.1	9.56	8.04	1.07	5.68	1.44	N	Y	74
8	14076.92	N19-W6	15	CS	14	30	0.9	19	17.43	2.21	5.44	1.08	Y	Y	74
8	14076.93	N19-W6	15	CS	14	30	0	8.82	4.49	0.59	1.24	0.88	N	N	74
8	14076.126	N19-W6	15	CS	14	30	0.4	25.93	8.9	1.85	3.2	1.67	N	Y	74
8	14076.130	N19-W6	15	CS	14	30	0	6.78	6.02	0.78	3.47	0.83	N	N	74

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14076.136	N19-W6	15	CS	14	30	0	5.53	8.42	0.49	2.83	0.63	N	N	74
8	14076.149	N19-W6	15	CS	14	30	2.2	34.07	24.09	2.42	4.66	2.33	N	Y	74
8	14076.157	N19-W6	15	CS	14	30	0	9.2	8.77	0.81	1.84	0.74	N	Y	74
8	14076.163	N19-W6	15	CS	14	30	0	10.81	6.68	0.74	4.38	0.89	N	N	74
8	14076.173	N19-W6	15	CS	14	30	0.2	7.85	12.26	1.85	5.53	1.95	N	Y	74
8	14076.184	N19-W6	15	CS	14	30	0.2	10.45	12.69	1.46	4.6	1.45	N	Y	74
8	14076.209	N19-W6	15	CS	14	30	0.5	22.81	12.94	1.64	5.11	1.23	N	Y	74
8	14076.221	N19-W6	15	CS	14	30	0	12.99	7.05	0.64	4.16	1.48	N	N	74
8	14076.234	N19-W6	15	CS	14	30	1.2	20.39	26.86	1.59	8.73	2.29	N	Y	74
8	14542.15	N19-W6	16	CS	14	30	0.8	17.79	15.42	2.6	5.65	1.76	N	N	76
8	14542.59	N19-W6	16	CS	14	30	0	7.32	5.2	0.81	3.46	1.08	N	Y	76
8	14542.62	N19-W6	16	CS	14	30	0.1	12.31	8.2	0.99	1.75	0.73	N	N	76
8	14542.83	N19-W6	16	CS	14	30	0.1	10.01	10.74	1.03	3.77	0.91	N	Y	76
8	14542.102	N19-W6	16	CS	14	30	7.3	31.01	36.08	3.99	8.29	1.7	N	N	76
8	14542.138	N19-W6	16	CS	14	30	0.5	21.7	13.72	1.39	2.5	1.01	N	Y	76
8	14542.141	N19-W6	16	CS	14	30	0.1	16.03	6.87	1.06	2.58	0.66	N	Y	76
8	14542.142	N19-W6	16	CS	14	30	0.2	9.61	13.32	1.05	6.62	2.06	N	N	76
8	7760.6	N19-W6	17	CS	14	30	0.6	33.87	16.31	1.3	2.78	0.89	N	N	10
8	7760.8	N19-W6	17	CS	14	30	0	9.05	7.78	0.97	5.08	1.21	N	N	10
8	7760.12	N19-W6	17	CS	14	30	0	6.6	5.72	0.47	3.61	0.83	N	Y	10
8	14311.45	N19-W5	13	CS	14	30	0	9.01	6.27	0.96	3.53	0.76	N	N	75
8	14311.47	N19-W5	13	CS	14	30	0.9	14.19	20.06	2.53	8.84	1.89	N	Y	75
8	14311.63	N19-W5	13	CS	14	30	0.7	17.08	15.33	2.38	5.48	1.91	N	Y	75
8	14311.67	N19-W5	13	CS	14	30	3	35.73	33.11	2.38	3.72	1.62	N	Y	75
8	14311.74	N19-W5	13	CS	14	30	0.3	15	11	1.68	4	1.28	N	Y	75
8	14311.92	N19-W5	13	CS	14	30	0.3	16.98	11.4	1.42	3.76	1.08	N	Y	75
8	14311.111	N19-W5	13	CS	14	30	0	7.14	6.29	0.96	3.49	1.29	N	Y	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14193.13	N19-W5	14	CS	14	30	2.3	27.51	19.28	5.09	4.6	1.15	N	N	75
8	14193.22	N19-W5	14	CS	14	30	0.9	24.96	19.32	2.08	8.74	1.97	N	N	75
8	14193.23	N19-W5	14	CS	14	30	0	7.06	9.32	1.37	5.31	1.11	N	Y	75
8	14193.69	N19-W5	14	CS	14	30	0	7.31	4.46	0.57	2.83	0.74	N	N	75
8	14193.93	N19-W5	14	CS	14	30	0	9.03	6.4	0.6	2.47	1.11	N	Y	75
8	14193.150	N19-W5	14	CS	14	30	0.6	12.33	13.53	1.64	9.4	2.38	Y	Y	75
8	14193.165	N19-W5	14	CS	14	30	0.2	16.71	8.77	1.03	4.54	1.16	N	N	75
8	14193.167	N19-W5	14	CS	14	30	0.6	22.68	16.02	1.53	5.73	1.73	N	N	75
8	14193.171	N19-W5	14	CS	14	30	1.5	26.58	19.53	2.23	7.12	1.46	N	N	75
8	14193.181	N19-W5	14	CS	14	30	0	7.01	7.61	1.19	3.64	1.05	N	Y	75
8	14193.248	N19-W5	14	CS	14	30	1.6	27.49	25.8	2.06	12.51	3.18	N	Y	75
8	14193.311	N19-W5	14	CS	14	30	0.3	12.13	10.07	2.17	2.96	0.92	N	Y	75
8	14193.315	N19-W5	14	CS	14	30	0	11.11	6.75	0.91	3.19	1.2	N	N	75
8	14193.330	N19-W5	14	CS	14	30	0.4	22.52	8.05	1.76	4.14	0.72	N	N	75
8	14193.331	N19-W5	14	CS	14	30	0.4	16.44	11.75	1.77	2.81	0.91	N	N	75
8	14193.387	N19-W5	14	CS	14	30	0.1	9.48	7.41	1.37	4.92	1.62	N	Y	75
8	14193.394	N19-W5	14	CS	14	30	0	10.66	10.65	0.7	3.4	1.22	N	N	75
8	14193.409	N19-W5	14	CS	14	30	0	6.93	6.11	1.12	5.11	1.89	N	Y	75
8	14193.411	N19-W5	14	CS	14	30	0.1	10.9	11.07	1.08	4.44	0.45	N	N	75
8	14227.22	N19-W5	16	CS	14	30	3.2	47.27	27.75	2.03	7.79	2.47	N	N	75
8	14227.33	N19-W5	16	CS	14	30	0.5	19.45	11.34	1.74	8.17	1.47	N	Y	75
8	14227.67	N19-W5	16	CS	14	30	0	9.46	6.61	1.05	3.78	1.42	N	N	75
8	14227.102	N19-W5	16	CS	14	30	0.3	10.09	13.65	1.96	3.9	1.27	N	Y	75
8	14227.120	N19-W5	16	CS	14	30	1.6	19.03	28.27	2.09	6.55	2.16	N	Y	75
8	14227.137	N19-W5	16	CS	14	30	0	7.78	9.47	0.83	3.73	0.96	N	Y	75
8	14227.180	N19-W5	16	CS	14	30	0.2	16.5	11.61	1.52	3.81	1.6	N	N	75
8	14227.189	N19-W5	16	CS	14	30	0	6.32	5.07	0.47	2.48	0.77	N	N	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14227.204	N19-W5	16	CS	14	30	0.1	11.76	11.25	0.94	2.52	1	N	Y	75
8	14227.212	N19-W5	16	CS	14	30	0.5	14.92	18.58	1.73	8.08	2.43	N	N	75
8	14227.231	N19-W5	16	CS	14	30	0.5	18.03	12.96	2.12	9.43	2.65	N	N	75
8	14227.238	N19-W5	16	CS	14	30	0	7.63	6.77	0.55	3.85	1.03	N	Y	75
8	14227.242	N19-W5	16	CS	14	30	0.1	8.23	12.01	1.09	6.11	1.91	N	N	75
8	14227.250	N19-W5	16	CS	14	30	1	20.07	20.99	1.72	3.67	1.03	N	Y	75
8	14227.256	N19-W5	16	CS	14	30	0.1	10.95	10.47	1.16	6.98	1.02	N	N	75
8	14227.276	N19-W5	16	CS	14	30	0.5	18.56	15.82	1.62	6.44	1.45	N	Y	75
8	14227.297	N19-W5	16	CS	14	30	0	6.24	10.38	1.03	4.83	1.25	N	Y	75
8	14227.326	N19-W5	16	CS	14	30	0	5.67	6.02	0.54	2.94	0.51	N	Y	75
8	14227.358	N19-W5	16	CS	14	30	0	5.73	4.53	0.58	2.67	0.5	N	N	75
8	14227.374	N19-W5	16	CS	14	30	0	6.61	4.23	0.57	2.64	0.75	N	Y	75
8	14227.397	N19-W5	16	CS	14	30	0	14.84	6.87	0.88	3.34	0.57	N	N	75
8	14227.398	N19-W5	16	CS	14	30	0.1	9.63	10.25	1.19	9.71	1.9	N	Y	75
8	14227.426	N19-W5	16	CS	14	30	0	6.38	6.59	0.79	3.73	0.98	N	Y	75
8	14227.455	N19-W5	16	CS	14	30	0.5	11.68	20.51	0.87	14.5	1.29	N	Y	75
8	14227.459	N19-W5	16	CS	14	30	0	6.6	6.46	1.28	3.92	1.76	N	N	75
8	14346.11	N19-W5	17	CS	14	30	0.6	18.67	20.17	1.5	6.79	1.16	N	N	75
8	14346.53	N19-W5	17	CS	14	30	0.2	13.58	7.66	2.05	3.82	0.81	Y	N	75
8	14346.97	N19-W5	17	CS	14	30	0.1	11.56	8.02	1.11	5.47	1.09	N	Y	75
8	14346.123	N19-W5	17	CS	14	30	0	4.79	5.24	0.76	2.39	0.98	N	N	75
8	14346.127	N19-W5	17	CS	14	30	0	4.6	5.9	0.4	6.63	1.14	N	Y	75
8	14346.136	N19-W5	17	CS	14	30	2.2	30.33	43.24	2.68	5.89	1.64	N	Y	75
8	14346.137	N19-W5	17	CS	14	30	0	5.73	6.95	0.52	3.12	0.66	N	N	75
8	14346.153	N19-W5	17	CS	14	30	0	14.67	5.57	1.04	3.01	0.91	N	Y	75
8	14346.154	N19-W5	17	CS	14	30	1.2	25.57	22.95	2	6.97	1.81	N	Y	75
8	14346.165	N19-W5	17	CS	14	30	0.2	14.16	11.57	1.41	5.71	1.17	N	N	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14346.172	N19-W5	17	CS	14	30	0	5.7	4.33	0.5	3.15	1.15	N	N	75
8	14346.192	N19-W5	17	CS	14	30	0	6.15	5.35	0.67	4.55	0.8	N	N	75
8	14346.201	N19-W5	17	CS	14	30	1.5	20.77	16.85	3.78	6.91	1.5	Y	Y	75
8	7673.21	N19-W5	18	CS	14	30	0.7	14.35	20.13	3.65	8.13	1.9	N	Y	10
8	7673.38	N19-W5	18	CS	14	30	1.1	32.28	9.02	2.24	5.42	2.19	N	Y	10
8	7673.46	N19-W5	18	CS	14	30	0.4	18.44	11.18	1.37	5.16	0.57	N	N	10
8	7673.50	N19-W5	18	CS	14	30	0.1	12.5	11.2	0.91	3.16	1.23	N	N	10
8	7673.79	N19-W5	18	CS	14	30	7.7	43.12	28.61	3.65	17.01	5.34	N	Y	10
8	7673.84	N19-W5	18	CS	14	30	0	4.64	5.01	0.36	2.68	0.73	N	N	10
8	7673.89	N19-W5	18	CS	14	30	0	8.29	5.44	0.94	2.26	0.84	N	Y	10
8	7673.100	N19-W5	18	CS	14	30	0.1	13	10.8	0.73	6.54	2.49	N	Y	10
8	7673.133	N19-W5	18	CS	14	30	0.3	14.53	12.48	1.26	4.92	1.16	N	Y	10
8	7673.145	N19-W5	18	CS	14	30	0.1	12.41	7.1	0.85	3.24	0.86	N	Y	10
8	7673.152	N19-W5	18	CS	14	30	0.3	10.61	12.72	1.38	3.83	1.1	N	Y	10
8	7673.185	N19-W5	18	CS	14	30	0.5	20.43	20.24	0.55	7.34	1.88	N	Y	10
8	7673.189	N19-W5	18	CS	14	30	0	4.45	4.2	0.56	2.26	0.56	N	Y	10
8	14349.12	N19-W5	19	CS	14	30	0.7	26.67	17.77	1.41	3.73	0.94	N	Y	75
8	14349.38	N19-W5	19	CS	14	30	0.2	19.16	8.28	1.61	6.23	1.51	N	Y	75
8	14349.40	N19-W5	19	CS	14	30	0	9.5	6.12	0.9	2.69	0.73	N	N	75
8	14349.70	N19-W5	19	CS	14	30	0.8	21.49	12.81	2.38	6.89	2.45	N	N	75
8	14349.72	N19-W5	19	CS	14	30	0	5.27	4.63	0.47	2.83	0.88	N	Y	75
8	14349.95	N19-W5	19	CS	14	30	2	29.33	16.91	3.64	6.86	1.85	N	Y	75
8	14349.119	N19-W5	19	CS	14	30	1	27.71	15.34	1.44	2.35	1.12	N	Y	75
8	14349.155	N19-W5	19	CS	14	30	0	7.61	7.01	1.74	3.26	1.58	N	N	75
8	14237.9	N19-W5	20	CS	14	30	0	6.49	4.43	0.62	2.22	0.54	N	N	75
8	14237.33	N19-W5	20	CS	14	30	0.4	12.24	12.8	1.48	5.93	1.96	N	Y	75
8	14237.38	N19-W5	20	CS	14	30	0	9.89	6.9	0.77	3.77	0.94	N	Y	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14237.41	N19-W5	20	CS	14	30	0	6.61	5.27	0.65	2.74	1.03	N	N	75
8	14237.58	N19-W5	20	CS	14	30	1	33.79	11.66	2.47	7.47	3.64	Y	N	75
8	14237.104	N19-W5	20	CS	14	30	5.9	35.8	39.91	3.99	8.71	3.48	N	Y	75
8	14237.119	N19-W5	20	CS	14	30	0.6	13.92	24.02	1.3	5.96	2.17	N	Y	75
8	14237.125	N19-W5	20	CS	14	30	0.3	14.72	10.65	1.51	4.08	1.09	N	Y	75
8	14237.142	N19-W5	20	CS	14	30	0	4.62	6	0.66	2.95	1.03	N	N	75
8	14237.156	N19-W5	20	CS	14	30	0.2	13.62	11.11	1	9.65	3.08	N	N	75
8	14237.158	N19-W5	20	CS	14	30	0	6.14	4.28	0.43	2.08	0.47	N	N	75
8	14237.191	N19-W5	20	CS	14	30	0.3	12.7	15.14	1.2	3.08	0.58	N	Y	75
8	14237.194	N19-W5	20	CS	14	30	0	9.07	8.84	0.71	2.26	0.88	N	N	75
8	14237.199	N19-W5	20	CS	14	30	1.1	18.65	21.22	1.49	8.81	2.89	N	Y	75
8	14237.205	N19-W5	20	CS	14	30	0.2	8.63	14.01	1.01	10.25	1.9	N	N	75
8	14069.33	N19-W5	21	CS	14	30	0.2	13.73	8.91	1.97	7.08	3.2	N	N	74
8	14069.95	N19-W5	21	CS	14	30	0.3	10.14	18.25	1.27	4.62	1.53	N	N	74
8	14069.140	N19-W5	21	CS	14	30	0	5.79	9.27	0.62	4.35	0.76	N	N	74
8	7674.39	N19-W5	22	CS	14	30	0.6	18.77	17.36	1.53	6.07	2.44	N	Y	10
8	7674.62	N19-W5	22	CS	14	30	3.6	39.6	24.71	3.64	10.47	2.53	Y	N	10
8	7674.67	N19-W5	22	CS	14	30	0	7.15	11.64	0.78	3.87	0.71	Y	Y	10
8	7674.77	N19-W5	22	CS	14	30	0	4.64	4.65	0.37	1.84	0.44	N	N	10
8	14303.12	N19-W5	23	CS	14	30	0.9	14.97	21.27	1.72	8.95	3.89	Y	N	75
8	14303.26	N19-W5	23	CS	14	30	0	9.06	4.33	0.75	2.25	0.71	N	N	75
8	14303.39	N19-W5	23	CS	14	30	0	8.62	6.03	1.15	1.98	0.53	N	Y	75
8	14303.48	N19-W5	23	CS	14	30	0.4	22.91	15.82	0.72	3.28	1.38	N	Y	75
8	14303.49	N19-W5	23	CS	14	30	0.2	10.04	13.44	1.14	4.24	1.25	N	Y	75
8	14613.22	N19-W5	24	CS	14	30	0.3	11.58	10.94	2.18	3.81	1.23	N	Y	76
8	14613.33	N19-W5	24	CS	14	30	0.3	17.3	10.76	1.54	3.74	2.32	N	Y	76
8	14613.43	N19-W5	24	CS	14	30	0	7.99	5.45	0.64	4.56	0.78	N	N	76

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14613.46	N19-W5	24	CS	14	30	3.9	30.77	25.11	5.41	5.87	2.43	Y	N	76
8	14613.97	N19-W5	24	CS	14	30	0.2	14.3	8.89	1.05	3.03	0.67	N	Y	76
8	14613.106	N19-W5	24	CS	14	30	0	8.83	9.73	0.8	5.24	0.95	N	Y	76
8	14613.137	N19-W5	24	CS	14	30	0	8.71	7.67	1.37	3.41	1.07	N	Y	76
8	14061.72	N19-W5	25	CS	14	30	0.3	21.52	9.45	0.87	4.16	0.78	N	Y	74
8	14061.79	N19-W5	25	CS	14	30	0	13.61	7.32	0.59	2.95	0.81	N	N	74
8	14423.29	N19-W7	15	CS	14	30	0	10.56	7.73	1.08	3.92	1.26	N	Y	76
8	14393.42	N19-W7	16	CS	14	30	0.3	20.95	9.37	1.39	3.41	1.51	N	N	75
8	7737.46	N19-W6	15	CS	14	30	0.3	15.05	14.62	1.67	5.49	1.94	N	Y	10
8	7737.56	N19-W6	15	CS	14	30	0.1	11.94	10.27	1.44	3.88	1.25	N	Y	10
8	7737.132	N19-W6	15	CS	14	30	1	18.14	18.22	1.75	6.24	1.24	Y	Y	10
8	7737.187	N19-W6	15	CS	14	30	0.1	11.51	10.64	1.09	7.1	1.65	N	Y	10
8	7737.217	N19-W6	15	CS	14	30	0	6.79	8.37	0.83	5.27	1.54	N	Y	10
8	14076.27	N19-W6	15	CS	14	30	0.5	14.27	19.4	1.28	5.48	1.66	N	Y	74
8	14076.182	N19-W6	15	CS	14	30	0	7.41	5.65	0.57	2.22	0.85	N	Y	74
8	14193.60	N19-W5	14	CS	14	30	0.5	15.24	19.49	1.96	7.17	1.57	N	Y	75
8	14193.76	N19-W5	14	CS	14	30	0	4.28	4.84	0.8	3.31	1.71	N	Y	75
8	14193.90	N19-W5	14	CS	14	30	0	7.12	9.43	0.61	5.91	0.97	N	Y	75
8	14193.196	N19-W5	14	CS	14	30	0.1	10.51	7.91	1.08	8.11	1.71	N	N	75
8	14193.222	N19-W5	14	CS	14	30	0.1	12.6	6.97	0.76	3.76	0.94	N	Y	75
8	14227.140	N19-W5	16	CS	14	30	1.1	15.71	19.35	2.3	4.36	1.41	N	Y	75
8	14227.207	N19-W5	16	CS	14	30	0	6.26	5.48	0.56	3.13	0.97	N	Y	75
8	14227.301	N19-W5	16	CS	14	30	0	6.76	6.47	0.77	4.86	1.18	N	Y	75
8	14227.372	N19-W5	16	CS	14	30	0.4	17.59	12.97	1.92	2.75	1.21	N	Y	75
8	14346.95	N19-W5	17	CS	14	30	0.2	13.75	15.78	1	5.21	1.29	N	N	75
8	14346.124	N19-W5	17	CS	14	30	0	9.21	6.26	0.86	3.03	0.77	N	N	75
8	14346.189	N19-W5	17	CS	14	30	0.1	10.28	8.57	1.18	5.19	1.32	N	Y	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	7673.35	N19-W5	18	CS	14	30	0.1	14.62	9.8	0.83	6.8	0.92	N	N	10
8	7673.94	N19-W5	18	CS	14	30	0.1	12.7	6.04	1.14	3.72	1.06	N	Y	10
8	7673.176	N19-W5	18	CS	14	30	0.5	23.78	12.46	1.51	8.26	1.33	N	Y	10
8	7673.290	N19-W5	18	CS	14	30	0	5.88	4.29	0.47	4.9	0.94	N	N	10
8	14237.16	N19-W5	20	CS	14	30	0.2	16.84	11.52	1.27	5.29	1.72	N	N	75
8	14237.19	N19-W5	20	CS	14	30	0	7.96	8.32	1.33	2.36	1.03	N	Y	75
8	14237.175	N19-W5	20	CS	14	30	0.2	10.18	9.78	1.52	6.17	1.55	N	Y	75
8	14069.57	N19-W5	21	CS	14	30	0	7.67	6.3	0.74	3.26	1.08	N	Y	74
8	7674.10	N19-W5	22	CS	14	30	2.9	25.36	24.54	3.74	6.92	2.52	Y	Y	10
8	7674.41	N19-W5	22	CS	14	30	0.7	19.36	20.41	1.22	4.47	1.35	N	N	10
8	7674.46	N19-W5	22	CS	14	30	0	7.88	6.6	0.65	2.1	0.65	N	Y	10
8	14613.123	N19-W5	24	CS	14	30	0.4	24.85	11.41	1.31	6.79	1.62	N	Y	76
8	14061.24	N19-W5	25	CS	14	30	0	8.24	5.85	0.74	2.14	1.01	N	N	74
8	14061.28	N19-W5	25	CS	14	30	0.2	11.23	15.27	0.66	9.65	1	N	N	74
8	14423.8	N19-W7	15	CS	14	30	0.4	14.61	17.67	1.08	6.25	2.01	Y	Y	76
8	7737.218	N19-W6	15	CS	14	30	0.1	10.17	6.67	0.82	5.61	1.7	N	N	10
8	14542.97	N19-W6	16	CS	14	30	0.4	16.2	12.75	2.1	3.78	1.72	N	Y	76
8	14542.125	N19-W6	16	CS	14	30	0	10.23	5.31	0.76	3.39	1.04	N	N	76
8	14311.3	N19-W5	13	CS	14	30	1.7	22.95	25.25	2.72	5.63	1.39	N	N	75
8	14311.27	N19-W5	13	CS	14	30	0.5	15.17	13.18	2.04	7.06	2.36	N	N	75
8	14193.58	N19-W5	14	CS	14	30	0.7	15.74	19.7	2.2	7.55	1.71	N	Y	75
8	14193.74	N19-W5	14	CS	14	30	0	15.71	5.74	0.78	2.73	0.98	N	N	75
8	14193.169	N19-W5	14	CS	14	30	0.5	17.04	18.66	1.37	3.79	1.24	N	Y	75
8	14193.249	N19-W5	14	CS	14	30	0	7.39	10	1.53	6.11	1.73	N	Y	75
8	14193.285	N19-W5	14	CS	14	30	0	7.3	8.99	0.47	2.85	0.59	N	N	75
8	14193.309	N19-W5	14	CS	14	30	0.3	19.55	12.69	1.29	5.39	1.27	N	Y	75
8	14227.49	N19-W5	16	CS	14	30	0	5.04	7.62	0.64	4.79	1.25	N	Y	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14227.160	N19-W5	16	CS	14	30	4.2	45.94	26.2	2.63	9.07	1.97	N	Y	75
8	14227.222	N19-W5	16	CS	14	30	0.2	9.96	10.79	1.29	3.95	1.49	N	Y	75
8	14227.230	N19-W5	16	CS	14	30	0	5.88	5.64	1.13	3.93	1.33	N	Y	75
8	14227.246	N19-W5	16	CS	14	30	1.5	21.57	28.54	2.59	3.98	1.55	N	Y	75
8	14346.22	N19-W5	17	CS	14	30	0	8.66	8.63	1.4	3.25	1.22	N	N	75
8	14346.26	N19-W5	17	CS	14	30	0	7.48	6.24	0.81	4.2	1.45	N	Y	75
8	14346.56	N19-W5	17	CS	14	30	0.4	23.63	15.01	1.98	6.72	2.45	N	Y	75
8	14346.122	N19-W5	17	CS	14	30	0	6.42	5.42	0.7	4.07	0.5	N	N	75
8	14346.139	N19-W5	17	CS	14	30	0.8	14.23	23.05	1.77	4.09	1.78	N	N	75
8	7673.257	N19-W5	18	CS	14	30	0.1	11.13	8.68	1.16	4.35	1.3	N	N	10
8	14349.24	N19-W5	19	CS	14	30	0.4	12.28	18.44	1.47	7.29	1.78	N	Y	75
8	14349.25	N19-W5	19	CS	14	30	2.6	29.25	23.88	2.76	8.13	2.54	N	N	75
8	14349.180	N19-W5	19	CS	14	30	0	6.37	6.4	0.73	3.52	1.27	N	Y	75
8	14237.89	N19-W5	20	CS	14	30	0.2	15.31	10.42	1.3	2.96	1.38	N	Y	75
8	14237.136	N19-W5	20	CS	14	30	0	12.08	10.56	0.65	1.61	1.09	N	Y	75
8	14237.157	N19-W5	20	CS	14	30	0	8.89	4.46	0.5	4.31	0.87	N	N	75
8	7674.40	N19-W5	22	CS	14	30	0	7.78	8.29	1.27	4.66	1.53	N	Y	10
8	7674.42	N19-W5	22	CS	14	30	0	7.3	4.43	0.56	2.39	0.55	N	Y	10
8	7674.43	N19-W5	22	CS	14	30	2	43.31	22	1.94	4.56	1.65	N	N	10
8	14613.125	N19-W5	24	CS	14	30	0.1	12.19	9.38	1.12	3.39	0.76	N	N	76
8	14061.11	N19-W5	25	CS	14	30	0.2	13.57	9.19	1.67	4.62	1.86	N	Y	74
8	14423.86	N19-W7	15	CS	14	30	2.4	21.46	28.04	3.82	4.05	1.64	Y	N	76
8	14393.29	N19-W7	16	CS	14	30	0	9.01	8.35	0.79	2.05	0.68	N	Y	75
8	7737.143	N19-W6	15	CS	14	30	0.1	11.98	10.51	1.64	2.84	0.85	N	Y	10
8	7737.171	N19-W6	15	CS	14	30	0.2	14.57	7.56	0.96	7.09	1.19	N	N	10
8	7737.201	N19-W6	15	CS	14	30	0	7.86	4.64	0.51	1.37	0.49	N	N	10
8	14076.46	N19-W6	15	CS	14	30	1.6	32.8	21.02	3.1	7.21	0.95	N	N	74

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14076.48	N19-W6	15	CS	14	30	0.7	14.16	15.81	2.33	9.71	2.26	N	Y	74
8	14076.220	N19-W6	15	CS	14	30	0	6.32	4.21	0.93	2.14	0.71	N	Y	74
8	14076.255	N19-W6	15	CS	14	30	0.1	10.73	7.46	1.45	3.1	1.01	N	N	74
8	14193.5	N19-W5	14	CS	14	30	3.5	19.64	32.2	3.85	9.23	1.72	N	Y	75
8	14193.51	N19-W5	14	CS	14	30	0.3	17.51	16.78	0.81	3.2	0.7	N	Y	75
8	14193.85	N19-W5	14	CS	14	30	0.4	13.29	16.11	1.28	5.87	1.84	Y	Y	75
8	14193.170	N19-W5	14	CS	14	30	0	10.92	5.46	1.24	3.09	0.92	N	N	75
8	14193.332	N19-W5	14	CS	14	30	0.1	10.51	9.76	0.96	5.04	0.66	N	Y	75
8	14193.397	N19-W5	14	CS	14	30	0	6.24	4.07	0.68	1.4	0.73	N	Y	75
8	14227.45	N19-W5	16	CS	14	30	1	14.3	16.52	2.89	13.31	4.98	N	N	75
8	14227.95	N19-W5	16	CS	14	30	0.1	8.28	13.81	0.63	8.91	1.57	N	Y	75
8	14227.282	N19-W5	16	CS	14	30	0	6.27	7.42	1.1	2.03	0.78	N	N	75
8	14227.289	N19-W5	16	CS	14	30	0	5.07	4.45	0.47	2.47	0.98	N	Y	75
8	14346.109	N19-W5	17	CS	14	30	0.7	21.89	19.19	1.54	4.35	1.83	N	Y	75
8	14346.175	N19-W5	17	CS	14	30	0	8.95	7.53	0.75	4.52	0.86	N	N	75
8	7673.25	N19-W5	18	CS	14	30	0.1	9.59	7.43	1.43	5.45	1.54	N	Y	10
8	7673.31	N19-W5	18	CS	14	30	0.1	9.11	10.28	1.1	2.08	0.87	N	N	10
8	7673.166	N19-W5	18	CS	14	30	0	6.61	4.55	0.61	1.96	0.74	N	Y	10
8	14349.29	N19-W5	19	CS	14	30	6.1	30.33	29.22	4.34	21.07	6.92	Y	N	75
8	14237.84	N19-W5	20	CS	14	30	0.1	10.2	10.49	0.92	4.65	1.4	N	Y	75
8	14237.148	N19-W5	20	CS	14	30	0.2	11.58	13.6	0.95	8.24	2.35	N	Y	75
8	14069.12	N19-W5	21	CS	14	30	1.3	17.66	23.53	2.41	8.34	1.53	N	Y	74
8	7674.49	N19-W5	22	CS	14	30	0.1	9.5	11.86	1.17	5.88	0.68	N	Y	10
8	7674.74	N19-W5	22	CS	14	30	0	7.83	5.17	0.46	2.02	0.63	N	N	10
8	14303.59	N19-W5	23	CS	14	30	0.3	10.39	12.15	1.98	4.03	0.76	N	N	75
8	14303.71	N19-W5	23	CS	14	30	0	10.79	4.76	0.89	3.56	1.37	N	N	75
8	14613.77	N19-W5	24	CS	14	30	0.1	11.3	8.27	1.68	6.94	1.54	N	Y	76

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14061.8	N19-W5	25	CS	14	30	1.5	19.24	17.59	4.07	8.49	2.65	Y	N	74
8	14423.51	N19-W7	15	CS	14	30	0	5.66	7.05	0.55	3.22	0.8	N	N	76
8	14423.71	N19-W7	15	CS	14	30	0.1	16.6	6.71	1.36	2.7	1.33	N	Y	76
8	7737.7	N19-W6	15	CS	14	30	0.1	9.45	10.87	1.51	3.69	1.39	N	Y	10
8	14076.180	N19-W6	15	CS	14	30	0.2	12.99	10.72	1.43	2.73	1.17	Y	N	74
8	14076.212	N19-W6	15	CS	14	30	0.5	12.18	15.24	1.93	8.94	1.75	N	Y	74
8	14076.237	N19-W6	15	CS	14	30	1.5	23.99	25.22	2.83	7.89	1.84	N	N	74
8	7760.16	N19-W6	17	CS	14	30	0.1	18.63	8.84	0.86	3.28	0.76	N	N	10
8	14311.20	N19-W5	13	CS	14	30	3.4	51.42	19.65	2.67	4.13	1.27	N	N	75
8	14193.62	N19-W5	14	CS	14	30	0.7	20.61	14.47	1.87	6.14	0.8	Y	N	75
8	14193.80	N19-W5	14	CS	14	30	0	10.18	6.47	0.78	4.82	1.32	N	N	75
8	14193.133	N19-W5	14	CS	14	30	0.3	14.36	12.31	1.38	9.86	2.43	N	Y	75
8	14193.403	N19-W5	14	CS	14	30	0	8.9	10.96	0.61	2.07	0.98	N	N	75
8	14227.44	N19-W5	16	CS	14	30	0.5	19.34	11.5	1.72	6.53	1.13	N	Y	75
8	14227.113	N19-W5	16	CS	14	30	0.1	11.5	7.83	0.94	4.37	1.1	N	N	75
8	14227.206	N19-W5	16	CS	14	30	0.4	9.99	15.8	2.08	7.58	2.94	N	N	75
8	14227.243	N19-W5	16	CS	14	30	0	6.03	6.28	0.48	3.53	0.96	N	Y	75
8	14227.281	N19-W5	16	CS	14	30	0	7.29	5.29	0.53	2.3	1	N	N	75
8	14346.23	N19-W5	17	CS	14	30	0	8.12	4.6	0.81	3.12	0.94	N	N	75
8	14346.52	N19-W5	17	CS	14	30	1.1	18.24	18.99	1.97	5.12	2.33	N	Y	75
8	14346.80	N19-W5	17	CS	14	30	0.2	9.77	15.35	1.09	4.41	1.35	N	Y	75
8	14346.90	N19-W5	17	CS	14	30	0	6.42	8.35	1.33	5.51	1.55	N	Y	75
8	7673.83	N19-W5	18	CS	14	30	0.4	14.7	14.43	2.02	6.25	1.3	N	Y	10
8	7673.99	N19-W5	18	CS	14	30	2	24.48	30.86	2.02	12.12	2.54	N	Y	10
8	7673.139	N19-W5	18	CS	14	30	0.1	9.79	10.84	1.62	4.24	0.96	N	N	10
8	7673.275	N19-W5	18	CS	14	30	0	7.45	4.92	0.41	2.2	0.38	N	N	10
8	14349.148	N19-W5	19	CS	14	30	0.1	14.46	8.86	1.21	5.39	1.28	Y	N	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14069.8	N19-W5	21	CS	14	30	0.1	9.08	9.19	1.5	3.5	1.18	N	N	74
8	14069.51	N19-W5	21	CS	14	30	1.1	26.01	13.83	2.27	8.78	2.44	N	N	74
8	14069.65	N19-W5	21	CS	14	30	0.1	13.61	6.19	2.07	4.77	1.3	Y	Y	74
8	14069.116	N19-W5	21	CS	14	30	0	6.09	8.65	0.76	3.37	0.9	N	Y	74
8	7674.33	N19-W5	22	CS	14	30	0	8.7	7.19	0.9	2.54	0.61	N	Y	10
8	14613.71	N19-W5	24	CS	14	30	0.3	11.59	14.22	1.4	2.95	0.59	N	N	76
8	14061.29	N19-W5	25	CS	14	30	0.3	11.47	12.89	1.8	9.29	1.01	N	Y	74
8	14061.52	N19-W5	25	CS	14	30	0.1	8	15.18	1.36	11.7	2.67	N	N	74
8	14061.88	N19-W5	25	CS	14	30	0	8.48	7.93	1.47	2.6	0.92	N	Y	74
8	14423.34	N19-W7	15	CS	14	30	0.3	16.3	16.73	1.45	3.64	1.36	N	Y	76
8	14423.38	N19-W7	15	CS	14	30	0.3	9.36	14.04	1.55	7.94	1.54	N	N	76
8	14423.129	N19-W7	15	CS	14	30	0	8.69	6.22	0.86	2.56	0.75	N	N	76
8	14393.22	N19-W7	16	CS	14	30	1.9	22.68	22.85	4.05	8.36	2.51	N	N	75
8	14393.26	N19-W7	16	CS	14	30	0	5.81	4.73	0.74	2.84	0.59	N	Y	75
8	14144.9	N19-W7	17	CS	14	30	0.2	12.19	10.7	0.99	5.97	1.42	N	N	75
8	13105.8	N19-W7	18	CS	14	30	0.3	12.7	13.09	1.07	6.56	2.24	N	Y	72
8	7737.1	N19-W6	15	CS	14	30	2.4	25.64	34.29	1.9	5.27	1.73	Y	Y	10
8	7737.60	N19-W6	15	CS	14	30	0.3	12.67	14.97	0.91	8.87	0.9	Y	N	10
8	7737.115	N19-W6	15	CS	14	30	0.1	9.95	6.45	1.92	1.78	0.73	N	N	10
8	7737.135	N19-W6	15	CS	14	30	0.2	13.44	8.38	0.9	1.83	1.26	N	Y	10
8	14076.96	N19-W6	15	CS	14	30	0.3	11	11.51	1.92	4.4	1.41	N	Y	74
8	14076.169	N19-W6	15	CS	14	30	0.4	29.54	10.6	1.42	4.88	1.52	N	N	74
8	14076.239	N19-W6	15	CS	14	30	0	4.92	6.42	0.51	2.72	0.96	N	Y	74
8	14076.246	N19-W6	15	CS	14	30	0.1	11.12	7.38	1.27	2.47	1.04	N	Y	74
8	14542.77	N19-W6	16	CS	14	30	0.1	11.04	8.2	1.58	6.29	2.23	N	N	76
8	14193.68	N19-W5	14	CS	14	30	0	5.24	4.47	0.51	2.65	0.57	N	N	75
8	14193.81	N19-W5	14	CS	14	30	0.3	18.63	11.98	0.74	4.25	1.24	N	Y	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14193.289	N19-W5	14	CS	14	30	0.1	9.71	10.45	1.1	5.93	1.11	N	Y	75
8	14227.3	N19-W5	16	CS	14	30	0.5	18.55	11	2.16	7	2.89	N	N	75
8	14227.16	N19-W5	16	CS	14	30	0.2	12.95	12.11	1.16	6.55	1.97	N	Y	75
8	14227.163	N19-W5	16	CS	14	30	0	8.19	4.85	0.78	3.11	1.36	N	Y	75
8	14227.248	N19-W5	16	CS	14	30	0.2	16.15	10.66	1.42	2.02	1.02	N	N	75
8	14346.115	N19-W5	17	CS	14	30	1	25.73	23.11	1.34	5.69	1.75	N	Y	75
8	7673.236	N19-W5	18	CS	14	30	2	30.24	27.27	3.37	6.98	0.79	N	N	10
8	7673.248	N19-W5	18	CS	14	30	0.6	13.74	13.05	1.27	10.84	4.7	N	N	10
8	14349.7	N19-W5	19	CS	14	30	0.4	17.01	10.13	2.43	7.27	2.1	N	Y	75
8	14349.159	N19-W5	19	CS	14	30	0	7.25	5.27	0.72	3.58	0.87	N	Y	75
8	14237.11	N19-W5	20	CS	14	30	1	16.03	29.61	1.3	6.11	1.9	Y	Y	75
8	14237.36	N19-W5	20	CS	14	30	0	7.53	6.63	0.89	5.04	2.09	Y	Y	75
8	14069.37	N19-W5	21	CS	14	30	0.2	15.62	6.89	1.88	8.33	2.84	N	N	74
8	14069.47	N19-W5	21	CS	14	30	0.9	25.14	13.03	2.95	6.14	4.34	Y	N	74
8	7674.51	N19-W5	22	CS	14	30	0.9	18.59	19.62	3.01	4.44	2.64	Y	Y	10
8	14613.59	N19-W5	24	CS	14	30	0.1	11.4	8.93	0.72	4.44	0.73	N	N	76
8	14082.23	N19-W6	15	CS	14	10	0	11.26	5.98	0.8	3.43	1.31	N	Y	74
8	14392.6	N19-W7	16	CS	14	10	0	12.11	6.87	0.77	2.11	1.04	N	Y	75
8	7741.21	N19-W6	15	CS	14	10	0.9	27.18	14.17	1.76	3.83	1.42	N	Y	10
8	14180.33	N19-W5	14	CS	14	10	0	5.41	5.38	0.46	2.44	0.91	N	Y	75
8	14422.1	N19-W7	15	CS	14	10	0	10.3	5.69	0.86	1.85	0.51	N	N	76
8	14315.6	N19-W5	13	CS	14	10	1.9	38.88	15.53	2.46	3.13	1.89	Y	N	75
8	14315.8	N19-W5	13	CS	14	10	0	7.52	5.89	1.25	2.24	0.89	N	Y	75
8	14352.9	N19-W5	19	CS	14	10	0	5.93	4.25	0.83	2.09	0.66	N	Y	75
8	7763.2	N19-W6	17	CS	14	10	0	9.14	7.05	0.86	2.46	0.76	N	Y	10
8	14315.12	N19-W5	13	CS	14	10	0	7.43	6.87	0.85	1.58	0.96	N	Y	75
8	14234.6	N19-W5	20	CS	14	10	0	7.88	3.82	0.46	2	1.14	N	Y	75

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
8	14352.1	N19-W5	19	CS	14	10	0	5.88	6.68	0.78	1.95	1.22	N	Y	75
8	14422.7	N19-W7	15	CS	14	10	0	5.77	5.58	0.55	1.84	0.52	N	Y	76
8	14220.27	N19-W5	16	CS	14	10	0.1	10.76	8.28	1.28	2.54	1.16	N	Y	75
8	7666.12	N19-W5	18	CS	14	10	0	6.86	4.74	0.81	1.65	0.91	N	Y	10
8	14082.15	N19-W6	15	CS	14	10	0	7.42	3.9	0.48	2.17	0.81	N	N	74
8	7666.24	N19-W5	18	CS	14	10	0	6.36	3.91	0.35	1.19	0.61	N	Y	10
8	7678.17	N19-W5	22	CS	14	10	0	5.16	3.45	0.4	1.88	0.62	N	Y	10
8	14071.3	N19-W5	21	CS	14	10	0.1	10.02	10.95	1.15	3.61	0.91	N	Y	74
8	14220.13	N19-W5	16	CS	14	10	0	5.83	4.1	0.67	2.09	1.07	N	Y	75
8	14220.32	N19-W5	16	CS	14	10	0.3	18.33	12.19	1.09	2.54	0.72	N	Y	75
8	7678.14	N19-W5	22	CS	14	10	0	7.61	6.98	0.67	1.95	0.59	N	Y	10
8	7666.36	N19-W5	18	CS	14	10	0	8.1	5.88	0.6	2.47	0.93	N	Y	10
8	14082.24	N19-W6	15	CS	14	10	0	10.47	5.5	0.77	1.95	0.91	N	N	74
8	14220.33	N19-W5	16	CS	14	10	0	8.23	6.21	1.21	1.86	0.57	N	Y	75
8	14220.1	N19-W5	16	CS	14	10	0	4.71	3.85	0.65	1.85	0.82	N	Y	75
8	14059.2	N19-W5	25	CS	14	10	0.1	14.56	9.63	0.87	2.18	1.13	N	Y	74
8	14082.13	N19-W6	15	CS	14	10	0	9.08	4.34	1.04	2.26	1.06	N	Y	74
8	14220.2	N19-W5	16	CS	14	10	0	6.19	5.55	0.62	1.96	0.76	N	Y	75
8	14315.17	N19-W5	13	CS	14	10	0	5.88	6.58	0.92	1.94	0.92	N	Y	75
8	14310.13	N19-W5	23	CS	14	10	0	7.62	5.95	1.01	2.02	0.94	N	Y	75
8	7666.21	N19-W5	18	CS	14	10	0	7.43	5.83	0.76	2.02	1.13	N	Y	10
8	14180.36	N19-W5	14	CS	14	10	0.4	17.22	11.84	1.85	3.02	1.57	N	Y	75
8	14071.16	N19-W5	21	CS	14	10	0	7.36	10.16	0.96	2.49	0.87	N	Y	74
8	14180.21	N19-W5	14	CS	14	10	0.1	16.63	7.21	0.85	2.47	1	N	Y	75
8	14180.35	N19-W5	14	CS	14	10	0	7.41	3.77	0.58	3.01	1.03	N	Y	75
10&11	8962	N17-W6	9	CS	14	30	0.1	11.57	7.61	0.97	3.4	1.67	N	Y	11
10&11	8362.4	N17-W6	11	CS	14	30	0.6	20.34	17.96	1.59	3.65	0.92	Y	Y	11

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	8362.14	N17-W6	11	CS	14	30	0	8.72	6.21	1.25	3.46	1.31	N	Y	11
10&11	6195	N17-W5	6	CS	14	30	7.1	31.48	32.48	7	32.45	9.12	Y	Y	7
10&11	6660.4	N17-W5	6	CS	14	30	0.4	15.69	13.41	2.73	4.9	1.19	N	N	8
10&11	5665	N17-W5	7	CS	14	30	0.2	14.02	8.64	2.05	5.11	1.61	N	N	6
10&11	7110.49	N17-W5	7	CS	14	30	0	9.12	7.25	0.69	5.2	1.19	N	N	9
10&11	6094.1	N17-W5	8	CS	14	30	0.4	11.3	19.31	1.67	6.76	0.89	N	Y	7
10&11	6576.42	N17-W4	6	CS	14	30	0.3	17.45	16.4	1.12	3.35	1.16	N	N	7
10&11	8497	N17-W7	9	CS	14	30	0.1	13.92	7.7	0.91	4.45	1.24	N	Y	11
10&11	8516.10	N17-W7	9	CS	14	30	0	7.38	5.92	0.96	3.09	1.11	N	N	11
10&11	5213	N17-W6	8	CS	14	30	0.1	15.45	8.76	0.78	5	1.39	N	Y	6
10&11	6767.87	N17-W5	4	CS	14	30	6.8	29.12	36.2	7.19	6.41	3.65	Y	N	8
10&11	8019.15	N17-W5	12	CS	14	30	0.5	18.66	12.01	1.4	5.22	2.26	N	Y	11
10&11	8019.33	N17-W5	12	CS	14	30	0.1	14.12	8.48	0.77	2.57	1.55	N	N	11
10&11	8019.67	N17-W5	12	CS	14	30	3.3	24.2	23.21	4.21	17.76	4.17	Y	N	11
10&11	8019.123	N17-W5	12	CS	14	30	5.6	33.96	27.21	7.25	12.8	4.86	Y	Y	11
10&11	8019.198	N17-W5	12	CS	14	30	0	6.07	4.92	0.75	4.34	1.33	N	Y	11
10&11	9536	N17-W4	8	CS	14	30	0	8.58	6.41	1.17	3.88	1.58	N	N	12
10&11	9539	N17-W4	8	CS	14	30	0	6.41	5.46	0.75	2.62	0.8	N	Y	12
10&11	9549	N17-W4	8	CS	14	30	1.2	32.31	25.87	1.33	7.28	1.7	N	Y	12
10&11	9383	N17-W4	10	CS	14	30	0.2	9.94	12.74	1.53	8.8	2.71	Y	Y	12
10&11	5606	N16-W7	9	CS	14	30	0	7.82	5.55	0.84	2.25	0.67	N	Y	6
10&11	6985.77	N16-W6	8	CS	14	30	0.5	15.67	17.92	2.43	5.78	1.6	N	Y	8
10&11	9180	N17-W7	10	CS	14	30	0	7.95	6.02	0.92	3.02	1.23	N	N	12
10&11	9201	N17-W7	10	CS	14	30	0.1	8.7	9.5	1.44	4.92	2.23	N	Y	12
10&11	5666	N17-W5	7	CS	14	30	0.6	20	15.13	2.56	3.13	0.72	N	N	6
10&11	7110.26	N17-W5	7	CS	14	30	1.4	18.6	22.02	2.64	7.37	0.89	N	Y	9
10&11	6705.113	N17-W5	10	CS	14	30	25.9	46.18	47.52	9.92	21.44	9.23	N	N	8

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	6576.25	N17-W4	6	CS	14	30	0	10.11	7.68	0.92	2.93	0.86	N	Y	7
10&11	6576.97	N17-W4	6	CS	14	30	0	7.28	5.96	0.9	4.55	1.37	N	Y	7
10&11	8370.15	N16-W6	10	CS	14	30	0	6.15	5.79	0.62	3.02	0.62	N	N	11
10&11	8516.8	N17-W7	9	CS	14	30	0	5.89	4.23	0.54	1.53	0.62	N	N	11
10&11	4674	N17-W8	8	CS	14	30	0.2	14.09	9.45	1.41	3.84	1.51	N	N	5
10&11	14605.51	N17-W8	11	CS	14	30	0.3	20.6	11.07	1.44	6.44	1.41	N	N	76
10&11	5150	N17-W6	8	CS	14	30	1	16.09	24.08	3.32	4.65	1.43	Y	Y	6
10&11	5183	N17-W6	8	CS	14	30	0	6.71	8.29	0.87	5.07	1.21	N	Y	6
10&11	9302	N17-W5	11	CS	14	30	0	4.28	6.88	0.95	3.51	0.79	N	Y	12
10&11	9332	N17-W5	11	CS	14	30	0	8.15	6.61	1.36	2.81	0.84	Y	Y	12
10&11	8019.48	N17-W5	12	CS	14	30	0.1	10.97	10.58	1.18	5.61	1.72	N	Y	11
10&11	8019.56	N17-W5	12	CS	14	30	0	4.75	4.75	0.62	1.46	0.74	N	Y	11
10&11	8019.72	N17-W5	12	CS	14	30	0.5	18.38	16.3	1.26	6.3	1.66	N	Y	11
10&11	8900.53	N17-W4	7	CS	14	30	1.1	39.28	12.82	2.58	7.61	1.58	N	Y	11
10&11	8900.87	N17-W4	7	CS	14	30	0.4	22.25	11.6	1.67	3.09	1.02	N	Y	11
10&11	8900.126	N17-W4	7	CS	14	30	0	6.42	8.71	0.91	3.31	1.39	N	Y	11
10&11	9534	N17-W4	8	CS	14	30	0	9.98	11.91	0.94	4.19	0.59	N	Y	12
10&11	9551	N17-W4	8	CS	14	30	0.1	7.65	14.49	1.49	7.54	1.9	N	Y	12
10&11	8665	N17-W4	9	CS	14	30	0.2	7.08	13.79	1.33	6.2	1.19	N	Y	11
10&11	7156.9	N17-W7	12	CS	14	30	0.3	12.57	16.46	1.27	4.58	0.85	Y	N	9
10&11	6206	N17-W5	6	CS	14	30	1	16.86	21.21	2.36	8.57	2.58	N	Y	7
10&11	6238	N17-W5	6	CS	14	30	0.4	13.46	15.19	1.73	10.59	1.06	Y	Y	7
10&11	6660.18	N17-W5	6	CS	14	30	2.8	19.06	28.11	4.01	14.57	6.3	Y	N	8
10&11	7110.45	N17-W5	7	CS	14	30	0	11.52	6.73	0.89	3.79	1	N	N	9
10&11	7110.47	N17-W5	7	CS	14	30	0.1	10.03	8.53	2.42	6.15	1.95	N	N	9
10&11	8723	N17-W5	9	CS	14	30	0	5.59	8.34	0.83	3.19	0.85	N	Y	11
10&11	6705.4	N17-W5	10	CS	14	30	0.5	17.47	15.09	1.18	7.56	1.52	N	N	8

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	5690	N16-W5	9	CS	14	30	0.1	14.53	9.1	1.68	4.01	1.07	Y	Y	6
10&11	8489	N17-W7	9	CS	14	30	0	4.43	6.74	0.62	4.36	0.97	N	N	11
10&11	8496	N17-W7	9	CS	14	30	0	7.33	8.73	1.16	3.43	1.89	N	Y	11
10&11	8516.19	N17-W7	9	CS	14	30	0	6.77	11.14	0.82	4.99	0.75	N	Y	11
10&11	14605.52	N17-W8	11	CS	14	30	0	12.59	7.99	1.43	3.87	1.41	Y	N	76
10&11	5242	N17-W6	8	CS	14	30	0.1	16.68	11.92	0.77	1.8	0.6	N	N	6
10&11	4721	N17-W5	4	CS	14	30	0	5.23	5.81	0.75	4.47	1.15	N	N	5
10&11	6767.73	N17-W5	4	CS	14	30	0.5	11.21	19.62	2.96	8.35	2.24	N	N	8
10&11	6767.137	N17-W5	4	CS	14	30	0	7.62	4.2	0.48	3.19	0.85	N	N	8
10&11	6767.141	N17-W5	4	CS	14	30	0.2	10.79	16.96	1.23	5.4	1.65	N	Y	8
10&11	8019.108	N17-W5	12	CS	14	30	8.6	29.36	41.29	11.36	11.63	4.94	Y	N	11
10&11	8900.57	N17-W4	7	CS	14	30	0	8.85	7.15	0.63	5.24	1.05	N	N	11
10&11	8900.110	N17-W4	7	CS	14	30	0.2	17.03	8.99	1.24	4.79	0.58	N	N	11
10&11	8651	N17-W4	9	CS	14	30	0.1	6.6	11.21	0.89	7.32	0.97	N	Y	11
10&11	9378	N17-W4	10	CS	14	30	0.6	23	21.54	1.31	3.45	1.11	N	Y	12
10&11	9379	N17-W4	10	CS	14	30	0	4.54	7.31	0.7	2.23	1.08	N	N	12
10&11	6985.67	N16-W6	8	CS	14	30	0.6	16.29	20.59	1.05	5.22	2.21	N	Y	8
10&11	9225	N17-W7	10	CS	14	30	0	9.65	5.56	0.75	4.28	0.8	N	N	12
10&11	6033	N17-W7	11	CS	14	30	0	15.01	6.05	1.19	3.04	0.72	N	N	7
10&11	8938	N17-W6	9	CS	14	30	0	10.7	12.94	0.94	3.09	0.9	N	Y	11
10&11	8716	N17-W5	9	CS	14	30	0	9.54	6.88	1.43	2.82	1	N	N	11
10&11	8745	N17-W5	9	CS	14	30	0	4.32	5.87	0.47	3.16	0.74	N	N	11
10&11	6576.67	N17-W4	6	CS	14	30	0.6	15.96	16.5	2.52	5.35	1.77	Y	N	7
10&11	8370.8	N16-W6	10	CS	14	30	2.7	40.43	20.48	2.46	3.11	1.71	N	Y	11
10&11	8516.14	N17-W7	9	CS	14	30	0.1	9.41	5.86	1.02	3.06	0.55	N	Y	11
10&11	14605.15	N17-W8	11	CS	14	30	0.7	16.06	16.55	1.73	3.65	1.35	N	Y	76
10&11	6767.8	N17-W5	4	CS	14	30	0	9.75	4.99	0.8	3.37	1.01	N	N	8

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	6767.82	N17-W5	4	CS	14	30	1.5	21.39	19.67	3.75	4.11	1.99	Y	Y	8
10&11	6767.136	N17-W5	4	CS	14	30	0.1	14.45	10.31	0.83	3.28	1.3	N	N	8
10&11	5644	N17-W5	5	CS	14	30	0.7	17.64	12.75	2.49	5.06	1.88	N	Y	6
10&11	9268	N17-W5	11	CS	14	30	0.5	26.11	13.27	1.8	4.69	0.94	N	N	12
10&11	8019.32	N17-W5	12	CS	14	30	0	8.79	9.92	0.97	5.72	1.3	N	Y	11
10&11	8019.69	N17-W5	12	CS	14	30	0.4	17.84	15.58	1.61	6.33	3.24	N	Y	11
10&11	8019.107	N17-W5	12	CS	14	30	0.5	20.49	13.31	1.68	6.41	3.01	N	N	11
10&11	8019.115	N17-W5	12	CS	14	30	0	8.07	6.12	0.79	2.44	0.88	N	N	11
10&11	8900.54	N17-W4	7	CS	14	30	1.2	27.13	13.3	2.26	4.04	1.34	N	Y	11
10&11	8900.83	N17-W4	7	CS	14	30	1.1	16.34	27.61	2.59	10.68	2.05	N	N	11
10&11	8900.111	N17-W4	7	CS	14	30	0	7.31	6.64	0.87	3.23	0.75	N	Y	11
10&11	8900.121	N17-W4	7	CS	14	30	0	6.13	5.49	0.82	2.96	0.83	N	Y	11
10&11	5135	N16-W8	7	CS	14	30	1.2	24.82	20.97	1.78	10.02	3.64	N	N	6
10&11	5604	N16-W7	9	CS	14	30	0.5	10.54	16.25	2.44	7.92	1.18	Y	Y	6
10&11	9207	N17-W7	10	CS	14	30	0	6.13	7.4	0.59	2.33	0.74	N	N	12
10&11	10261	N17-W8	10	CS	14	30	1.3	17.18	24.72	2.63	6.31	1.89	N	Y	14
10&11	8929	N17-W6	9	CS	14	30	0	10.18	7	1.39	3.68	1.18	N	N	11
10&11	8922	N17-W6	9	CS	14	30	1.6	21.3	24.53	2.74	8.76	2.89	Y	Y	11
10&11	9143	N17-W6	10	CS	14	30	0.1	7.79	9.48	1.75	2.93	1.19	N	Y	12
10&11	8291	N17-W6	11	CS	14	30	0	4.57	10.22	0.47	9.9	2.26	N	Y	11
10&11	8297	N17-W6	11	CS	14	30	0	5.16	4.43	0.58	2.37	0.9	N	Y	11
10&11	8303	N17-W6	11	CS	14	30	0	3.75	6.78	0.8	2.78	0.74	N	Y	11
10&11	8362.18	N17-W6	11	CS	14	30	0.3	15.75	12.54	1.51	6.52	0.72	N	N	11
10&11	9018	N17-W6	13	CS	14	30	0.1	10.14	16.24	0.9	6.57	1.53	N	Y	12
10&11	5978	N17-W5	8	CS	14	30	1.2	13.75	26.17	2.64	4.15	0.76	Y	Y	6
10&11	6079	N17-W5	8	CS	14	30	0.5	26.39	14.9	1.01	5.05	1.24	N	N	7
10&11	6092	N17-W5	8	CS	14	30	2.9	24.31	25.33	5.19	18.14	6.53	N	Y	7

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	8500	N17-W7	9	CS	14	30	0.4	18.15	14.15	1.21	5.58	1.24	N	N	11
10&11	8516.2	N17-W7	9	CS	14	30	0.7	12.42	15.4	2.95	8.31	3.53	N	Y	11
10&11	8516.15	N17-W7	9	CS	14	30	0.1	8.77	10.18	0.99	2.75	1.06	N	N	11
10&11	5211	N17-W6	8	CS	14	30	0	6.64	7.94	0.5	1.94	0.7	N	Y	6
10&11	6767.95	N17-W5	4	CS	14	30	0.5	23.22	12.42	1.48	4.41	1.61	N	Y	8
10&11	6767.108	N17-W5	4	CS	14	30	0.4	18.61	13.27	2.16	6.4	1.29	N	Y	8
10&11	9335	N17-W5	11	CS	14	30	0	7.98	5.72	1.11	2.13	1.22	N	Y	12
10&11	9527	N17-W4	8	CS	14	30	0	9.16	10.52	0.96	4.81	1.07	N	Y	12
10&11	6985.40	N16-W6	8	CS	14	30	0.3	10.04	14.18	1.21	5.13	1.1	N	Y	8
10&11	8819	N16-W5	10	CS	14	30	0.3	15.97	10.24	1.49	4.53	1.57	N	N	11
10&11	8836	N16-W5	10	CS	14	30	0.8	24.53	18.2	1.66	5.74	0.94	N	N	11
10&11	9184	N17-W7	10	CS	14	30	1	13.29	7.91	1.07	3.69	1.43	N	N	12
10&11	9244	N17-W7	10	CS	14	30	0.1	10.75	9.37	0.71	5.25	1.16	N	N	12
10&11	6035	N17-W7	11	CS	14	30	0	7.03	11.24	0.67	3.39	0.66	N	Y	7
10&11	8865	N17-W7	13	CS	14	30	0.2	19.18	11.9	1.46	2.97	0.95	N	N	11
10&11	6410.14	N17-W8	9	CS	14	30	0.4	19.73	12.09	1.48	4.11	0.67	N	N	7
10&11	10269	N17-W8	10	CS	14	30	0.5	18.05	16.51	2.16	3.95	1.05	N	Y	14
10&11	8931	N17-W6	9	CS	14	30	0	4.48	11.24	1.13	4.99	1.73	N	Y	11
10&11	8930	N17-W6	9	CS	14	30	0	6.24	5.21	0.46	1.92	1.06	N	N	11
10&11	8968	N17-W6	9	CS	14	30	0.3	16.35	6.88	1.97	4.98	0.93	N	N	11
10&11	8970	N17-W6	9	CS	14	30	0	6.68	9.52	0.6	2.17	0.95	N	N	11
10&11	9137	N17-W6	10	CS	14	30	0	7.66	5.71	0.78	2.09	0.7	N	Y	12
10&11	8295	N17-W6	11	CS	14	30	0	4.5	7.72	0.49	2.64	0.8	N	N	11
10&11	8319	N17-W6	11	CS	14	30	0.4	18.64	14.23	1.56	6.62	2.01	N	Y	11
10&11	8325	N17-W6	11	CS	14	30	0.5	13.29	11.91	1.67	5.6	2.35	Y	Y	11
10&11	6190	N17-W5	6	CS	14	30	0	6.65	8.86	0.64	2.48	0.54	N	N	7
10&11	6229	N17-W5	6	CS	14	30	0	5.67	6.48	0.92	4.54	0.99	N	N	7

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	6232	N17-W5	6	CS	14	30	3.6	21.29	46.94	4.13	8.6	3.96	N	Y	7
10&11	6660.5	N17-W5	6	CS	14	30	0.4	12.46	16.21	1.74	4.45	1.47	N	N	8
10&11	6685.3	N17-W5	7	CS	14	30	0	9.68	7.89	0.67	4.14	0.86	N	N	8
10&11	6685.14	N17-W5	7	CS	14	30	0.6	15.62	18.77	1.31	5.78	1.23	N	N	8
10&11	7110.6	N17-W5	7	CS	14	30	1.4	16.29	27.43	2.45	6.19	0.91	N	N	9
10&11	7110.9	N17-W5	7	CS	14	30	0.2	12.01	10.54	1.14	6.21	1.61	N	Y	9
10&11	7110.25	N17-W5	7	CS	14	30	2.8	28.31	27.2	2.17	8.19	1.64	N	Y	9
10&11	7110.28	N17-W5	7	CS	14	30	0.2	9.64	14.14	0.71	7.89	2.82	N	Y	9
10&11	7110.29	N17-W5	7	CS	14	30	0	8.13	4.82	0.61	1.59	0.74	N	N	9
10&11	5955	N17-W5	8	CS	14	30	1	27.5	16.18	2.3	4.63	1.93	N	N	6
10&11	5974	N17-W5	8	CS	14	30	0	8.15	5.59	1.1	2.41	0.71	N	Y	6
10&11	5975	N17-W5	8	CS	14	30	0	9.97	7.16	0.86	4.16	1.09	N	Y	6
10&11	6011	N17-W5	8	CS	14	30	0.1	9.3	6.77	1.06	4.63	2.14	N	Y	7
10&11	6015	N17-W5	8	CS	14	30	0	6.53	6.68	0.87	1.72	0.71	N	Y	7
10&11	6022	N17-W5	8	CS	14	30	0	7.67	8.29	1.16	2.48	0.67	N	Y	7
10&11	6050	N17-W5	8	CS	14	30	0.3	11.62	14.26	1.36	3.55	1.27	N	Y	7
10&11	6056	N17-W5	8	CS	14	30	0	9.8	6.66	1.47	2.71	0.95	N	Y	7
10&11	6070	N17-W5	8	CS	14	30	0	9.74	6.6	1.03	3.56	1.5	N	N	7
10&11	6085	N17-W5	8	CS	14	30	0.1	11.6	8.79	1.16	4.66	2.2	N	N	7
10&11	6108	N17-W5	8	CS	14	30	0	6.18	6.53	0.79	2.48	1.23	N	Y	7
10&11	8713	N17-W5	9	CS	14	30	1.2	19.54	17.29	2.46	12.9	5.71	N	N	11
10&11	8725	N17-W5	9	CS	14	30	0.1	13.07	8.46	0.92	2.98	0.92	N	Y	11
10&11	8742	N17-W5	9	CS	14	30	0	3.75	5.02	0.4	3.96	0.77	N	Y	11
10&11	6705.31	N17-W5	10	CS	14	30	6.1	38.71	22.42	7.84	21.33	7.39	Y	N	8
10&11	6705.75	N17-W5	10	CS	14	30	0	13.25	8.1	1.11	2.5	0.94	N	Y	8
10&11	6705.78	N17-W5	10	CS	14	30	0	9.44	8.68	0.72	3.24	0.93	N	N	8
10&11	6705.99	N17-W5	10	CS	14	30	2.3	28.02	21.9	3.32	7.52	1.61	N	Y	8

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	6576.2	N17-W4	6	CS	14	30	5.3	40.1	30.85	4.18	6.41	1.6	N	Y	7
10&11	6576.38	N17-W4	6	CS	14	30	0	7.46	6.76	0.71	3.54	1.45	N	Y	7
10&11	6576.41	N17-W4	6	CS	14	30	0.3	14.48	17.55	1.52	7.24	1.51	N	Y	7
10&11	6576.57	N17-W4	6	CS	14	30	0.5	20.62	13.31	1.8	3.82	0.8	N	N	7
10&11	6576.59	N17-W4	6	CS	14	30	0	5.69	5.03	0.79	3.67	0.82	N	Y	7
10&11	6576.63	N17-W4	6	CS	14	30	2	29.72	16.34	5.2	12.46	5.14	N	N	7
10&11	8398	N16-W6	10	CS	14	30	0	8.34	6.12	0.71	2.25	0.66	N	Y	11
10&11	8400	N16-W6	10	CS	14	30	0	7.28	8.46	0.76	2.6	1.2	N	Y	11
10&11	8416	N16-W6	10	CS	14	30	0.1	8.78	10.32	1.97	5.14	2.34	N	Y	11
10&11	8557	N16-W6	11	CS	14	30	0.7	15.18	18.47	2.83	8.25	3.01	N	Y	11
10&11	8565	N16-W6	11	CS	14	30	1.2	19.32	18.32	3.46	8.91	3.73	Y	Y	11
10&11	8584	N16-W6	11	CS	14	30	0	5.08	7.53	0.54	5.33	1.33	N	N	11
10&11	5549	N16-W5	8	CS	14	30	0.2	14.15	12.59	1.53	4.24	0.89	N	N	6
10&11	5698	N16-W5	9	CS	14	30	3.3	21.4	25.34	4.65	6.55	2.6	N	Y	6
10&11	5707	N16-W5	9	CS	14	30	0.3	11.05	13.11	2.5	7.79	2.11	Y	N	6
10&11	5708	N16-W5	9	CS	14	30	1	20.87	17.34	2.7	8.86	3.37	N	N	6
10&11	8516.23	N17-W7	9	CS	14	30	0	9.33	6.03	1.13	4.27	1.46	N	Y	11
10&11	4684	N17-W8	8	CS	14	30	0	6.42	8.75	1.33	3.47	1.31	N	Y	5
10&11	14605.32	N17-W8	11	CS	14	30	19.8	72.37	44.58	6.35	6.18	1.25	Y	N	76
10&11	14605.47	N17-W8	11	CS	14	30	1.1	22.4	20.63	2.02	11.03	4.27	N	N	76
10&11	14605.49	N17-W8	11	CS	14	30	0	8.34	4.66	1.28	1.75	0.89	N	N	76
10&11	14605.53	N17-W8	11	CS	14	30	0.9	26.34	21.27	1.32	8.14	1.91	N	N	76
10&11	5152	N17-W6	8	CS	14	30	0.7	16.77	14.95	2.08	8.45	3.37	N	Y	6
10&11	5241	N17-W6	8	CS	14	30	0	6.69	4.56	0.42	1.55	0.44	N	Y	6
10&11	4723	N17-W5	4	CS	14	30	0	9.14	6.44	0.69	2.13	0.85	N	N	5
10&11	4728	N17-W5	4	CS	14	30	0.7	13.1	19.47	1.82	6.79	1.71	N	Y	5
10&11	4741	N17-W5	4	CS	14	30	0	4.32	9.65	1.03	3.81	1.68	N	Y	5

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	6767.6	N17-W5	4	CS	14	30	1.2	18.78	19.74	3	4.08	1.61	N	N	8
10&11	6767.63	N17-W5	4	CS	14	30	0	13.22	9.51	0.83	4.86	0.79	N	N	8
10&11	6767.70	N17-W5	4	CS	14	30	0	12.35	6.56	1.26	3.94	0.81	N	N	8
10&11	6767.85	N17-W5	4	CS	14	30	0	4.49	7.41	0.7	1.95	0.85	N	N	8
10&11	6767.114	N17-W5	4	CS	14	30	0.9	17.31	17.6	1.5	5.41	1.42	N	Y	8
10&11	6767.125	N17-W5	4	CS	14	30	0.4	12.49	17.27	1.48	1.83	0.85	N	Y	8
10&11	6767.159	N17-W5	4	CS	14	30	0	8.77	5.95	0.63	2.92	0.81	N	N	8
10&11	6404.4	N17-W5	5	CS	14	30	0.4	13.37	19.4	1.61	7.35	2.27	N	N	7
10&11	9276	N17-W5	11	CS	14	30	0.4	11.73	11.35	2.44	5.3	2.08	N	Y	12
10&11	9299	N17-W5	11	CS	14	30	0.4	8.93	17.71	1.85	6.72	2.84	N	Y	12
10&11	8019.6	N17-W5	12	CS	14	30	3	34.14	29.43	2.64	13.18	1.51	N	N	11
10&11	8019.30	N17-W5	12	CS	14	30	0.6	22.05	16.7	1.05	7.91	1.22	N	Y	11
10&11	8019.38	N17-W5	12	CS	14	30	0	9.86	7.14	0.7	3.12	1.48	N	Y	11
10&11	8019.57	N17-W5	12	CS	14	30	0	9.78	5.84	0.99	3.51	1.51	N	N	11
10&11	8019.64	N17-W5	12	CS	14	30	1.5	27.89	17.01	2.67	13.93	4.06	N	N	11
10&11	8019.68	N17-W5	12	CS	14	30	1.6	18.2	20.45	3.27	7.14	2.6	N	Y	11
10&11	8019.76	N17-W5	12	CS	14	30	11.9	49.72	48.61	5.97	6.38	3.46	N	N	11
10&11	8019.82	N17-W5	12	CS	14	30	2.5	31.31	21.45	3.83	11.74	3.29	N	N	11
10&11	8019.102	N17-W5	12	CS	14	30	0.1	12.66	6.55	1.02	2.23	1.22	N	N	11
10&11	8019.152	N17-W5	12	CS	14	30	0.2	14.92	9.61	1.08	2.39	0.89	N	Y	11
10&11	8019.184	N17-W5	12	CS	14	30	0	6.36	7.13	0.72	2.99	0.73	N	N	11
10&11	8019.200	N17-W5	12	CS	14	30	1.6	31.98	16.58	3.56	3.85	1.27	N	N	11
10&11	9041	N17-W5	13	CS	14	30	0.1	9.58	9.77	1.74	4.2	1.41	N	Y	12
10&11	9040	N17-W5	13	CS	14	30	8.5	64.48	36.92	4.83	6.11	1.35	Y	Y	12
10&11	8885	N17-W4	7	CS	14	30	0.7	19.68	14.72	2.15	4.84	1.77	N	Y	11
10&11	8900.15	N17-W4	7	CS	14	30	4.3	34.12	23.36	4.63	14.79	6.95	N	N	11
10&11	8900.19	N17-W4	7	CS	14	30	0	7.96	6.2	0.73	6.76	1.23	N	N	11

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	8900.42	N17-W4	7	CS	14	30	0.2	12.11	9.28	2	5.55	0.65	N	N	11
10&11	8900.84	N17-W4	7	CS	14	30	0	6.42	9.18	1.39	2.44	0.75	N	Y	11
10&11	8900.128	N17-W4	7	CS	14	30	2.4	36	13.46	2.99	3.28	1.41	N	N	11
10&11	9535	N17-W4	8	CS	14	30	0.4	14.48	14.62	1.27	8.06	3.25	N	Y	12
10&11	9548	N17-W4	8	CS	14	30	0.7	17.7	15.4	2.49	2.87	0.75	N	Y	12
10&11	8626	N17-W4	9	CS	14	30	0	9.25	5.83	0.95	1.97	1.12	N	N	11
10&11	8627	N17-W4	9	CS	14	30	0	9.15	5.52	0.97	4.4	1.83	N	Y	11
10&11	8628	N17-W4	9	CS	14	30	0.1	14.35	7.84	1.1	3.54	1.33	N	N	11
10&11	8639	N17-W4	9	CS	14	30	1.1	23.67	10.53	5.02	9.65	2.02	N	Y	11
10&11	8668	N17-W4	9	CS	14	30	1.6	20.71	22.17	2.77	9	1.27	N	Y	11
10&11	8677	N17-W4	9	CS	14	30	0.9	27.89	16.02	1.87	4.31	1.89	N	N	11
10&11	9369	N17-W4	10	CS	14	30	0.8	26.69	18.61	1.42	7.33	1.82	N	Y	12
10&11	9387	N17-W4	10	CS	14	30	0.5	13.13	18.71	1.95	7.08	0.89	N	Y	12
10&11	9396	N17-W4	10	CS	14	30	0	8.26	12.28	0.89	3.79	1.03	N	Y	12
10&11	9399	N17-W4	10	CS	14	30	0	8.96	7.87	0.63	2.47	0.73	N	Y	12
10&11	9420.23	N17-W4	10	CS	14	30	0	7.09	6.13	0.91	4.42	0.74	N	N	12
10&11	5137	N16-W8	7	CS	14	30	0	6.22	10.54	1.93	2.54	1.21	N	Y	6
10&11	5600	N16-W7	9	CS	14	30	0.3	10.16	14.07	2	4.4	1.35	N	Y	6
10&11	6985.1	N16-W6	8	CS	14	30	1.3	19.3	24.8	3.28	4.73	1.26	N	Y	8
10&11	6985.34	N16-W6	8	CS	14	30	0.3	12.23	10.18	1.88	4.11	0.69	N	N	8
10&11	6985.46	N16-W6	8	CS	14	30	0	8.61	8.77	0.58	2.87	1.12	N	N	8
10&11	6985.53	N16-W6	8	CS	14	30	0	5.71	5.41	0.75	2.29	0.61	N	Y	8
10&11	6985.86	N16-W6	8	CS	14	30	0.2	9.55	15.57	1.52	2.86	1.17	N	Y	8
10&11	6985.90	N16-W6	8	CS	14	30	2.5	21.68	19.81	3.27	9.79	3.94	N	Y	8
10&11	6664.6	N17-W5	6	CS	14	10	0.7	30.71	11.62	1.59	2.15	0.92	N	N	8
10&11	4719	N17-W8	8	CS	14	10	0	5.66	3.83	0.44	1.79	0.58	N	Y	5
10&11	4712	N17-W8	8	CS	14	10	0.9	25.62	11.41	3	2.25	0.97	N	N	5

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	6080	N17-W5	8	CS	14	10	0	6.93	11.27	1.52	3.04	0.96	N	Y	7
10&11	9322	N17-W5	11	CS	14	10	0.2	13.08	12.02	1.21	3.61	0.97	N	Y	12
10&11	8353	N17-W6	11	CS	14	10	0	10.02	4.74	0.8	2.05	0.82	N	Y	11
10&11	3741	N17-W6	11	CS	14	10	0.1	7.67	10.19	1.21	2.63	1.36	N	Y	4
10&11	5683	N16-W5	9	CS	14	10	1.2	26.77	19.38	1.85	2.86	1.56	N	Y	6
10&11	5089	N17-W8	7	CS	14	10	0.1	10.97	9.94	0.97	2.48	0.65	N	Y	6
10&11	9109	N17-W6	10	CS	14	10	0	6.3	3.86	0.46	2.6	0.68	N	N	12
10&11	14599.46	N17-W8	11	CS	14	10	1.1	30.28	18.19	1.48	2.56	0.9	N	N	76
10&11	9323	N17-W5	11	CS	14	10	0	9.86	5.96	0.86	2.45	0.84	N	Y	12
10&11	6580.5	N17-W4	6	CS	14	10	0	8.54	5.15	0.7	2.26	0.68	N	Y	7
10&11	5405	N17-W6	8	CS	14	10	0	4.47	7.07	0.55	1.85	0.77	N	Y	6
10&11	8559	N16-W6	11	CS	14	10	0	6.75	4.72	0.8	2.26	0.42	N	Y	11
10&11	8979	N17-W6	9	CS	14	10	0	5.69	6.45	1.56	3.45	0.98	N	Y	11
10&11	9123	N17-W6	10	CS	14	10	0	6.4	8.03	1	3.01	0.67	N	Y	12
10&11	7152.1	N17-W7	12	CS	14	10	0	6.67	5.04	0.71	2.54	1.15	N	Y	9
10&11	14599.1	N17-W8	11	CS	14	10	0	11.81	6.87	0.99	2.41	1.24	N	Y	76
10&11	9233	N17-W7	10	CS	14	10	0	6.61	8.59	1.23	2.6	1.23	N	N	12
10&11	5686	N16-W5	9	CS	14	10	0	6.83	2.64	0.41	1.29	0.6	N	Y	6
10&11	6702.17	N17-W5	10	CS	14	10	0	10.37	6.96	0.74	2.56	0.85	N	Y	8
10&11	9461	N17-W4	5	CS	14	10	0.1	8.19	9.14	1.98	2.58	0.94	N	Y	12
10&11	9464	N17-W4	5	CS	14	10	0	8.45	6.04	1.42	2.62	0.85	N	Y	12
10&11	14599.4	N17-W8	11	CS	14	10	0	7.14	5.39	0.45	2.15	0.67	N	Y	76
10&11	6100	N17-W5	8	CS	14	10	0	9.6	5.86	1.13	2.4	5.84	N	Y	7
10&11	6702.9	N17-W5	10	CS	14	10	0	7.42	3.23	0.51	1.72	0.59	N	N	8
10&11	9453	N17-W4	5	CS	14	10	0	4.56	7.51	0.72	2.18	0.85	N	N	12
10&11	9111	N17-W6	10	CS	14	10	0	8.14	6.87	1.05	1.92	0.88	N	Y	12
10&11	9252	N17-W7	10	CS	14	10	0.2	10.54	13.66	1.77	3.68	1.51	N	Y	12

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	8828	N16-W5	10	CS	14	10	0	7.6	4.52	0.31	2.97	0.89	N	Y	11
10&11	9248	N17-W7	10	CS	14	10	0	6.51	6.65	0.45	2.19	0.73	N	Y	12
10&11	6580.4	N17-W4	6	CS	14	10	0.8	13.74	14.87	3.22	2.98	1.34	N	Y	7
10&11	7102.9	N17-W5	7	CS	14	10	0.3	13.98	14.63	0.92	4.15	1.58	N	Y	9
10&11	8849	N16-W7	11	CS	14	10	0	6.72	5.27	0.81	2.13	1.65	N	Y	11
10&11	14599.33	N17-W8	11	CS	14	10	0	10.78	7.22	0.94	2.77	1.11	N	Y	76
10&11	6702.4	N17-W5	10	CS	14	10	0.1	14.03	9.2	1.26	2.03	0.81	N	N	8
10&11	6223	N17-W5	6	CS	14	10	0.6	17.82	13.63	2.43	3.67	1.61	N	Y	7
10&11	14599.67	N17-W8	11	CS	14	10	0	8.39	5.53	0.79	1.38	0.59	N	N	76
10&11	14599.40	N17-W8	11	CS	14	10	0.1	12.16	7.67	1.01	1.92	1.05	N	Y	76
10&11	8611	N17-W4	9	CS	14	10	0	7.55	5.63	0.58	2.48	0.89	N	Y	11
10&11	14599.48	N17-W8	11	CS	14	10	0.5	20.02	11.45	3.21	3.63	0.65	N	Y	76
10&11	5424	N17-W6	8	CS	14	10	0	7.44	9.65	0.9	2.56	0.79	N	Y	6
10&11	14599.31	N17-W8	11	CS	14	10	0	7.27	4.19	0.75	1.56	0.55	N	Y	76
10&11	5612	N16-W7	9	CS	14	10	0	5.89	6.72	1.17	2.78	1.19	N	Y	6
10&11	9237	N17-W7	10	CS	14	10	0	5.18	6.52	0.43	2.37	0.61	N	Y	12
10&11	5949	N17-W7	11	CS	14	10	0	10.13	7.55	0.76	2.73	1.16	N	Y	6
10&11	14599.6	N17-W8	11	CS	14	10	0	11.46	6.32	1.23	2.34	1.04	N	Y	76
10&11	9479	N17-W4	5	CS	14	10	0.4	13.27	13.38	1.73	2.86	1.68	N	Y	12
10&11	9402	N17-W4	10	CS	14	10	0	3.67	3.63	0.58	1.87	0.54	N	Y	12
10&11	5407	N17-W6	8	CS	14	10	0	5.25	4.76	0.79	1.98	0.79	N	Y	6
10&11	14599.27	N17-W8	11	CS	14	10	0	4.88	4.47	0.41	2.62	0.58	N	Y	76
10&11	6403.2	N17-W5	5	CS	14	10	0	4.72	4.84	0.64	2.37	0.63	N	N	7
10&11	6580.1	N17-W4	6	CS	14	10	0	8.2	4.74	0.71	2.47	0.77	N	Y	7
10&11	6065	N17-W5	8	CS	14	10	0.1	9.68	9.09	1.36	2.65	1.08	N	Y	7
10&11	9223	N17-W7	10	CS	14	10	1.1	25.2	17.84	1.44	3.84	1	N	Y	12
10&11	8995	N17-W6	13	CS	14	10	0.2	12.41	9.23	1.31	3.29	1.33	N	Y	11

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
10&11	9449	N17-W4	5	CS	14	10	0.8	11.94	19.7	1.95	4.87	2.49	Y	Y	12
12	24003	N1057-E980	32	CS	15	30	2.3	41.44	22.62	2.32	3.32	1.52	N	Y	153
12	22624.5	N1057-E981	30	CS	15	30	0.4	9.31	22.31	2.38	5.62	1.72	N	Y	123
12	24156.3	N1057-E981	31	CS	15	30	0.5	14.59	12.61	1.54	7.36	0.75	N	Y	154
12	23983.4	N1057-E975	31	CS	15	30	0.9	15.69	27.84	2.17	2.9	0.97	Y	N	153
12	23868.4	N1057-E975	32	CS	15	30	0.3	15.17	12.57	1.05	3.41	1.1	N	Y	153
12	23929.6	N1057-E979	31	CS	15	30	0.1	7.71	10.27	1.14	2.96	1.19	N	Y	155
12	24399.4	N1057-E983	31	CS	15	30	0	11.16	9.43	0.72	2.66	1.04	N	Y	161
12	23997.12	N1057-E976	30	CS	15	30	0.1	11	5.62	2.25	3.98	2.11	Y	Y	153
12	23783.4	N1057-E976	33	CS	15	30	0.1	8.66	9.4	2.91	2.94	1.59	Y	Y	149
12	22847.6	N1057-E978	31	CS	14	30	0.3	18.63	8.47	1.31	3.4	0.72	N	Y	138
12	23086.1	N1057-E977	30	CS	14	30	0	6.37	5.63	1.06	1.84	1.05	N	N	137
12	25227.4	N1057-E981	31	CS	14	30	0	4.96	5.11	0.52	2.67	0.83	N	Y	206
12	25244.2	N1057-E978	30	CS	15	30	0.4	21.23	11.5	1.5	3.17	1.02	Y	N	206
12	23919.3	N1057-E979	33	CS	15	30	1.7	19.4	29.4	3.12	13.04	4.48	Y	Y	153
12	23086.11	N1057-E977	30	CS	14	30	0.1	12.35	9.26	1.55	2.18	0.74	N	Y	137
12	24262.1	N1057-E983	32	CS	15	30	0.1	13.4	7.9	1.36	4.18	1.62	N	Y	156
12	23774.4	N1057-E976	32	CS	15	30	0	8.47	9.65	2.04	2.49	1.28	Y	Y	149
12	23064.14	N1057-E975	30	CS	15	30	0.1	8.7	10.98	0.86	2.59	0.89	N	Y	137
12	23953.7	N1057-E981	32	CS	15	30	0	8.69	11.87	0.95	2.52	1.43	N	Y	153
12	23783.6	N1057-E976	33	CS	15	30	0	4.76	7.65	0.95	2.17	1.07	N	N	149
12	23994.1	N1057-E981	33	CS	15	30	0.1	5.73	11.46	1.36	6.01	2.41	N	Y	153
12	23931.7	N1057-E976	29	CS	15	30	9.4	31.09	37.44	9.83	5.19	2.61	Y	N	155
12	25227.3	N1057-E981	31	CS	14	30	0	6.08	4.9	0.59	1.72	0.8	N	Y	206
12	23104.2	N1057-E977	31	CS	14	30	3.8	29.84	33.26	5.13	5.33	2.34	Y	N	138
12	23994.5	N1057-E981	33	CS	15	30	0	5.43	3.89	0.53	2.68	0.84	N	Y	153
12	23064.3	N1057-E975	30	CS	15	30	0	9.76	6.95	0.69	1.97	0.78	N	Y	137

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
12	23931.3	N1057-E976	29	CS	15	30	0.5	22.6	10.79	1.97	3.6	2.05	N	Y	155
12	23953.1	N1057-E981	32	CS	15	30	0.1	8.91	9.38	1.82	6.32	2.22	N	Y	153
12	23064.10	N1057-E975	30	CS	15	30	0.1	11.45	10.56	1.27	2.83	0.85	N	Y	137
12	25244.14	N1057-E978	30	CS	15	30	0	4.45	7.9	0.57	2.84	0.6	N	Y	206
12	23983.1	N1057-E975	31	CS	15	30	0	7.82	5.67	1.13	2.25	1.11	N	Y	153
12	24564.7	N1057-E976	34	CS	15	30	0	7.41	9.46	0.94	2.63	0.91	Y	Y	157
12	23994.2	N1057-E981	33	CS	15	30	0.1	7.51	11.32	1.57	2.34	0.75	Y	Y	153
12	25244.11	N1057-E978	30	CS	15	30	0	12.09	5.9	0.76	1.68	0.88	N	Y	206
12	23956.4	N1057-E981	32	CS	15	10	0	6.34	4.74	0.84	2.8	0.98	N	Y	153
12	22850.2	N1057-E978	31	CS	14	10	0	10.23	6.97	0.98	3.21	0.99	N	N	138
12	24770.2	N1057-E978	30	CS	15	10	0	8.83	5.53	0.63	2.38	0.77	N	Y	179
12	24397	N1057-E983	31	CS	15	10	0.3	17.34	8.67	1.23	7.02	2.37	N	Y	161
12	23927.3	N1057-E979	31	CS	15	10	0	3.93	3.97	0.42	3.57	1.15	N	Y	155
12	23956.2	N1057-E981	32	CS	15	10	0	14.06	4.27	0.76	2.91	0.79	N	N	153
13	22935.2	N1057-E974	22	CS	14	30	0.8	13.69	18.18	2.48	3.74	1.05	N	Y	141
13	23319.2	N1057-E976	20	CS	14	30	0.1	7.02	10.92	1.02	4.17	1.12	N	Y	122
13	22965.3	N1057-E976	22	CS	14	30	4.4	24.84	31.37	3.16	5.07	2.01	N	Y	139
13	22920.16	N1057-E976	23	CS	14	30	0	8.92	7.88	0.97	1.94	0.77	N	Y	137
13	23314.4	N1057-E977	19	CS	14	30	0	7.74	5.74	0.7	1.94	0.68	N	Y	122
13	24541.3	N1057-E975	18	CS	15	30	0.6	28.53	15.45	1.43	2.76	1.01	N	Y	157
13	22823.11	N1057-E976	24	CS	14	30	0.2	16.21	9.17	1.7	3.69	1.02	N	N	137
13	22920.19	N1057-E976	23	CS	14	30	0.3	14.6	8.39	1.37	6.45	1.89	N	Y	137
13	22823.9	N1057-E976	24	CS	14	30	0	6.88	10.62	1.35	3.64	1.55	N	Y	137
13	22836.7	N1057-E975	25	CS	14	30	0.1	11.52	10.12	1.38	1.56	1.2	N	Y	138
13	22940.2	N1057-E973	17	CS	14	30	0	5.83	9.3	1.15	2.43	0.93	N	Y	138
13	22823.3	N1057-E976	24	CS	14	30	0.6	20.83	14.22	1.44	6.27	1.77	N	Y	137
13	24614.3	N1057-E977	21	CS	15	30	0	3.67	4	0.52	2.28	0.71	N	Y	161

Appendix E: Proximal Flake Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Platform Length (mm)	Plat. Width (mm)	Cortex	Broken	Box
13	23944.4	N1057-E978	18	CS	15	30	0.1	12.55	9.52	1.35	3.04	1.06	N	Y	154
13	22687.3	N1057-E972	20	CS	14	30	1.3	29.88	16.07	3.7	2.8	0.81	N	N	137
13	22920.21	N1057-E976	23	CS	14	30	0.1	17.3	6.35	2.17	2.48	0.95	N	N	137
13	22800.3	N1057-E976	17	CS	14	30	0.7	23.85	9.96	2	2.65	0.74	Y	Y	139
13	23944.8	N1057-E978	18	CS	15	30	1.1	20.15	15.99	2.54	5.99	2.74	N	Y	154
13	22836.9	N1057-E975	25	CS	14	30	0.5	22.74	12.69	1.61	3.94	1.69	N	Y	138
13	23271.5	N1057-E976	21	CS	14	30	0	5.73	4.84	0.44	1.92	0.66	N	Y	137
13	22856.2	N1057-E975	19	CS	14	30	0.3	9.69	15.58	1.71	2.88	1.4	Y	N	138
13	22836.3	N1057-E975	25	CS	14	30	0	6.53	4.17	0.83	2.66	0.64	N	N	138
13	22920.18	N1057-E976	23	CS	14	30	0	7.56	3.77	0.81	1.76	0.61	N	Y	137
13	22920.14	N1057-E976	23	CS	14	30	0.6	11.03	18.73	1.38	3.68	1.98	N	Y	137
13	23560.5	N1057-E978	22	CS	15	30	1.7	23.24	29.12	3.45	3.69	1.42	N	N	148
13	22920.27	N1057-E976	23	CS	14	30	0	6.26	7.34	0.99	3.8	1.32	N	Y	137
13	22916.9	N1057-E974	23	CS	14	30	0	5.67	4.09	0.83	2.62	1.03	N	Y	141
13	23314.7	N1057-E977	19	CS	14	30	0.3	9.83	14.8	2.1	4.01	1.28	N	Y	122
13	23433.4	N1057-E976	19	CS	14	30	0.1	9.34	7.67	1.77	4.22	1.34	N	N	122
13	23049.1	N1057-E975	20	CS	14	10	0	9.12	5.27	0.63	2.59	0.75	N	Y	122
13	24289.6	N1057-E975	17	CS	15	10	0	9.26	6.55	1.35	2.39	1.32	N	Y	156
13	23947.2	N1057-E978	18	CS	15	10	0.5	11.1	13.23	3.23	2.25	1.07	N	Y	154
13	22943	N1057-E973	17	CS	14	10	0	7.62	3.64	0.62	2.55	0.8	N	Y	138

APPENDIX F

FLAKE TOOL DATA

Appendix F: Flake Tool Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Thickness (mm)	Length (mm)	Width (mm)	Cir. (mm)	Retouch Dorsal (mm)	Retouch Ventral (mm)	Box
1	25231	N1057-E984	29	CS	22	30	1	2.3			63	34		206
1	25232	N1057-E984	29	CS	22	30	0.5	2.38			65	18		206
1	20343	N1057-E981	26	CS	23	30	4.3	6.6			86	46	54	88
2	14160.1	N17-W4	25	CS	22	30	34	7.51	51.1	73.68	218	38		75
2	14160.2	N17-W4	25	CS	22	30	1.7	3.11	32.88	18.71	88	27		75
2	7917	N17-W5	23	CS	22	30	6.4	5.78			103	29.5		10
2	14629	N17-W7	35	CS	22	30	2.2	5.42	17.16	28.31	74	24	27	76
2	12926	N17-W7	37	CS	22	30	3.5	4			116		9.5	71
3	24181	N1057-E979	24	CS	22	30	17	8.5	49.03	41.36	146	22	19	156
3	25249.1	N1057-E981	25	CS	22	30	5.1	4.46	29.13	27.08	102	31		206
3	25249.2	N1057-E981	25	CS	22	30	3.3	2.9	39.01	32.02	111		15	206
3	24633	N1057-E980	24	CS	23	30	4.2	6.44			104.5	22	3	161
4	9881	N50-W16	12	CS	22	30	28.4	13.24			178	74.5	70	13
4	9979	N51-W16	12	CS	22	30	16.7	8.77	45.94	41.35	145.5	10.5	47	13
4	11008	N50-W16	9	CS	22	30	16.3	11.36			142	22.5		16
4	11010	N50-W16	9	CS	22	30	2.8	3.79	34.28	18.14	99	5		16
4	11011	N50-W16	9	CS	22	30	4.7	6.17			104		31	16
4	10980	N50-W16	10	CS	23	10	5.9	8.27	33.77	24.1	99	53	25	15
4	10850	N51-W16	9	CS	24	30	42.7	19.28			171	64		15
5	9670	N26-W1	7	CS	22	30	70.4	15.17			242	33	25	13
5	9671	N26-W1	7	CS	22	30	42.5	15.95	88.57	32.9	205	120	38.5	13
5	4794	N26-W1	8	CS	22	30	12.1	9.27			119	25.5	13	5
6	13012	N24-W7	13	CS	22	10	14	10.31	35.41	42.26	138.5	20	30	72
6	13013	N24-W7	13	CS	22	10	7.6	6.12	48.24	27.51	124.5		28.5	72
6	17153	N24-W9	8	CS	22	10	0.1	1.28	16.43	6.89	39		5	81
6	17155	N24-W9	8	CS	22	10	0.1	1.27			26	10		81
6	17068	N24-W8	9	CS	22	30	22.6	9.25	48.23	55.48	160	87.5	53.5	81

Appendix F: Flake Tool Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Thickness (mm)	Length (mm)	Width (mm)	Cir. (mm)	Retouch Dorsal (mm)	Retouch Ventral (mm)	Box
6	12986	N24-W7	11	CS	22	30	1.4	3.02			73	5.5	26	71
6	12973	N24-W7	14	CS	22	30	58.5	14.28	75.39	49.17	227	67	51	71
6	12974	N24-W7	14	CS	22	30	4.4	5.73			89.5	22.5		71
6	12975	N24-W7	14	CS	22	10	1.1	2.4	28.21	14.33	76		15.5	71
6	12976	N24-W7	14	CS	22	10	2.4	2.82			84.5	20		71
6	12977	N24-W7	14	CS	22	30	36	7.95	61.09	69.6	209.5		31	71
6	15468	N24-W9	11	CS	24	30	2.1	2.71			116	27	28.5	78
7	8042	N17-W8	4	CS	22	30	1.7	3.1	36.79	14.89	92.5	13	33	11
7	18795	N17-W8	4	CS	22	30	1.5	4.25			65.5	13		84
7	7499	N17-W8	5	CS	22	30	2.3	6.25			76.5	33	16	9
7	7959	N17-W8	6	CS	22	30	2.1	3.78	23.46	18.41	72.5	34		10
7	18749	N16-W8	5	CS	22	30	1.8	2.59	38.77	12	91	21.5	14.5	84
7	7442	N16-W7	5	CS	22	30	1.1	2.24	17.54	25.07	75		21	9
7	18738	N16-W6	4	CS	22	10	0.1	1.35	10.38	5.28	28.5		10	84
7	18740	N16-W6	4	CS	22	30	2.4	3.03			87.5	34		84
7	18742	N16-W6	4	CS	22	30	4	5.72			108	27		84
7	18743	N16-W6	4	CS	22	10	3.7	2.78	52.72	26.43	130		11	84
7	6937	N16-W5	3	CS	22	30	159.3	31.65	96.28	49.01	252	67	71	8
7	6798	N17-W7	8	CS	22	30	20.3	8.2	46.77	41.27	140	37	38	8
7	6568.1	N17-W4	3	CS	22	30	0.9	2.31	32.64	14.28	80	18		7
7	18751	N16-W8	4	CS	22	10	13.8	4.89	43.73	35.24	124	11	42	84
7	7078	N16-W7	4	CS	22	10	0.1	1.33	10.65	7.83	39.5		9	9
7	7463	N16-W7	8	CS	22	30	2.5	4.68			69	26		9
7	18818	N16-W7	8	CS	22	30	3.4	4.09	34.7	17.71	99.5	28	31	84
7	18741	N16-W6	5	CS	22	30	12.6	5.31	63.6	37.72	166	32	24	84
7	18744	N16-W6	5	CS	22	30	20.9	113.05			148	17	27.5	84
7	6907	N16-W5	2	CS	22	10	1	3.45	12.68	17.33	56	20		8

Appendix F: Flake Tool Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Thickness (mm)	Length (mm)	Width (mm)	Cir. (mm)	Retouch Dorsal (mm)	Retouch Ventral (mm)	Box
7	8040	N17-W8	4	CS	23	10	5.4	46.82	34.74	136.5	22.5	30		11
7	7476	N17-W7	6	CS	23	30	37.4	12.05			201	93	46	9
7	4483	N17-W7	7	CS	23	30	25.2	14.75			151	48		5
7	5811	N17-W4	4	CS	23	30	33.1	8.19			230	125	187	6
7	7012	N17-W6	3	CS	23	10	9	7.26	32.37	31.26	111	41	30	9
7	9489	N17-W4	5	CS	23	30	5.8	4.82	46.57	23.62	111	87	83.5	12
7	9477	N17-W4	5	CS	24	30	26.8	13.87			168	39	91	12
8	14397	N19-W7	16	CS	22	30	4.9	3.48			128	39	11	75
8	14398	N19-W7	16	CS	22	30	7.8	10.93			103	17		75
8	13110	N19-W7	18	CS	22	30	14.1	11.05	56.75	36	155	27.5	28	72
8	7736	N19-W6	15	CS	22	30	1	3.14			64	18.5		10
8	7740	N19-W6	15	CS	22	30	0.4	4.19			41.5		10	10
8	7745	N19-W6	15	CS	22	30	11.3	11.8	24.9	40.39	124.5	31		10
8	7746	N19-W6	15	CS	22	30	18.1	9.45	38.03	64.91	180	29.5		10
8	7751	N19-W6	15	CS	22	30	2.1	3.22			85.5	26	8.5	10
8	**7755**	N19-W6	15	CS	22	30	4.4							10
8	7757	N19-W6	15	CS	22	30	4.2	5.86			100.5		22	10
8	14074	N19-W6	15	CS	22	30	6.7	5.05	36.88	37.79	119	22		74
8	14077	N19-W6	15	CS	22	30	6.8	4.93	43.81	26.97	128		22.5	74
8	14080	N19-W6	15	CS	22	30	3.3	4.06			108		15.5	74
8	15593	N19-W6	16	CS	22	30	13.2	11.26			117	26		79
8	15594	N19-W6	16	CS	22	30	4.7	4.65	48.55	29.36	127		10	79
8	18802	N19-W6	16	CS	22	30	30.3	8.81			159		37.5	84
8	7764	N19-W6	17	CS	22	30	0.9	4.72			54	20	17	10
8	7765	N19-W6	17	CS	22	30	1.1	3.33	18.86	20.52	62.5	25		10
8	14185	N19-W5	14	CS	22	30	2	4.27			86	16		75
8	14187	N19-W5	14	CS	22	30	2.4	3.51			76	13		75

Appendix F: Flake Tool Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Thickness (mm)	Length (mm)	Width (mm)	Cir. (mm)	Retouch Dorsal (mm)	Retouch Ventral (mm)	Box
8	14189	N19-W5	14	CS	22	30	1.4	5.83			70	14		75
8	14338	N19-W5	17	CS	22	30	12.3	9.02			137	68		75
8	14340	N19-W5	17	CS	22	30	0.9	3.45			69		17	75
8	14341	N19-W5	17	CS	22	30	4.2	8.16			102.5	34	42.5	75
8	14343	N19-W5	17	CS	22	30	0.3	1.53			42.5	28		75
8	14344	N19-W5	17	CS	22	30	1.9	2.09			95.5	13		75
8	7664	N19-W5	18	CS	22	30	0.1	1.28			29.5	10		10
8	7668	N19-W5	18	CS	22	30	3.4	7.91			77		16	10
8	14353	N19-W5	19	CS	22	30	6	9.9			90		19	75
8	14354	N19-W5	19	CS	22	30	11.9	5.88	36.63	49.98	150	26.5		75
8	14355	N19-W5	19	CS	22	30	3	3.91	27.41	24.28	93.5	15		75
8	14356	N19-W5	19	CS	22	30	1.9	3.55	27.26	17.69	82	9		75
8	14361	N19-W5	19	CS	22	30	48.8	14.24	46.97	54.1	190	32		75
8	14238	N19-W5	20	CS	22	30	2.1	4.85			76.5		21	75
8	14239	N19-W5	20	CS	22	30	2.5	5.95			93.5	18.5		75
8	14068	N19-W5	21	CS	22	30	42.3	16.14			176.5	54.5		74
8	7677	N19-W5	22	CS	22	30	2.5	7.88			65.5	9	20	10
8	14307	N19-W5	23	CS	22	30	4.4	4.97			115		10	75
8	14308	N19-W5	23	CS	22	30	1.1	2.37			68.5	8.5		75
8	18814	N19-W5	23	CS	22	10	0.1	1.21	9.73	7.5	33		9	84
8	14058	N19-W5	25	CS	22	30	4	4.57	28.75	30.98	97	23.5		74
8	13111	N19-W7	18	CS	23	30	4.2	6.02			87	22	24	72
8	7747	N19-W6	15	CS	23	10	8.8	8.9	45.02	32.08	120.5	52.5	49.5	10
8	14305	N19-W5	23	CS	23	30	15.3	9.81	56.02	29.69	149.5	39.5	25	75
8	14060	N19-W5	25	CS	23	30	12.4	7.24			147	76	107	74
10	9164	N17-W7	10	CS	22	30	0.5	2.98			43	18		12
10	9169	N17-W7	10	CS	22	30	15.8	6.94	62.75	37.51	167.5	29		12

Appendix F: Flake Tool Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Thickness (mm)	Length (mm)	Width (mm)	Cir. (mm)	Retouch Dorsal (mm)	Retouch Ventral (mm)	Box
10	9206	N17-W7	10	CS	22	30	10.3	7.06	38.24	30.1	131	27.5		12
10	7158	N17-W7	12	CS	22	10	4.6	5.8	29.19	31.64	97	44	17	9
10	8939	N17-W6	9	CS	22	30	7.5	4.9			122	60	11	11
10	18779	N17-W6	10	CS	22	30	5.3	4.66	41	27.35	116	25		84
10	8367	N17-W6	11	CS	22	10	6.1	5.6			111	40	16	11
10	18769	N17-W5	6	CS	22	30	10.4	7.21			112	50		84
10	18770	N17-W5	6	CS	22	30	9.2	4.53			150	48		84
10	7101	N17-W5	7	CS	22	30	0.7	1.54			67		12	9
10	18762	N17-W5	7	CS	22	10	0.5	2.64	21.45	8.29	58	22		84
10	18764	N17-W5	7	CS	22	30	7.5	6.08	35.01	38.4	108.5		61	84
10	5950	N17-W5	8	CS	22	30	40.5	11.7			185	80	54	6
10	6016	N17-W5	8	CS	22	30	18.7	13.11			132	71.5	22.5	7
10	6063	N17-W5	8	CS	22	10	5.6	4.62			103	26	13	7
10	18761	N17-W5	8	CS	22	10	1	2.12			71	23	15	84
10	8768	N17-W5	9	CS	22	30	35.9	11.87	54.91	60.84	210.5	153.5	23.5	11
10	18771	N17-W5	9	CS	22	30	0.8	1.99	30.06	11.4	72	21	11	84
10	18765	N17-W5	10	CS	22	30	0.4	3.28			43	16		84
10	18776	N17-W5	10	CS	22	30	0.3	2.92			44	10		84
10	18777	N17-W5	10	CS	22	30	2.5	4.4	26.69	16.61	81	18		84
10	18796	N16-W7	10	CS	22	30	7.7	3.86			138.5	14	26	84
10	8375	N16-W6	10	CS	22	30	40.3	10.21	77.14	72.21	242	79		11
10	8382	N16-W6	10	CS	22	30	60	14.02			241	22	48.5	11
10	5680	N16-W5	9	CS	22	30	1.1	3.34			54	21.5		6
10	1498	N17-W7	9	CS	22	30	81	12.82	65.69	69.31	225	50		2
10	18768	N17-W5	11	CS	22	30	1.3	1.62			75	19.5	15	84
10	8029	N17-W5	12	CS	22	30	0.4	1.63	18.51	17.73	54.5		13	11
10	8912	N17-W4	7	CS	22	30	6.5	2.59	45.84	34.07	128	26.5	16	11

Appendix F: Flake Tool Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Thickness (mm)	Length (mm)	Width (mm)	Cir. (mm)	Retouch Dorsal (mm)	Retouch Ventral (mm)	Box
10	18752	N17-W4	7	CS	22	30	6.2	6.84			90	22.5		84
10	9562	N17-W4	8	CS	22	30	5.2	6.47			110		31.5	12
10	18735	N17-W4	9	CS	22	30	4.2	4			107	31		84
10	18758	N17-W4	9	CS	22	30	0.1	3.3			23.5	5		84
10	9360	N17-W4	10	CS	22	30	0.1	1.21	11.95	7.57	39	9		12
10	18753	N17-W4	10	CS	22	10	0.1	2.08			32	11		84
10	5597	N16-W7	9	CS	22	30	19.5	7.32	51.89	45.29	165	105		6
10	6991	N16-W6	8	CS	22	30	16.5	8.52	55.2	21.77	133	24.5	40.5	8
10	18739	N16-W6	8	CS	22	10	2.5	4.53			88		17	84
10	18745	N16-W6	8	CS	22	30	14.1	5.38	91.03	28.47	208	56		84
10	8519	N17-W7	9	CS	23	30	12.9	5.2			155	51.5	51.5	11
10	14594	N17-W8	11	CS	23	30	59.8	12.74	61.72	72.42	217	140	116	76
10	9262	N17-W5	11	CS	23	30	110.2	20.03	80.26	65.95	240	114	37.5	12
10	18775	N17-W5	10	CS	24	30	21.3	12.03	74.77	22.64	169	42		84
12	25233	N1057-E975	30	CS	22	30	7.4	6.13	54.13	24.04	146	22		206
12	25236	N1057-E976	30	CS	22	30	7.7	5.17	46.79	36.75	145	37		206
12	23106	N1057-E977	31	CS	22	30	18.2	10.92			142.5	39	14.5	138
12	24589	N1057-E977	32	CS	22	30	14.4	12.02			133	59		157
12	25263	N1057-E979	31	CS	22	30	1.9	2.31	35.55	20.74	102	12	21	206
12	24157	N1057-E981	31	CS	22	30	4.2	5.28			102	26		154
12	23122	N1057-E975	29	CS	24	30	6.5	5.84			99.5	49.5	46	140
13	22806	N1057-E976	17	CS	22	30	2.7	3.3			77.5	19	16	139

APPENDIX G

SCRAPER DATA

Appendix G: Scraper Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thickness (mm)	Face (mm)	Kuhn	Box
1	20463	N1057-E984	26	CS	6	30	45	79.07	43.27	10.75	8.6	0.8	88
6	11601	N24-W9	9	CS	7	10	7.4	37.69	26.07	11.44	6.65	0.58	16
6	12689	N24-W7	12	CS	7	30	8.8	37.49	28.72	7.29	2.4	0.33	71
7	6925	N16-W5	3	CS	9	30	137.9	106.12	75.6	16.51	15.98	0.97	8
7	6787	N16-W6	5	CS	6	30	45.2	58.84	46.4	14.87	3.65	0.25	8
7	6908	N16-W5	2	CS	9	30	77.2	63.24	50.05	24.91	6.21	0.25	8
10&11	6774	N17-W5	4	CS	9	30	17.8	38.73	31.51	13.82	5.61	0.41	8
10&11	6992	N16-W6	8	CS	9	30	18.8	49.22	36.05	10.08	5.46	0.54	8
10&11	8379	N16-W6	10	CS	22	30	26.2	47.49	41.92	12.57	7.76	0.62	11

APPENDIX H

UNHAFTED BIFACE DATA

Assemblage H: Unhafted Biface Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Broken	Box
1	7544	N17-W6	34	CS	5	30	24.7	40.32	39.94	11.59	Y	10
1	12927	N17-W7	37	CS	5	30	0.7	18.27	10.58	3.28	Y	71
1	20519	N1057-E984	24	CS	1	30	32.9	102.89	31.97	8.04	N	89
4	9984	N51-W16	12	CS	5	10	0.4	15.72	8.58	3.29	Y	13
4	11009	N50-W16	9	CS	5	30	7.1	30.35	26.14	7.23	Y	16
4	10124	N50-W15	7	CS	5	10	0.3	18.72	7.07	3.47	Y	14
4	10851	N51-W16	9	CS	5	30	45.1	56.55	42.39	19.34	N	15
4	10978	N50-W16	10	CS	3	30	4.9	24.37	29.12	5.17	Y	15
4	10951	N50-W15	11	CS	3	10	0.1	10.28	6.08	2.22	Y	15
4	10036	N50-W15	9	CS	3	10	0.7	13.15	15.5	3.84	Y	14
5	9678	N26-W1	7	CS	5	10	0.1	5.84	7.87	2.16	Y	13
5	9899	N25-W1	8	CS	5	30	193.1	96.72	67.44	21.14		13
5	9763	N25-W1	7	CS	3	10	1	10.91	16.77	4.77	Y	13
6	17152	N24-W9	8	CS	5	30	3	46.84	13.37	5.2	Y	81
6	12653	N24-W9	9	CS	3	10	2.4	25.86	20.94	6.89	Y	71
6	12984	N24-W7	11	CS	3	10	0	5.87	5.67	2.02	Y	71
7	18817	N17-W8	5	CS	5	30	0.3	19.01	7.71	4.73	Y	84
7	6926	N16-W5	3	CS	5	30	4.9	26.34	30.83	6.09	Y	8
7	6927	N16-W5	3	CS	5	10	3.7	34.79	26.14	5.32	Y	8
7	6871	N16-W5	4	CS	5	10	N/A	N/A	N/A	N/A	N/A	8
7	6566	N17-W4	3	CS	5	10	0.3	11.14	11.73	2.25	Y	7
7	9423	N17-W4	5	CS	5	10	0.1	8.31	5.02	2.14	Y	12
7	6785	N16-W6	5	CS	5	30	9.8	40.4	38.01	6.01	Y	8
7	6789	N16-W6	5	CS	5	10	0.3	10.28	7.52	4.18	Y	8
7	6799	N17-W7	8	CS	1	10	0.7	11.77	14.73	3.38	Y	8
7	7145	N16-W6	4	CS	4	30	40.5	83.06	43.12	11.18	N	9
7	8039	N17-W8	4	CS	3	10	3.7	17.86	20.13	7.37	Y	11
8	14223	N19-W5	16	CS	3	10	0	6.57	7.78	1.83	Y	75

Assemblage H: Unhafted Biface Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Broken	Box
8	14224	N19-W5	16	CS	3	10	0	6.24	4.06	2.53	Y	75
8	14225	N19-W5	16	CS	3	30	13.6	58.69	22.42	7.34	Y	75
8	16771	N19-W5	13	CS	3	30	1.4	17.15	16.71	3.86	Y	81
8	14421	N19-W7	15	CS	5	30	138.6	136.44	55.4	18.57	Y	76
8	7744	N19-W6	15	CS	5	30	9	42.59	30.2	6.36	Y	10
8	7748	N19-W6	15	CS	5	30	25.6	55.19	35.64	9.96	Y	10
8	7750	N19-W6	15	CS	5	30	N/A	N/A	N/A	N/A	N/A	10
8	7753	N19-W6	15	CS	5	30	1.5	15.54	18.32	6.04	Y	10
8	14078	N19-W6	15	CS	5	30	8.9	34.04	27.54	7.81	Y	74
8	14541	N19-W6	16	CS	5	10	1.5	32.29	10.1	5.16	Y	76
8	14188	N19-W5	14	CS	5	30	2	11.23	24.82	7.51	Y	75
8	14226	N19-W5	16	CS	5	30	12.1	41.5	36.32	7.16	Y	75
8	14335	N19-W5	17	CS	5	30	4.1	28.34	22.85	6.44	Y	75
8	14351	N19-W5	19	CS	5	30	0.9	23.12	11.56	7.07	Y	75
8	14360	N19-W5	19	CS	5	30	5	27.22	29.7	5.95	Y	75
8	14241	N19-W5	20	CS	5	30	20.8	59.21	35.13	8.38	Y	75
8	14302	N19-W5	23	CS	5	30	8.9	37.57	36.09	8.37	Y	75
10&11	9165	N17-W7	10	CS	5	10	0.5	10.76	13.4	4.21	Y	12
10&11	5944	N17-W7	11	CS	5	30	4.4	26.66	23.63	3.98	Y	6
10&11	7159	N17-W7	12	CS	5	30	113.4	65.62	57.37	23.97	Y	9
10&11	8856	N17-W7	13	CS	5	10	0.3	8.9	7.13	3.47	Y	11
10&11	7097	N17-W5	7	CS	5	10	0.4	8.16	13.38	4.5	Y	9
10&11	7099	N17-W5	7	CS	5	30	0.6	20.51	6.14	3.23	Y	9
10&11	5502	N16-W7	10	CS	5	30	1	21.46	13.25	4.31	Y	6
10&11	5503	N16-W7	10	CS	5	30	0.1	5.16	16.68	2.53	Y	6
10&11	8378	N16-W6	10	CS	5	10	2	31.28	17.11	4.01	Y	11
10&11	14598	N17-W8	11	CS	5	10	0.2	12.88	7.12	2.13	Y	76
10&11	5431	N17-W6	8	CS	5	30	0.6	9.99	19.01	4.27	Y	6

Assemblage H: Unhafted Biface Data

Assemblage	Inv#	Unit	Level	OG	OT	RM	Weight (g)	Length (mm)	Width (mm)	Thick (mm)	Broken	Box
10&11	18778	N17-W6	8	CS	5	30	0.4	14.89	10.26	2.82	Y	84
10&11	18782	N17-W6	8	CS	5	10	0.1	7.34	4.18	1.34	Y	84
10&11	6776	N17-W5	4	CS	5	10	0.3	13.35	7.54	3.38	Y	8
10&11	18772	N17-W5	11	CS	5	30	0.6	13.1	13.2	4.46	Y	84
10&11	8028	N17-W5	12	CS	5	10	0.3	10.17	7.43	4.14	Y	11
10&11	18754	N17-W4	7	CS	5	10	0	4.09	5.29	1.59	Y	84
10&11	9556	N17-W4	8	CS	5	30	15	43.93	45.87	10.92	Y	12
10&11	8617	N17-W4	9	CS	5	30	14.4	48.74	32.53	6.85	Y	11
10&11	6062	N17-W5	8	CS	3	10	1	14.07	13.49	4.5	Y	7
10&11	8754	N17-W5	9	CS	3	30	2.3	32.05	12.96	5.32	Y	11
10&11	14635	N17-W8	11	CS	3	10	2.8	38.58	16.8	5.98	Y	11
10&11	18781	N17-W6	8	CS	1	10	0.5	7.8	13.38	3.22	Y	8
10&11	8770	N17-W5	9	CS	5	30	15.8	51.63	28.75	7.45	Y	11
10&11	5945	N17-W7	11	CS	5	30	61.5	135.24	32.96	15.49	Y	6
10	5596	N16-W7	9	CS	3	10	2.6	24.54	18.08	5.34	Y	6
12	23926	N1057-E979	31	CS	5	10	0.2	10.71	8.96	3.54	Y	155
12	23930	N1057-E979	31	CS	5	10	N/A	N/A	N/A	N/A	N/A	155
12	23920	N1057-E979	33	CS	5	10	0.9	19.56	10.32	4.08	Y	153
13	22944	N1057-E973	17	CS	5	10	3.7	28	22.3	4.95	Y	138
13	23274	N1057-E976	21	CS	3	10	1.1	11.33	18.35	4.27	Y	137

APPENDIX I

HAFTED BIFACE DATA

Appendix I: Hafted Biface Data

Assemblage	Inv#	Project #	Unit	Level	OG	OT	RM	Weight (g)	Blade Length (mm)	Neck Height (mm)	Haft Length (mm)	Blade Width (mm)	Neck Width (mm)	Base Width (mm)	Shoulder to Corner (mm)	Blade Broken	Haft Broken	Type	Box
1	20469	1	N1057-E984	26	CS	1	10	10.1	39.3	15.2	15.2	20.59	20.59	7.13	15.08	N	N	Contracting Stemmed	88
1	23240	2	N1057-E984	29	CS	1	10	4.3	NA	10.3	19.32	19.08	11.18	NA	19.84	Y	Y	Northern Sidenotch	141
2	13382	3	N17-W4	26	CS	1	30	7.1	37.53	7.47	12.73	24.89	14.31	18.05	12.92	N	N	Northern Side notch	72
2	7916	4	N17-W5	23	CS	1	30	4	48.99	12.4	12.4	13.14	11.19	NA	12.23	N	Y	Humboldt Basal Notch	10
2	7545	5	N17-W6	34	CS	1	30	5.8	NA	12.7	12.7	15.14	15.14	10.58	12.71	Y	N	Humboldt Basal Notch	10
2	15087	6	N17-W7	34	CS	1	10	1.9	24.33	8.5	8.5	14.5	13.37	14	8.08	N	N	Split Stem Pinto	77
4	9879	7	N50-W16	12	CS	1	10	1.8	NA	2.66	5.88	18.96	15.86	16.45	6.03	Y	N	Gatecliff Contracting Stem	13
4	1065	8	N50-W15	8	CS	1	10	1.2	20.8	6.13	6.13	18.34	10.11	14.77	5.65	N	N	Elko Eared	2
4	10239	9	N51-W16	7	CS	1	10	2.4	NA	7.25	7.25	22.54	12.56	17.61	6.94	Y	N	Elko Eared	14
6	12687	10	N24-W7	12	CS	3	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	71
6	17228	11	N24-W7	14	CS	1	10	0.4	14.18	3.1	3.1	13.22	7.16	NA	2.85	N	Y	Rosegate	81
7	8044	12	N17-W8	4	CS	1	30	6	35.04	7.73	7.73	16.77	16.77	8.92	8.31	N	N	Contracting Stemmed	11
7	7498	13	N17-W8	5	CS	1	10	2	22.55	5.07	5.07	20.6	10.82	NA	6.37	N	Y	Elko Corner	9
7	5813	14	N17-W4	4	CS	1	10	7.1	57.88	12.69	12.69	16.87	16.87	13.84	11.51	N	N	Humboldt Basal Notch	6
7	7015	15	N17-W6	3	CS	1	10	3	35.84	NA	NA	20.26	9.72	NA	NA	N	Y	Gatecliff Contracting Stem	9
7	7173	16	N17-W5	3	CS	1	10	2.3	24.24	7.12	7.12	21.99	9.37	15.34	7.4	N	N	Elko Eared	9
7	3343	17	N16-W6	3	CS	1	10	1.7	19.01	4.64	4.64	NA	NA	14.56	6.01	Y	Y	Elko Corner Notch	4
7	6906	18	N16-W5	2	CS	1	10	2.7	34	5.42	5.42	NA	9.71	13.7	6.3	N	Y	Elko Eared	8
7	6910	19	N16-W5	2	CS	5	30	1.3	NA	2.83	5.31	11.14	9.93	10.03	6.34	Y	N	Humboldt Basal Notch	8
8	7742	20	N19-W6	15	CS	1	10	2.8	22.43	4.86	4.86	24.22	10.2	14.53	5.16	N	N	Elko Corner Notch	10
8	7749	21	N19-W6	15	CS	1	10	2	19.07	8.36	8.36	18.88	9.87	17.06	7.29	N	N	Elko Corner Notch	10
8	14084	22	N19-W6	15	CS	3	10	3.8	NA	7.61	7.61	19.25	19.25	12.84	8.14	Y	N	Contracting Stemmed	74
8	16770	23	N19-W5	13	CS	1	30	3.4	39.97	11.15	11.15	13.75	13.75	10.58	10.73	N	N	Humboldt Basal Notch	81
8	17865	24	N19-W5	19	CS	1	10	3.4	29.42	8.63	8.63	19.43	19.43	7.4	10.45	N	N	Contracting Stemmed	83
10&11	5991	25	N17-W5	8	CS	1	10	2.3	26.53	8.4	8.4	22.04	12.06	NA	8.31	N	Y	Elko Eared	6
10&11	6700	26	N17-W5	10	CS	1	30	1.6	NA	6.16	6.16	10.3	10.3	NA	6.32	Y	Y	Humboldt Basal Notch	8
10&11	6775	27	N17-W5	4	CS	1	10	3.6	NA	8.42	8.42	24.69	12.49	NA	9.24	Y	Y	Elko Eared	8

Appendix I: Hafted Biface Data

Assemblage	Inv#	Project #	Unit	Level	OG	OT	RM	Weight (g)	Blade Length (mm)	Neck Height (mm)	Haft Length (mm)	Blade Width (mm)	Neck Width (mm)	Base Width (mm)	Shoulder to Corner (mm)	Blade Broken	Haft Broken	Type	Box
10&11	9261	28	N17-W5	11	CS	1	30	2	25.01	8.76	9.88	14.31	10.95	NA	10.22	N	Y	DSN	12
12	23985	29	N1057-E975	31	CS	1	10	2.8	23.24	9.93	9.93	24.08	13.23	NA	10.16	N	Y	Northern Side notch	153
13	22881	30	N1057-E974	24	CS	1	30	9.9	NA	10.77	14.25	26.23	12.77	19.06	5.88	Y	N	Turkey Tail	115

APPENDIX J

XRF OBSIDIAN SOURCING

Appendix J: XRF Obsidian Sourcing

Sample	Inv#	Unit	Level	OG	OT	RM	Box	Source
1	20469	N1057-E984	26	CS	1	10	88	Indian Creek Buttes Variety A
1	23240	N1057-E984	29	CS	1	10	141	Gregory Creek
2	15087	N17-W7	34	CS	1	10	77	Skull Springs
2	14149.2	N17-W7	38	CS	14	10	75	Barren Valley
4	1065	N50-W15	8	CS	1	10	2	Venator
6	17228	N24-W7	14	CS	1	10	81	Barren Valley
7	8040	N17-W8	4	CS	23	10	11	Coyote Wells
7	8039	N17-W8	4	CS	3	10	11	Dry Creek Canyon (GGOV)
7	7498	N17-W8	5	CS	1	10	9	Timber Butte
7	5813	N17-W4	4	CS	1	10	6	Coyote Wells
7	7173	N17-W5	3	CS	1	10	9	Venator
7	6794.8	N17-W7	8	CS	14	10	8	Barren Valley
8	14541	N19-W6	16	CS	5	10	76	Sourdough Mountain
8	7747	N19-W6	15	CS	23	10	10	Twin Springs Bench (GGOV)
8	7742	N19-W6	15	CS	1	10	10	Sourdough Mountain
8	7749	N19-W6	15	CS	1	10	10	Sourdough Mountain
8	17865	N19-W5	19	CS	1	10	83	Venator
8	7741.21	N19-W6	15	CS	14	10	10	Barren Valley
8	14059.2	N19-W5	25	CS	14	10	74	Skull Springs
10	9165	N17-W7	10	CS	5	10	12	Unknown 12
10	5503	N16-W7	10	CS	5	30	6	Unknown 6
10	7158	N17-W7	12	CS	22	10	9	Indian Creek Buttes A
10	8367	N17-W6	11	CS	22	10	11	Sourdough Mountain
10	6062	N17-W5	8	CS	3	10	7	Indian Creeks Buttes A
10	14635	N17-W8	11	CS	3	10	11	Indian Creek Buttes A
10	5991	N17-W5	8	CS	1	10	6	Venator
10	6775	N17-W5	4	CS	1	10	8	Sourdough Mountain
10	14599.5	N17-W8	11	CS	14	10	76	Coyote Wells
10	14599.5	N17-W8	11	CS	14	10	76	Sourdough Mountain
10	9223	N17-W7	10	CS	14	10	12	Coyote Wells East
12	23926	N1057-E979	31	CS	5	10	155	Sourdough Mountain
12	23920	N1057-E979	33	CS	5	10	153	Timber Butte
12	23985	N1057-E975	31	CS	1	10	153	Coyote Wells
12	24397	N1057-E983	31	CS	15	10	161	Coyote Wells
13	22944	N1057-E973	17	CS	5	10	138	Sourdough Mountain
13	23274	N1057-E976	21	CS	3	10	137	Sourdough Mountain