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# Results of the Cultural Resources Testing Program for CA-SDI-18,428 and CA-SDI-18,429 at the Avion Project, San Diego, California

*Prepared for*
Lennar
16465 Via Esprillo, Suite 150
San Diego, CA 92127

*Prepared by*
RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101
P 619.308.9333

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Harry Price, Principal Investigator

## NATIONAL ARCHAEOLOGICAL DATA BASE INFORMATION

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| Authors: | Harry J. Price |
| Consulting Firm: | RECON Environmental<br>1927 Fifth Avenue<br>San Diego, CA 92101-2358 |
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| Prepared for: | Lennar<br>16465 Via Esprillo, Suite 150<br>San Diego, CA 92127 |
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## ABSTRACT

RECON completed a cultural resources testing program for CA-SDI-18,428 or CA-SDI-18,429 located on the Avion Project in the city of San Diego. The project site consists of a 41.48-acre parcel of undeveloped land located in northern part of the city of San Diego approximately 1.2 miles west of Interstate 15. Carmel Valley Road/Bernardo Center Drive is approximately 0.6 mile to the north, and Black Mountain Road is approximately 1.4 miles to the west. Heritage Bluffs, a new residential development currently under construction, abuts the northern edge of the property.

SDI-18,428 has the potential to be eligible under Criterion 4 for inclusion on the California Register of Historical Resources. It is also potentially eligible for inclusion on the City of San Diego (City) Historic Resources Register (HRR) under Criterion A. RECON recommended a testing program that uses shovel scrapes instead of shovel test pits. Seventeen shovel scrapes were excavated at CA-SDI-18,248; some placed adjacent to locations of flakes and others to cover the remainder of the site area. A horizon soils were thicker than expected and two 1-meter-square test units were excavated to determine the presence or absence of a subsurface deposit and examine soil stratigraphy.

Three hundred and sixty-one artifacts were recovered from the test excavations at CA-SDI-18,428: 359 flakes/shatter and 2 tools. The limited range of recovered materials would indicate that CA-SDI-18,428 fits in the category of an artifact scatter; it has a limited variety of artifact types, tool production was not taking place on-site, no domestic refuse was recovered, and no hearths or other features were found. The dominance of secondary shatter and tertiary reduction debitage would indicate final shaping and re-sharpening were the most common knapping tasks taking place on the site. As a result of the testing program it is RECON's determination that CA-SDI-18,428 does not qualify as a significant historical resource under the California Environmental Quality Act (CEQA). It is RECON's opinion that CA-SDI-18,428 is not a significant historical resource under any of the six criteria in the current City guidelines, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. RECON recommends no additional work at CA-SDI-18,428.

At CA-SDI-18,429 thirteen artifacts were recovered; all were debitage. The predominant lithic material is fine-grained porphyritic metavolcanic, which is available in the site area in the form of outcrops and large cobbles. No tools, cores milling implements, or domestic refuse were recovered in the shovel scrapes. CA-SDI-18,429 falls in the category of a sparse artifact scatter with no variety of artifact type. The site most probably represents a single-use episode of locally available material being reduced from a prepared core or tool resharpening for immediate use in harvesting a resource available on the ridge. It is RECON's determination that CA-SDI-18,429 does not qualify as a significant historical resource under CEQA. It is RECON's opinion that CA-SDI-18,429 is not a significant historical resource under any of the six criteria in the current City guidelines, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. RECON recommends no additional work at CA-SDI-18,429.

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# Acronyms and Abbreviations

| | |
|---|---|
| CEQA | California Environmental Quality Act |
| City | City of San Diego |
| HRR | Historic Resources Register |
| project | Avion Project |
| SCIC | Southern California Information Center |
| SDAC | San Diego Archaeology Center |
| STP | shovel test pit |

# 1.0 Management Summary

This report summarizes the results of the cultural resources testing program for CA-SDI-18,428 and CA-SDI-18,429 on the Avion Project (project) property in the city of San Diego. The purpose of this study is to determine the effects of the project on these two potentially significant cultural resources located within the project area of potential effect. In order to determine these potential effects, RECON developed a testing program for CA-SDI-18,428 and CA-SDI-18,429. The goal of the testing program was to determine whether these two prehistoric sites are significant cultural resources under the California Environmental Quality Act (CEQA) and City of San Diego (City) guidelines.

The project site consists of a 41.48-acre parcel of undeveloped land located in northern part of the city of San Diego, approximately 1.2 miles west of Interstate 15. Carmel Valley Road/Bernardo Center Drive is located approximately 0.6 mile to the north, and Black Mountain Road is located approximately 1.4 miles to the west. RECON excavated 17 shovel scrapes at CA-SDI-18,428, some placed adjacent to locations of flakes and others to cover the remainder of the site area. Two 1-meter-square test units were also excavated in areas where surface scrapes resulted in high artifact recovery. Three hundred and sixty-one artifacts were recovered from the test excavations at CA-SDI-18,428; 359 flakes/shatter and 2 tools. Quartz was the predominant material type, followed by fine-grained porphyritic metavolcanic (FGPM). The limited range of recovered materials would indicate that CA-SDI-18,428 fits in the category of an artifact scatter; it has a limited variety of artifact types, tool production was not taking place on-site, no domestic refuse was recovered, and no hearths or other features were found. The dominance of secondary shatter and tertiary reduction debitage would indicate final shaping and re-sharpening were the most common knapping tasks taking place on the site. In addition, the test units showed no subsurface component to the site. It is RECON's determination that CA-SDI-18,428 does not qualify as a significant historical resource under CEQA. It is RECON's opinion that CA-SDI-18,428 is not a significant historical resource under any of the six criteria in the current City of San Diego guidelines. In RECON's opinion, the site is not an important archaeological site, as discussed in Division 2, Article 3, of the San Diego Municipal Code, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. RECON recommends no additional work at CA-SDI-18,428.

At CA-SDI-18,429, RECON excavated three 2-meter-square surface scrapes, placed within the Affinis mapped location of the site. Thirteen artifacts were recovered, all were debitage. The predominant lithic material is FGPM, available in the site area in the form of outcrops and large cobbles. No tools, cores milling implements, or domestic refuse were recovered in the shovel scrapes. CA-SDI-18,429 falls in the category of a sparse artifact scatter with no variety of artifact type. The site most probably represents a single-use episode of locally available material being reduced from a prepared core or tool resharpening for immediate use in harvesting a resource available on the ridge. It is RECON's determination that CA-SDI-18,429 does not qualify as a significant historical resource under CEQA. It is RECON's opinion that CA-SDI-18,429 is not a significant historical resource under any of the six criteria in the current City guidelines. In RECON's opinion, the site is not an important

archaeological site, as discussed in Division 2, Article 3, of the San Diego Municipal Code, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. RECON recommends no additional work at CA-SDI-18,429.

# 2.0 Introduction

The project site consists of a 41.48-acre parcel of undeveloped land located in northern part of the city of San Diego, approximately 1.2 miles west of Interstate 15 (Figure 1). The project is in the northeast ¼ of Section 5, Township 14 South, Range 2 West, of the U.S. Geological Survey 1996 7.5-minute topographic map, Poway quadrangle (see Figure 2). The project is on city of San Diego 800 scale maps numbers 298-1725 and 298-1737 (Figure 3). Carmel Valley Road/Bernardo Center Drive is located approximately 0.6 mile to the north, and Black Mountain Road is located approximately 1.4 miles to the west. Heritage Bluffs, a new residential development currently under construction, abuts the northern edge of the property. Land uses surrounding the site include a portion of the Black Mountain Open Space Park to the west, east, and south, residential development to the north, and additional Black Mountain Open Space Park open space lands to the northwest (Figure 4).

The project requires approval of a vesting tentative map, a rezone from AR-1-1 (Agricultural–Residential, minimum 10-acre lots) to RS-1-14 (Residential Single Unit, minimum 5,000-square-foot lots), a planned development permit, a site development permit, and a Multi-Habitat Planning Area boundary line adjustment to subdivide and construct 84 detached multi-family residential units. The Black Mountain Ranch Subarea Plan allows 117 dwelling units on-site, including a requirement for 19 affordable units. The project proposes to construct 84 detached multi-family units on-site and transfer 19 affordable units to Lot X of Map 15919 in the Black Mountain Ranch North Village Town Center. In addition, the project proposes the transfer of 14 market rate dwelling units to Lots 12, 13, 18 and 19 of Map 15919 in the Black Mountain Ranch North Village Town Center. In total, the project proposes a combined 117 dwelling units, including 19 affordable units, on-site and off-site in conformance with the Black Mountain Ranch Subarea Plan. Approximately 17.74 acres of the 41.48-acre site would be developed for residential uses, brush management, and an access road connecting to Winecreek Drive at the northeast corner of the project site. The remaining approximate 23.75 acres on-site would be preserved as Multi-Habitat Planning Area open space.

# 3.0 Physical and Cultural Setting

## 3.1 Physical Setting

The project is located on the northern slope of Black Mountain, approximately 0.6 mile south of Carmel Valley Road/Bernardo Center Drive. Topography on the property consists of a south/north-trending central ridge with southerly trending seasonal drainages to the west and east. These drainages have slopes of moderate to steep grade. There is a small meadow in the northeast corner of the property, at the mouth of the eastern drainage (see Figure 4).


# FIGURE 1
## Regional Location

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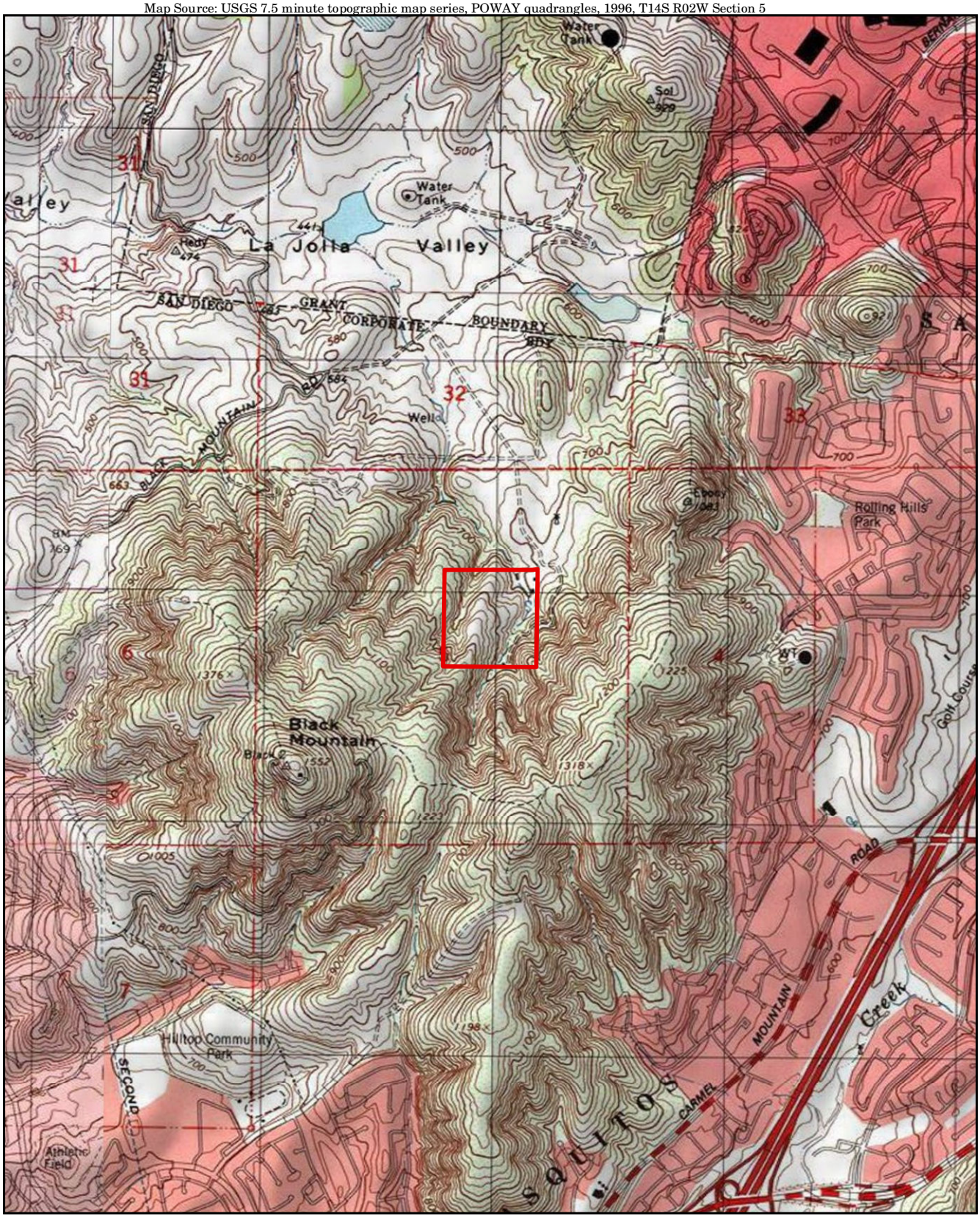
Map Source: USGS 7.5 minute topographic map series, POWAY quadrangles, 1996, T14S R02W Section 5




Project Boundary

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# FIGURE 2

## Project Location on USGS Map

Image Source: NearMaps (flown Nov 2017)


0 Feet 600

Project Boundary

Heritage Bluffs Boundary

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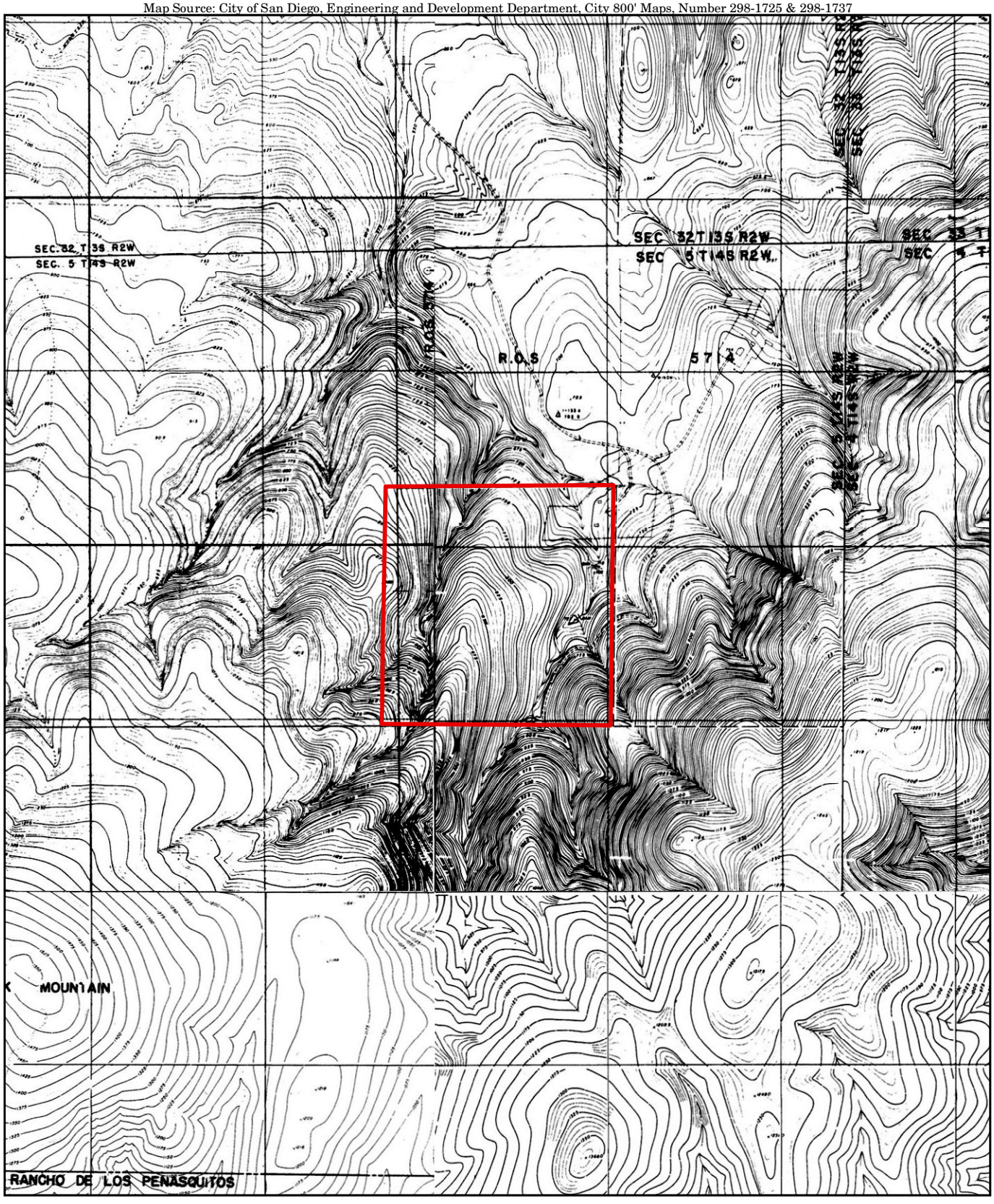
FIGURE 3

Project Location on Aerial Photograph

Map Source: City of San Diego, Engineering and Development Department, City 800' Maps, Number 298-1725 & 298-1737




Project Boundary

FIGURE 4

Project Location on City 800' Map

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Topography slopes away to the north from the north edge of the property, eventually meeting the La Jolla Valley, about one mile to the north. One soil type occurs on the site, San Miguel-Exchequer rocky silt loam (U.S. Department of Agriculture 1973). This relatively shallow rocky soil is derived from meta-volcanic parent materials.

Four vegetation communities occur on the project site (RECON Environmental, Inc. 2019). Southern mixed chaparral comprises the majority of the site with lesser acreages of coastal sage scrub, non-native grassland, and freshwater marsh patches. The southern mixed chaparral on the site is dominated by a mixture of chaparral shrub species that includes chamise (*Adenostoma fasciculatum*), laurel sumac (*Malosma laurina*), mission manzanita (*Xylococcus bicolor*), toyon (*Heteromeles arbutifolia*), and lilac (*Ceanothus tomentosus*). Dense chaparral covers the slopes to the east and west while a more open chaparral occurs along the central ridge and eastern flank. The central ridge has been brushed at least once in the 1990s. Patches of coastal sage scrub vegetation occur in the northeast corner and northwest portion of the site. Black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac, and California sagebrush (*Artemisia californica*) make up this shrub community. Non-native grassland occurs in the northeast portion of the site in the meadow. The grassland area supports a mixture of non-native annual grasses such as purple falsebrome (*Brachypodium distachyon*), smooth brome (*Bromus hordaceous*), red brome (*Bromus madritensis*), ripgut grass (*Bromus diandrus*), and slender wild oat (*Avena barbata*). Scattered non-native trees were planted in this area and include species of eucalyptus (*Eucalyptus* spp.), Italian cypress (*Cupressus sempervirens*), Canary Island pine (*Pinus canariensis*), and Peruvian peppertree (*Schinus molles*).

# 3.2 Cultural Setting

## 3.2.1 Prehistoric Period

The prehistoric cultural sequence in San Diego County is generally conceived as comprising three basic periods: the Paleoindian, dated between about 11,500 and 8,500 years ago and manifested by the artifacts of the San Dieguito Complex; the Archaic, lasting from about 8,500 to 1,500 years ago (A.D. 500) and manifested by the cobble and core technology of the La Jollan Complex; and the Late Prehistoric, lasting from about 1,500 years ago to historic contact (i.e., A.D. 500 to 1769) and represented by the Cuyamaca Complex. This latest complex is marked by the appearance of ceramics, small arrow points, and cremation burial practices.

The Paleoindian Period in San Diego County is most closely associated with the San Dieguito Complex, as identified by Rogers (1938, 1939, 1945). The San Dieguito assemblage consists of well-made scraper planes, choppers, scraping tools, crescentics, elongated bifacial knives, and leaf-shaped points. The San Dieguito Complex is thought to represent an early emphasis on hunting (Warren et al. 1993:III-33).

The Archaic Period brings an apparent shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish. The local cultural manifestations of the Archaic Period are called the La Jollan Complex along the coast and

the Pauma Complex inland. Pauma Complex sites lack the shell that dominates many La Jollan sites. Along with an economic focus on gathering plant resources, the settlement system appears to have been more sedentary. The La Jollan assemblage is dominated by rough cobble-based choppers and scrapers, and slab and basin metates. Large side-notched and Elko series projectile points appeared. Large deposits of marine shell at coastal sites argue for the importance of shellfish gathering to the coastal Archaic economy.

Near the coast and in the Peninsular Mountains beginning approximately 1,500 years ago, patterns began to emerge which suggest the ethnohistoric Kumeyaay. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversify and intensify during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, but effective technological innovations. The late prehistoric archaeology of the San Diego coast and foothills is characterized by the Cuyamaca Complex. It is primarily known from the work of D. L. True at Cuyamaca Rancho State Park (True 1970). The Cuyamaca Complex is characterized by the presence of steatite arrowshaft straighteners, steatite pendants, steatite comales (heating stones), Tizon Brownware pottery, ceramic figurines reminiscent of Hohokam styles, ceramic "Yuman bow pipes," ceramic rattles, miniature pottery various cobble-based tools (e.g., scrapers, choppers, hammerstones), bone awls, manos and metates, mortars and pestles, and Desert side-notched (more common) and Cottonwood Series projectile points.

### 3.2.2 Ethnohistory

The Kumeyaay (also known as Kamia, Ipai, Tipai, and Diegueño) occupied the southern two-thirds of San Diego County. The Kumeyaay lived in semi-sedentary, politically autonomous villages or rancherias. Settlement system typically consisted of two or more seasonal villages with temporary camps radiating away from these central places (Cline 1984a and 1984b). Their economic system consisted of hunting and gathering with a focus on small game, acorns, grass seeds, and other plant resources. The most basic social and economic unit was the patrilocal extended family. A wide range of tools were made of locally available and imported materials. A simple shoulder-height bow was used for hunting. Numerous other flaked stone tools were made including scrapers, choppers, flake-based cutting tools, and biface knives. Preferred stone types were locally available metavolcanics, cherts, and quartz. Obsidian was imported from the deserts to the north and east. Ground stone objects include mortars and pestles typically made of locally available, fine-grained granite. Both portable and bedrock types are known. The Kumeyaay made fine baskets. These employed either coiled or twined construction. The Kumeyaay also made pottery, using the paddle-and-anvil technique. Most were a plain brown utility ware called Tizon Brownware, but some were decorated (Meighan 1954; May 1976, 1978).

### 3.2.3 Spanish/Mexican/American Periods

The Spanish Period (1769–1821) represents a time of European exploration and settlement. Military and naval forces along with a religious contingent founded the San Diego Presidio,

the pueblo of San Diego, and the San Diego Mission in 1769 (Rolle 1998). Native American culture in the coastal strip of California rapidly deteriorated despite repeated attempts to revolt against the Spanish invaders (Cook 1976). One of the hallmarks of the Spanish colonial scheme was the rancho system. In an attempt to encourage settlement and development of the colonies, large land grants were made to meritorious or well-connected individuals.

In 1821, Mexico declared its independence from Spain. During the Mexican Period (1822–1848), the mission system was secularized by the Mexican government and these lands allowed for the dramatic expansion of the rancho system. The southern California economy became increasingly based on cattle ranching. San Bernardo Rancho, approximately 0.64 mile to the north, is the closest rancho to the project. San Bernardo Rancho, 17,763 acres in size, was comprised of two land grants given to Joseph F. Snook in 1842 and 1845 (Pourade 1969). Snook, a British sea captain, married Maria Antonia Alvarado, daughter of Don Juan Bautista Alvarado. Don Juan owned Rancho Rincon del Diablo, the rancho just east of San Bernardo (Pourade 1969).

A second rancho, Los Peñasquitos Rancho, is approximately 0.7 mile to the south. Los Peñasquitos Rancho was awarded to Captain Francisco María Ruiz for meritorious service in 1823 (Pourade 1969). Los Peñasquitos Rancho comprised 8,486 acres, stretching from Soledad Canyon, near the Pacific Ocean, to within feet of the west end of the project, at the current intersection of Interstate 15 and Poway Road. Captain Ruiz built an adobe near Soledad Canyon and raised cattle on the rancho, but lived in Old Town. He transferred ownership of the rancho to Don Francisco María Alvarado, a prominent member of the San Diego community, in 1837 (Pourade 1969). Don Alvarado lived on the rancho, continuing to raise cattle. Ownership then passed to Captain George Johnson through his marriage to Don Francisco's daughter, Tomasa (Pourade 1969).

The Mexican Period ended when Mexico signed the Treaty of Guadalupe Hidalgo on February 2, 1848, concluding the Mexican–American War (1846–1848; Rolle 1998). The Battle of San Pasqual, a skirmish during the Mexican–American War, was fought in the San Pasqual Valley, approximately nine miles northeast of the project. The battle was waged on December 6 and December 7, 1846, between American forces led by General Stephen W. Kearny and a smaller contingent of local Californios and Mexican Lancers, led by Captain Leonardo Cota and Major Andrés Pico. The American forces lost the battle and spent the next night at the Rancho San Bernardo ranch house. The United States quickly won the war, and took over the northern half of Mexico as a result of the in 1848. California became a state in 1850, shortly after gold was discovered on the Sacramento River in 1848-1849. The great influx of Americans and Europeans resulting from the California Gold Rush eliminated many remaining vestiges of Native American culture. California became a state in 1850.

The American homestead system encouraged settlement beyond the coastal plain into areas where Indians had retreated to avoid the worst of Spanish and Mexican influences (Carrico 1987; Cook 1976). A rural community cultural pattern existed in San Diego County from approximately 1870 to 1930. These communities were composed of an

aggregate of people who lived within well-defined geographic boundaries, on farmsteads tied together through a common school district, church, post office, and country store (Hector and Van Wormer 1986). A small community developed in the San Dieguito River Valley to the north of the project in the late 1800s, but it was destroyed when Lake Hodges was filled in 1917 (Pourade 1969). In the post-World War II period, the economy shifted from ranching and agriculture to light manufacturing, military, and tourism.

# 4.0 Previous Research

A site records search was conducted through the California Historical Resources Information System, South Coastal Information Center at San Diego State University (Confidential Attachment 2). The South Coastal Information Center lists two prehistoric resources on the parcel, CA-SDI-18,428 and CA-SDI-18,429 (Confidential Attachment 1). CA-SDI-18,428 was described as a flake scatter consisting of at least 15 quartz flakes. The site is located on the main ridge within the project, on both sides of the north-south dirt access road. The core site measures 20 meters north-south by 5 meters east-west. Two additional flakes discussed in the site form potentially increased the site dimensions to 120 meters by 40 meters. However, the site boundary shape file did not include these two flakes. The site form noted limited ground visibility. The site was recorded by Affinis in 2007.

CA-SDI-18429 was described as a scatter of five quartz fakes located 5 meters east of the north-south dirt road and approximately 36 meters south of the northern project boundary. The quartz flakes were in a 5-by-5-meter area. Limited ground visibility was noted on the site form. The site was, recorded by Affinis in 2007.

The project area has been surveyed twice by RECON archaeologists; once on July 19, 2013, and a second time on December 21, 2017. RECON archaeologists Harry Price and Richard Shultz conducted the 2013 field survey. This survey was conducted as part of a constraints evaluation for possible purchase of the property.

The 2017 survey was conducted by RECON archaeologists Richard Shultz and Tom Sowles. Vegetation cover during the 2017 survey had changed significantly on the property. The southern mixed chaparral vegetation and non-native grass ground cover had experienced substantial growth due to the 2016-2017 rains and ground visibility was significantly reduced. The western drainage slopes and west-facing slope of the eastern drainage were not surveyed, as the vegetation was even denser than in 2013. The central ridge was surveyed, as was the homestead site in the northeastern corner of the project. No cultural material was found at the mapped location of CA-SDI-18,428, however ten flakes were found in the vicinity of the mapped location of SDI-18,428, and the site area was enlarged to include these flakes. No cultural material was found at or adjacent to the mapped location of CA-SDI-18429 during either the 2013 or the 2017 surveys (Confidential Attachment 1).

# 5.0 Methods

## 5.1 Excavation

The testing program was conducted between May 13 and 30, 2019. Personnel working on the project included RECON archaeologists Harry Price, Richard Shultz, Nathanial Yerka, and Tom Sowles. Native American observers included Gabe Kitchen, Jr. and Anthony LaChappa.

Shovel scrapes were two-meter-square and hand-excavated to a depth of 10 centimeters. Test units were hand-excavated in 10-centimeter contour levels with shovels, trowels, and heavier tools as soil conditions dictated. Units were excavated until either sterile soil was reached or it was apparent that cultural material in a level was the result of rodent disturbance bringing said material into otherwise sterile level. Observations about soil characteristics, cultural material content, disturbance, and depth were recorded on field forms for each 10-centimeter level. One sidewall of each unit was profiled to document soil color and changes in stratigraphy. Photographs were taken of each unit and shovel test pit (STP).

### 5.1.1 CA-SDI-18,428

The expanded boundary of CA-SDI-18,428 increased the site area to just over 2,300 square meters. The site sits on a metavolcanic ridgeline with a very shallow soil horizon, in many places the bedrock is exposed on the surface. Because of this, RECON conducted a testing program that used predominately shovel scrapes instead of STPs. The use of 2-meter-square-by-10-centimeter-deep shovel scrapes would cover a larger percentage of the site and give a more accurate picture of site composition than STPs. Also, the amount of angular rock on the surface indicated that excavation of STPs past 10 to 15 centimeters would be difficult due to the presence of large numbers of rock. RECON excavated 17 shovel scrapes placed across the site, some placed adjacent to locations of flakes and others to cover the remainder of the site area. The location of some scrapes were adjusted in the field to avoid bushes and obvious rocky areas. The shovel scrapes showed there was depth to the soil profile in some areas, so two 1-meter-square test units were excavated to gather information on presence or absence of subsurface cultural material, as well as information on site stratigraphy. Units 1 and 2 were excavated to a maximum depth of 40 centimeters. Shovel scrape and test unit locations are shown on Confidential Attachment 2. Cultural material recovered during the test were washed, cataloged, and analyzed. Recovered material will be curated at the San Diego Archaeological Center (SDAC).

### 5.1.2 CA-SDI-18,429

No cultural material was found at or adjacent to the mapped location of CA-SDI-18,429 during the 2013 or the 2017 surveys. Since limited ground visibility may have obscured cultural material, RECON conducted a testing plan for CA-SDI-18,429. The site area was described in the site form as being 5 meters by 5 meters, although the shape file obtained for the record search shows the site with a 20-meter diameter. RECON excavated three

2-meter-square surface scrapes placed within the Affinis-mapped location of the site, which with a buffer added, included approximately 93 square meters. Shovel scrape locations are shown on Confidential Attachment 3. Cultural material recovered during the test was washed, cataloged, and analyzed. Recovered material will be curated at the SDAC.

## 5.2 Laboratory

All of the recovered artifacts and ecofacts were returned to RECON's archaeological laboratory. Laboratory tasks included sorting and cataloging the collected data as recommended by the SDAC. All items were counted, weighed, and cataloged according to class, type, and material, and the data was entered into a Microsoft Access database and then exported to a Microsoft Excel spreadsheet. Shellfish was only weighed. The complete catalog is provided as Attachment 1.

The following are artifact classes and their definitions.

### 5.2.1 Debitage

Debitage consists of flakes and angular waste or the stone byproducts of stone tool manufacture and maintenance. The items in this category were organized by sample unit and level within the unit and sorted by stone material type into nine reduction type choices (Table 1).

**Table 1**
**Standard Flake Typology for Small Assemblages**

| Bulb | Platform | Relative Length | Cortex | Dorsal Scars | Other | Assumed Process/ Type | Reduction Stage |
|---|---|---|---|---|---|---|---|
| Present | Present | 2x width | None | 2+ | Parallel | "Blade" type flake | Tertiary |
| Present | Present | -- | None | -- | Diverging, thin | Biface thinning flake | Tertiary |
| Present | Present | 2+ cm | 80%+ | None | -- | Platform creation, cortex removal | Primary |
| Present | Present | 2+ cm | 30%-80% | 0–1 | -- | Cortex removal | Primary |
| Present | Present | 2+ cm | -30% | 1+ | -- | Core reduction, basic shaping | Secondary |
| Present | Present | -2 cm | 0% | 1+ | -- | Finishing, resharpening | Tertiary |
| Present | Present | -2 cm | Present | 1+ | -- | Trimming | Tertiary |
| Absent | Absent | -- | Present | -- | -- | Shatter during primary reduction | Primary |
| Absent | Absent | -- | Absent | -- | -- | Shatter during secondary reduction | Shatter |

cm = centimeter; % = percent
SOURCE: Norwood et al. 1981.

The flaked lithic debris analysis followed a series of steps that were originally proposed by Jane Rosenthal (Norwood et al. 1981) and geared towards reconstructing the stages of stone tool manufacture. For the current study, the definition of a flake is a stone which has been removed from a larger stone (core) by human activity and that retains evidence of this removal in the form of a striking platform and a bulb of percussion. Angular waste includes shatter and items that are probably flake fragments with no bulb or the striking platform present. In addition, the angular waste group includes broken stone fragments that can be produced during hard hammer percussion where a strike can result in pieces breaking off the parent stone that do not have the attributes of a flake.

### 5.2.2 Flaked Lithic Tools

Formal flaked stone tools were assigned individual catalog numbers. Attributes were recorded for each of the formal tools and for cores. Attributes include identifying the parent material, dimensions, weight, whether the tool is complete or broken, the production base, the presence of cortex, the angle of the working edge, and a series of attributes regarding use, damage, and modification. Specimens were checked for use wear using a 10x hand lens.

Formal tools and cores are recognized by a combination of distinctive attributes. RECON employs a set of descriptive definitions as the initial means for identifying artifact types. These definitions come from Russell Kaldenberg's work at Rancho Park North (1976).

## 5.3 Curation

Per the City guidelines, the artifact collection, will be curated at the SDAC. The SDAC qualifies as an institution under the City guidelines that it is in San Diego County with proper facilities and staffing that ensures research access to the collections consistent with federal standards. Cataloging of the artifacts conformed to the requirements of the SDAC to facilitate curation of the collection and final report compilation upon project completion. The SDAC provides permanent curatorial stewardship for archaeological collections and meets the federal standard (36 Code of Federal Regulations 79) for curation facilities.

## 5.4 Native American Participation

A Native American observer participated during the testing program to ensure that the Native American community was represented during the project planning and advising the project archaeologist with regard to the respectful treatment of any Native American human remains or possible prehistoric grave-goods or artifacts that may have been encountered during the test excavations.

Native American observers during the test excavation program consisted of Gabe Kitchen, Jr. and Anthony LaChappa.

# 6.0 Results

## 6.1 CA-SDI-18,428

Aerial photography showed that the ridge on which CA-SDI-18,428 sits was brushed between 1989 and 1996, probably using heavy machinery such as a tractor in some areas. This resulted in surface disturbance, probably causing displacement and possible shallow burying of artifacts. Extensive clearing appears to have occurred only once, subsequent air photographs show the native vegetation slowly growing back to its present moderate density. Ground visibility was poor at the time of testing because dense grasses and other annuals proliferated as a result of the exceptionally wet winter/ spring of 2018-2019.

Soil in the shovel scrapes at CA-SDI-18,428 was uniform. The surface A Horizon consisted of loosely to slightly compact silty loam, classified as San Miguel-Exchequer rocky silt. Munsell color was predominately 7.5 YR 4/4 to 4/6. These soils derive from metavolcanic rock; in the project area, this consists of Santiago Peak Volcanics. Santiago Peak Volcanics occur in a long swath, beginning in Los Angeles County and extending south into Mexico, and are predominately comprised of dacite and andesite. No scrapes bottomed out on bedrock within 10 centimeters, but contained varying amounts of angular metavolcanic rock clasts, varying in size from a few centimeters to over 20 centimeters (Photographs 1 and 2). Rock content tended to be higher in the northern half of the site, but not consistently; Scrapes 4 and 5 in the north half had low to moderate rock counts, while Scrape 14 in the south half had a high rock count. Small amounts of B Horizon clay were encountered between 5 and 10 centimeters below the surface, which is the typical subsoil for San Miguel-Exchequer rocky silt.

In Unit 1 the A Horizon also consisted of loosely to slightly compact reddish (7.5 YR 4/4 to 4/6) silty loam averaging 5 to 10 centimeters in thickness, Below this the B Horizon consisted of reddish brown (7.5 YR 4/4) loamy, silty clay with varying amounts of angular metavolcanic clasts (Photograph 3). B Horizon soil was moderately to very compact. C Horizon substratum was encountered at depths varying between approximately 15 and 40 centimeters, with some patches of A Horizon clay remaining at 40 centimeters.

C Horizon substratum consisted of yellowish grey dense fine-grained clay with little rock below its contact zone with Horizon A. Unit 1 appears to show subsurface disturbance probably resulting from the brushing of the site. In the west wall profile, large chunks of C Horizon substratum are mixed with B Horizon clays, and B Horizon clays extend below 40 centimeters in a small area (Figure 5). This may be the result of using a ripper-equipped tractor for brushing, or the removal of a large root ball.

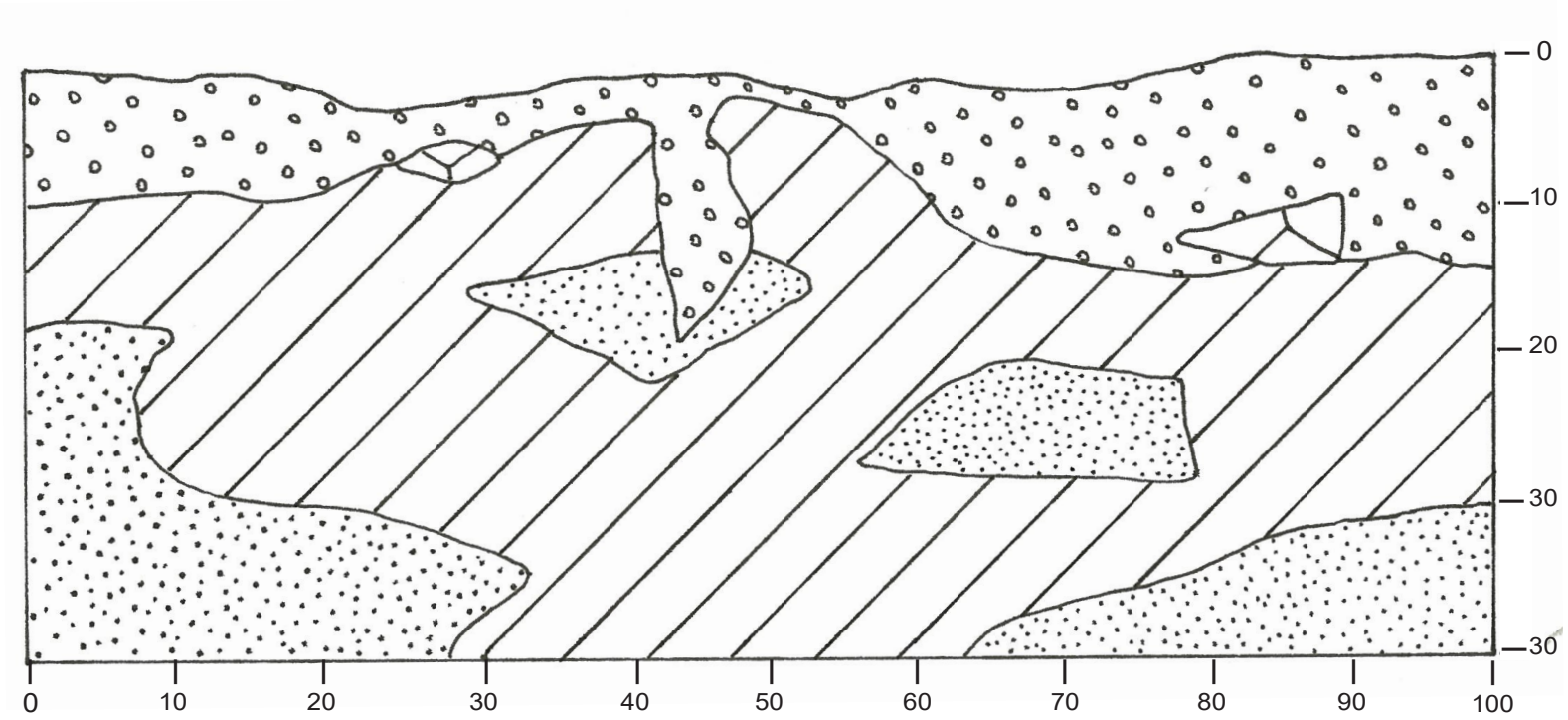
Unit 2 A Horizon soil was similar to that of the shovel scrapes and Unit A, consisting of loosely to slightly compact reddish (7.5 YR 4/4 to 4/6) silty loam averaging 5 to 12 centimeters in thickness. B Horizon, again, consisted of reddish brown (7.5 YR 4/4) loamy, silty clay with varying amounts of angular metavolcanic clasts. C Horizon soils were encountered at depths between 20 and 30 centimeters below surface (Photograph 4). The amount of angular rock was much greater in Unit 2 than Unit 1, and included clasts 30–40 centimeters in length. Rock clasts were present throughout the soil profile (Figure 6).

PHOTOGRAPH 1
CA-SDI-18,428 Shovel Scrape 4,
Showing Relatively Small Amounts of Angular Clasts

PHOTOGRAPH 2
CA-SDI-18,428 Shovel Scrape 11,
Showing Large Amounts of Angular Clasts

PHOTOGRAPH 3
CA-SDI-18,428, Unit 1, North Wall

PHOTOGRAPH 4
CA-SDI-18,428, Unit 2, North Wall




Surface Duff; Angular Rock; Moderately Compact, Loamy, Clayey, Silt; 7.5 YR 4/4 Brown

Angular Rock; Compact; Not Easily Friable; Silty CLay; Lighter Color; 5 YR 4/4 Reddish Brown

Very Compact; Lighter Color; Chalky; Subsoil

Rock

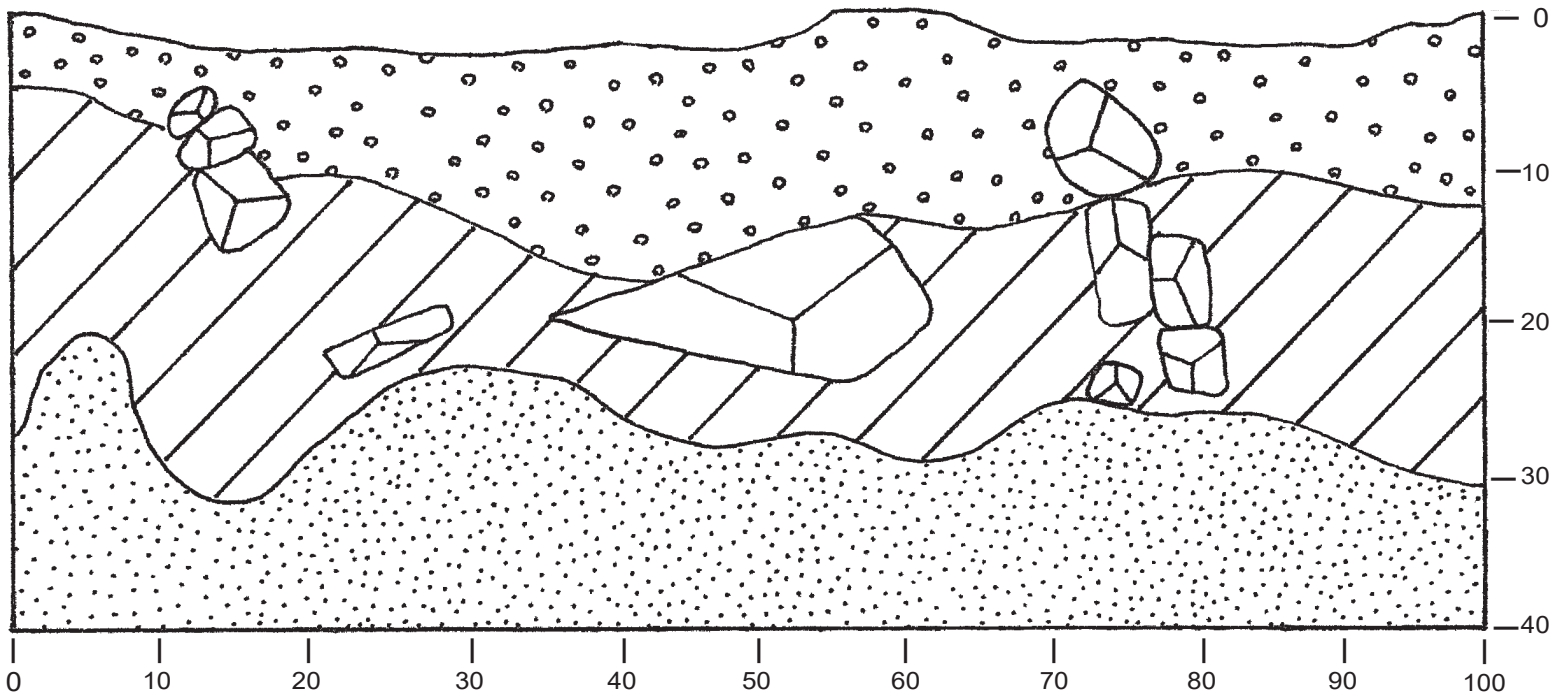
0 cm 10

# FIGURE 5

Unit 1 West Wall Profile

RECON

M:\JOBS5\8958\arc\graphics\Fig#_unit1.ai 07/16/19 jg




Surface Duff; Angular Rock; Moderately Compact, Loamy, Clayey, Silt; 7.5 YR 4/4 Brown

Angular Rock; Compact; Not Easily Friable; Silty Clay; Lighter Color; 5 YR 4/4 Reddish Brown

Very Compact; Lighter Color; Chalky; Subsoil

Rock

0 cm 10

# FIGURE 6

Unit 2 West Wall Profile

RECON

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### 6.1.1 Artifacts Recovered

Three hundred sixty-one artifacts were recovered from the 17 shovel scrapes and two test units excavated at CA-SDI-18,428; 359 flakes/shatter and 2 tools (Table 2). The highest recovery was from Scrapes 16, 6, and 3, with 131, 80 and 69 artifacts respectively (see Table 2). These three scrapes account for 77.56 percent of the total recovery. Scrapes 2 and 4 produced 20 and 20 artifacts respectively, accounting for an additional 11.08 percent of the total. These five scrapes accounted for 88.64 percent of the total recovery. Four scrapes, numbers 10, 12, 13, and 14 were negative. The two units produced 12 artifacts, all debitage. The two tools, one utilized flake and one biface fragment, were recovered from Scrape 6.

**Table 2**
**Summary of Artifacts for CA-SDI-18,428**

| Shovel Scrape | Debitage | FLA | Total | % |
|---|---|---|---|---|
| **SS 1** | | | | |
| Count | 5 | -- | 5 | 1.39 |
| Weight (g) | 3.36 | -- | 3.36 | 0.40 |
| **SS 2** | | | | |
| Count | 20 | -- | 20 | 5.54 |
| Weight (g) | 21.11 | -- | 21.11 | 2.50 |
| **SS 3** | | | | |
| Count | 69 | -- | 69 | 19.11 |
| Weight (g) | 216.31 | -- | 216.31 | 25.65 |
| **SS 4** | | | | |
| Count | 20 | -- | 20 | 5.54 |
| Weight (g) | 108.62 | -- | 108.62 | 12.88 |
| **SS 5** | | | | |
| Count | 3 | -- | 3 | 0.83 |
| Weight (g) | 0.4 | -- | 0.4 | 0.05 |
| **SS 6** | | | | |
| Count | 74 | 2 | 76 | 21.05 |
| Weight (g) | 49.08 | 0.41 | 49.49 | 5.87 |
| **SS 7** | | | | |
| Count | 8 | -- | 8 | 2.22 |
| Weight (g) | 271.36 | -- | 271.36 | 32.18 |
| **SS 8** | | | | |
| Count | 4 | -- | 4 | 1.11 |
| Weight (g) | 0.28 | -- | 0.28 | 0.03 |
| **SS 9** | | | | |
| Count | 1 | -- | 1 | 0.28 |
| Weight (g) | 1.61 | -- | 1.61 | 0.19 |
| **SS 11** | | | | |
| Count | 1 | -- | 1 | 0.28 |
| Weight (g) | 2 | -- | 2 | 0.24 |
| **SS 15** | | | | |
| Count | 3 | -- | 3 | 0.83 |
| Weight (g) | 6.51 | -- | 6.51 | 0.77 |
| **SS 16** | | | | |
| Count | 131 | -- | 131 | 36.29 |
| Weight (g) | 126.11 | -- | 126.11 | 14.96 |
| **SS 17** | | | | |
| Count | 8 | -- | 8 | 2.22 |
| Weight (g) | 27.81 | -- | 27.81 | 3.30 |

**Table 2**
**Summary of Artifacts for CA-SDI-18,428**

| Shovel Scrape | Debitage | FLA | Total | % |
|---|---|---|---|---|
| **Unit 1** | | | | |
| Count | 3 | -- | 3 | 0.83 |
| Weight (g) | 0.68 | -- | 0.68 | 0.08 |
| **Unit 2** | | | | |
| Count | 9 | -- | 9 | 2.49 |
| Weight (g) | 7.52 | -- | 7.52 | 0.89 |
| **Total Count** | **359** | **2** | **361** | **100.00** |
| **Total Weight (g)** | **842.76** | **0.41** | **843.17** | **100.00** |
| ***% Count*** | ***99.45*** | ***0.55*** | ***100.00*** | |
| ***% Weight*** | ***99.95*** | ***0.05*** | ***100.00*** | |

FLA = flake lithic artifact; % = percent; g = gram

### 6.1.1.1 Debitage

Debitage consists of the waste resulting from the production of lithic tools. The debitage category includes flakes and debris. Flakes are the pieces that retain specific, identifiable landmarks that differentiate these pieces from naturally occurring chips of stone. The pieces that do not have all of the necessary landmarks, but are clearly the result of this process, are identified as debris. A total of 359 pieces of debitage, weighing 842.76 grams was recovered from CA-SDI-18,428. Table 3 identifies the recovered debitage by type and material. The debitage types were grouped by reduction stages, including primary, secondary, and tertiary reduction.

Quartz was the predominant material type, at 77.15 percent by count (n=277) but only 11.59 percent by weight (97.74 grams), followed by FGPM at 10.86 percent by count (n=39), but 76.53 percent by weight (645.03 grams). This discrepancy in number vs percent of total in weight is because the average quartz flake/shatter weights 0.26 grams, while the average FGPM flake/shatter weights 16.54 grams. Both obsidian and chalcedony were present in small amounts in the collection, with three obsidian flakes/shatter (0.68 gram) and four chalcedony flakes/shatter (0.35 gram). Neither of these materials are local, and must be imported. By visual inspection, the obsidian appeared to be from Obsidian Butte. The chalcedony does not exhibit the occlusions and waxy surface look characteristic of material from Piedra de Lumbre, a cherty material that is local to San Diego county, and may have been traded in from the desert. Coarse-grained porphyritic metavolcanic (n=35) and quartzite (n=1) make up the remaining material types present.

Secondary shatter was the most common debitage category, accounting for 48.75 percent of the total debitage by count (n=175), followed by tertiary reduction debitage at 39.28 percent by count (n=141).

Tertiary reduction flakes represent final-shaping and maintenance of lithic tools taking place at the site. The presence of these flakes indicates final shaping/maintenance was the most common lithic related task performed on-site. Only 7.52 percent of the debitage by count (n=27) are represented by primary reduction debitage, indicating raw lithic material was not being brought to the site for initial reduction. This is reinforced by the fact that no cores were recovered from the site. Secondary reduction flakes were also uncommon, representing only 4.46 percent of the total by count (n=16).

**Table 3**
**Debitage by Type and Material for CA-SDI-18,428**

| Flake or Shatter Type | CGPM | Chert | FGPM | Obsidian | Quartz | Quartzite | Total | % |
|---|---|---|---|---|---|---|---|---|
| ***Primary Reduction*** | | | | | | | | |
| **Primary Shatter** | | | | | | | | |
| Count | 8 | -- | 3 | -- | 7 | -- | 18 | -- |
| Weight (g) | 26.51 | -- | 60.73 | -- | 6.84 | -- | 94.08 | -- |
| **Cortex Removal** | | | | | | | | |
| Count | 3 | -- | 3 | -- | -- | -- | 6 | -- |
| Weight (g) | 32.64 | -- | 288.89 | -- | -- | -- | 321.53 | -- |
| **Platform Creation, Cortex Removal** | | | | | | | | |
| Count | -- | -- | 3 | -- | -- | -- | 3 | -- |
| Weight (g) | -- | -- | 115.78 | -- | -- | -- | 115.78 | -- |
| **Primary Reduction Total** | | | | | | | | |
| Count | 11 | -- | 9 | -- | 7 | -- | 27 | 7.52 |
| Weight (g) | 59.15 | -- | 465.4 | -- | 6.84 | -- | 531.39 | 63.05 |
| ***Secondary Reduction*** | | | | | | | | |
| **Core Reduction, Basic Shaping** | | | | | | | | |
| Count | 3 | -- | 10 | -- | 3 | -- | 16 | -- |
| Weight (g) | 24.09 | -- | 165.57 | -- | 10.74 | -- | 200.4 | -- |
| **Secondary Reduction Total** | | | | | | | | |
| Count | 3 | -- | 10 | -- | 3 | -- | 16 | 4.46 |
| Weight (g) | 24.09 | -- | 165.57 | -- | 10.74 | -- | 200.4 | 23.78 |
| ***Tertiary Reduction*** | | | | | | | | |
| **Bifacial Thinning Flake** | | | | | | | | |
| Count | -- | 1 | -- | -- | 1 | 1 | 3 | -- |
| Weight (g) | -- | 0.05 | -- | -- | 0.34 | 0.26 | 0.65 | -- |
| **Finishing, Resharpening** | | | | | | | | |
| Count | 1 | 2 | 4 | 3 | 90 | -- | 100 | -- |
| Weight (g) | 1.46 | 0.25 | 1.7 | 0.68 | 33.19 | -- | 37.28 | -- |
| **Trimming** | | | | | | | | |
| Count | 16 | -- | 14 | -- | 8 | -- | 38 | -- |
| Weight (g) | 10.68 | -- | 10.78 | -- | 2.59 | -- | 24.05 | -- |
| **Tertiary Reduction Total** | | | | | | | | |
| Count | 17 | 3 | 18 | 3 | 99 | 1 | 141 | 39.28 |
| Weight (g) | 12.14 | 0.3 | 12.48 | 0.68 | 36.12 | 0.26 | 61.98 | 7.35 |
| ***Secondary Shatter*** | | | | | | | | |
| Count | 4 | 1 | 2 | -- | 168 | -- | 175 | 48.75 |
| Weight (g) | 3.32 | 0.05 | 1.58 | -- | 44.04 | -- | 48.99 | 5.81 |
| **Total Count** | **35** | **4** | **39** | **3** | **277** | **1** | **359** | **100.00** |
| **Total Weight (g)** | **98.7** | **0.35** | **645.03** | **0.68** | **97.74** | **0.26** | **842.76** | **100.00** |
| ***% Count*** | ***9.75*** | ***1.11*** | ***10.86*** | ***0.84*** | ***77.16*** | ***0.28*** | ***100.00*** | |
| ***% Weight*** | ***11.71*** | ***0.04*** | ***76.54*** | ***0.08*** | ***11.60*** | ***0.03*** | ***100.00*** | |

CGPM = coarse-grained porphyritic metavolcanic; FGPM = fine-grained porphyritic metavolcanic; % = percent; g = gram

#### 6.1.1.2 Flaked Lithic Tools

Two flaked lithic tools were recovered from CA-SDI-18,428. These consisted of one utilized flake and one biface fragment (see Table 2).

##### Utilized Flake

The utilized flake was recovered from Scrape 6. Utilized flakes are flakes or spalls, whole or fragmented, which show evidence of use, but lack intentional retouch. Edge angles are typically less than 60 degrees and damage is usually limited to microstepping, nibbling, or rounding, although items of larger mass may show crushing or battering. Artifact Number 18428-9000, is a broken quartz crystal secondary flake with a single 17-millimeter utilized edge exhibiting unifacial micro flaking. The broken edge is opposite the worked edge and exhibits a bend fracture. A small amount of abrasion and rounding is also present.

##### Bifaces

Bifaces are bifacially flaked and should have a thin cross-section compared to the length and/or width. The edge angles would be less than 30 degrees. The edges usually will be convex with an overall leaf-shaped profile composed of a pointed tip and ovate base. One partial biface, artifact number 18428-9001 was recovered from Scrape 6. The fragment is from the midsection, measures 8 by 10 millimeters by 3 millimeters thick, and is made of quartz crystal. Both edges are bifacially flaked and one shows unifacial use wear consisting of micro-flaking.

## 6.2 CA-SDI-18,429

As with CA-SDI-18,428, aerial photography showed that the portion of the ridge on which CA-SDI-18,429 sits was brushed between 1989 and 1996, although the disturbance in the area of CA-SDI-18,429 appears less extensive. Clearing appears to have occurred only once, subsequent air photographs show the native vegetation slowly growing back to its present moderate density. Ground visibility in the site area was poor because of dense grasses and other annuals, a result of the exceptionally wet winter/ spring of 2018-2019.

Soil at CA-SDI-18,429 was uniform and consisted of moderately compact silty clayey loam, different for the soil at CA-SDI-18,428 although still classified as San Miguel-Exchequer rocky silt. Munsell color was predominately 10 YR 5/4. No scrapes bottomed out on bedrock within 10 centimeters, but all three contained moderate amounts of angular metavolcanic rock clasts, varying in size from a few centimeters to over 20 centimeters (Photographs 5 and 6).

PHOTOGRAPH 5
CA-SDI-18,429 Surface Scrape 1

PHOTOGRAPH 6
CA-SDI-18,429 Surface Scrape 3

### 6.2.1 Artifacts Recovered

Thirteen artifacts were recovered from CA-SDI-18,429; all were debitage (Table 4). Scrape 2 produced 10 artifacts and Scrape 1 produced three.

**Table 4**
**Summary of Artifacts for CA-SDI-18,429**

| Shovel Scrape | Debitage | Total | % |
|---|---|---|---|
| **SS1** | | | |
| Count | 3 | 3 | 23.08 |
| Weight (g) | 22.15 | 22.15 | 18.65 |
| **SS2** | | | |
| Count | 10 | 10 | 76.92 |
| Weight (g) | 96.64 | 96.64 | 81.35 |
| **SS3** | | | |
| Count | -- | -- | -- |
| Weight (g) | -- | -- | -- |
| **Total Count** | **13** | **13** | |
| **Total Weight (g)** | **118.79** | **118.79** | |
| % = percent; g = gram | | | |

#### 6.2.1.1 Debitage

The 13 pieces of debitage, recovered weighed 118.79 grams. Table 5 identifies the recovered debitage by type and material. The debitage types were grouped by reduction stages, including primary, secondary, and tertiary reduction.

Fine-grained porphyritic metavolcanic (FGPM) was the predominant material type at 69.23 percent by count (n=9), and 96.67 percent by weight (114.84 grams). Quartz was the next most common material type, at 23.08 percent by count (n=36), but only 0.61 percent by weight (0.72 grams). One quartzite flake, weighing 3.23 grams, was recovered. Unlike CA-SDI-18,428, neither obsidian or chalcedony were present

Core reduction, basic shaping was the most common category, accounting for 53.85 percent of the total debitage by count (n=7), Core reduction flakes are part of the secondary reduction process, when either the tool is being worked into its final basic shape or a flakes are being struck off a prepared core. All of the secondary reduction flakes are FGPM, and the parent material was probably obtained in the vicinity.

The next most common flakes are trimming flakes, at 23.07 percent by count (n=3). Two finishing/resharpening flakes were also recovered, which represent 15.38 percent of the total recovered. Both of these flake types are representative of the tertiary reduction stage of lithic artifact production, which indicates final tool shaping and maintenance were taking place at the site.

**Table 5**
**Debitage by Material and Type for CA-SDI-18,429**

| Flake or Shatter Type | FGPM | Quartz | Quartzite | Total | % |
|---|---|---|---|---|---|
| ***Primary Reduction*** | | | | | |
| **Primary Shatter** | | | | | |
| Count | -- | 1 | -- | 1 | -- |
| Weight (g) | -- | 0.21 | -- | 0.21 | -- |
| **Primary Reduction Total** | | | | | |
| Count | -- | 1 | -- | 1 | 7.69 |
| Weight (g) | -- | 0.21 | -- | 0.21 | 0.18 |
| ***Secondary Reduction*** | | | | | |
| **Core Reduction, Basic Shaping** | | | | | |
| Count | 7 | -- | -- | 7 | -- |
| Weight (g) | 110.8 | -- | -- | 110.8 | -- |
| **Secondary Reduction Total** | | | | | |
| Count | 7 | -- | -- | 7 | 53.85 |
| Weight (g) | 110.8 | -- | -- | 110.8 | 93.27 |
| ***Tertiary Reduction*** | | | | | |
| **Finishing, Resharpening** | | | | | |
| Count | 1 | 1 | -- | 2 | -- |
| Weight (g) | 0.23 | 0.08 | -- | 0.31 | -- |
| **Trimming** | | | | | |
| Count | 1 | 1 | 1 | 3 | -- |
| Weight (g) | 3.81 | 0.43 | 3.23 | 7.47 | -- |
| **Tertiary Reduction Total** | | | | | |
| Count | 2 | 2 | 1 | 5 | 38.46 |
| Weight (g) | 4.04 | 0.51 | 3.23 | 7.78 | 6.55 |
| **Total Count** | **9** | **3** | **1** | **13** | **100.00** |
| **Total Weight (g)** | **114.84** | **0.72** | **3.23** | **118.79** | **100.00** |
| ***% Count*** | ***69.23*** | ***23.08*** | ***7.69*** | ***100.00*** | |
| ***% Weight*** | ***96.67*** | ***0.61*** | ***2.72*** | ***100.00*** | |

CGPM = coarse-grained porphyritic metavolcanic; FGPM = fine-grained porphyritic metavolcanic; % = percent; g = gram

# 7.0 Recommendations

According to CEQA, a significant impact is a project effect that may cause a substantial adverse change in the significance of a historical resource. Adverse changes include physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings resulting in the impairment of the resource's significance (Section 15064.5.4b of the CEQA Guidelines). Mitigation measures are required for adverse effects on significant historical resources (Section 21083.2 of the CEQA Code).

State criteria are those listed in CEQA and used to determine whether a historic resource qualifies for the California Register of Historical Resources. CEQA also recognizes resources listed in a local historic register or deemed significant in a historical resource survey. Some resources that do not meet these criteria may still be historically significant for the purposes of CEQA.

A resource may be listed in the California Register of Historical Resources if it is significant at the federal, state, or local level under one of more of the four criteria listed below.

1. Are associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage of California or the United States.

2. Are associated with the lives of persons important to the nation or to California's past.

3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

4. Has yielded, or may be likely to yield, information important in prehistory or history of the state or nation.

Since resources that are not listed or determined eligible for the state or local registers may still be historically significant, their significance must be determined if they are affected by a project.

The City has developed a set of guidelines that ensure compliance with state and federal guidelines for the management of historical resources. These guidelines are stated in the City's Historic Resources Register (HRR). The HRR has been developed to implement applicable local, state, and federal policies and mandates. Included in these are the City's Progress Guide and General Plan, the CEQA of 1970, and Section 106 of the National Historic Preservation Act of 1966. The intent of the City's guidelines is to ensure consistency in the identification, evaluation, preservation/mitigation, and development of the City's historical resources.

The criteria used by the City to determine significance for historic resources reflect a more local perspective of historical, architectural, and cultural importance for inclusion on the City's HRR. The resource can meet one or more of the following criteria:

a. Exemplifies or reflects special elements of the city's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or agricultural development.

b. Is identified with persons or events significant in local, state, or national history.

c. Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or crafts.

d. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman.

e. Is listed or has been determined eligible by National Park Service for listing on the National Register of Historic Places or is listed or has been determined eligible by the State Historical Preservation Office for listing on the State Register of Historic Resources.

f. Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value, or which represent one or more architectural periods or styles in the history and development of the city.

Unless demonstrated otherwise, archaeological sites with only a surface component are not typically considered significant. The determination of an archaeological site's significance depends on a number of factors specific to that site including size, type, integrity, presence or absence of a subsurface deposit, soil stratigraphy, features, diagnostic artifacts, or datable material; artifact/ecofact density; assemblage complexity; cultural affiliation; association with an important person or event; and ethnic importance. Under the City's guidelines, all archaeological sites are considered potentially significant (City of San Diego 2001:13).

Under City's Historical Resources Guidelines for the Land Development Code there are historical resource types which are typically considered insignificant for planning purposes. These are isolates, sparse lithic scatters, isolated bedrock milling features, shellfish processing stations, and sites and buildings less than 45 years old (City of San Diego 2001:13).

# 7.1 Evaluation of Historical Resources

## 7.1.1 CA-SDI-18,428

A total of 361 artifacts were recovered from the 17 shovel scrapes and two test units at CA-SDI-18,428. These consisted of 359 flakes and 2 stone tool fragments. No milling implements, bone, or shell were recovered.

The test units produced only 12 artifacts, all debitage. Eight of the 12 debitage were recovered in the 0–10 centimeter level, and the remaining three in the 10–20 centimeter level of Unit 1. Unit 1 shows evidence of subsurface disturbance in the form of mixed B and C horizon soils. Unit 2 produced no material below the 0–10 centimeter level, and the unit shows no visible subsurface disturbance. The disturbance in Unit 1 is most probably the cause of the artifacts recovered in the 10–20 centimeter level, and CA-SDI- 18,428 appears to have originally consisted of only a surface component.

The site boundary of CA-SDI-18,428 was determined to be approximately 2,300 square meters at the survey level. Test recovery was concentrated in shovel scrapes 2, 3, 4, 6, and 16, within an area of approximately 190 square meters in the northern end of the site.

One aim of the test program was to determine the site function. From the initial survey information, CA-SDI-18,428 represented, either an artifact scatter or possibly a field camp (as defined by Binford [1980]). In Binford's model of settlement patterns, field camps represent a temporary working and living area associated with gathered task groups while they are away from the main residential base. Field camps would be recognizable by a small but representative sample of several artifact types, location near a major resource area or a travel route; moderate quantities of domestic refuse, including portable food items, variable debitage assemblage with recognizable emphasis on the production and use of a particular task-related tool kit, and hearths.

CA-SDI-18,428 recovery did not produce sufficient materials to indicate the site was a field camp. Only two tools were recovered, both incomplete, and one of these was a utilized flake. No tools such as milling implements, scrapers, or pounding implements were recovered that would indicate food processing took place on the site. No cores, of either quartz or FGPM were recovered, and few primary reduction flakes (7.52 percent of total), indicating the majority of the artifacts were brought on site in the form of at least partially finished blanks or as completed tools. A particular task-related tool kit was not being produced on-site, either from imported quartz or the local FGPM. Unexpectedly, the dominant debitage material is quartz (77.6 percent) which is not available in the immediate area of the site. FGPM, available on site in the form of outcrops, constitutes only 10.86 percent of the total.

No domestic refuse, in the form of bone or marine shell was recovered. San Miguel-Exchequer rocky silt loam is slightly to moderately acidic, which may have affected preservation of organic materials. No hearths or other features were present on the surface or found in the shovel scrapes or units.

The limited range of recovered materials would preclude CA-SDI-18,428 as a field camp, as it does not have the diversity of materials required. CA-SDI-18,428 fits in the category of an artifact scatter; it has a limited variety of artifact types, tool production was not taking place on-site, no domestic refuse was recovered, and no hearths or other features were found. The dominance of secondary shatter and tertiary reduction debitage would indicate final shaping and re-sharpening were the most common knapping tasks taking place on the site. This may be the result of resharpening tools used for harvesting of plant materials in the area of the site,

It is RECON's determination that CA-SDI-18,428 does not qualify as a significant historical resource under CEQA and does not qualify under any of the four criteria for inclusion on the California Register of Historical Resources. CA-SDI-18,428 is not associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage. It is not associated with the life of any person important to the Nation's or California's past. CA-SDI-18,428 is not a structure or other built object, so it cannot represent the work of an important creative individual nor have high artistic values. It cannot represent any facet of construction, as it is not a built object. The site can yield no additional information important to San Diego's past. RECON has determined that the site can be adequately described using the materials recovered from the current RECON testing results. It is RECON's opinion that any cultural material recovered during a data recovery

phase conducted at CA-SDI-18,428 would be a replication of the materials already recovered and would not add significantly to the understanding of the site. It is RECON's opinion that CA-SDI-18,428 is not a significant historical resource under any of the six criteria in the current City guidelines. In RECON's opinion, the site is not an important archaeological site, as discussed in Division 2, Article 3, of the San Diego Municipal Code, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. RECON recommends no additional work at CA-SDI-18,428.

### 7.1.2 CA-SDI-18,429

Thirteen artifacts were recovered from CA-SDI-18,429, all debitage No cultural material was found during either previous RECON surveys of the site area. The predominant lithic material is FGPM, available in the site area in the form of outcrops and large cobbles. No tools, cores milling implements, or domestic refuse were recovered in the shovel scrapes. CA-SDI-18,429 falls in the category of a sparse artifact scatter with no variety of artifact type. The site most probably represents a single-use episode of locally available material being reduced from a prepared core, or tools being resharpened for immediate use in harvesting a resource available on the ridge.

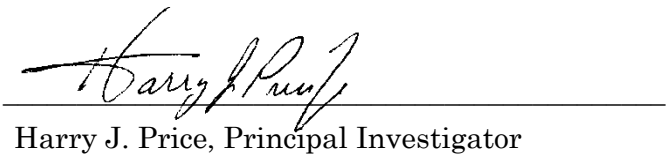
It is RECON's determination that CA-SDI-18,429 does not qualify as a significant historical resource under CEQA and does not qualify under any of the four criteria for inclusion on the California Register of Historical Resources. CA-SDI-18,429 is not associated with events that have made a significant contribution to the broad patterns of local or regional history and cultural heritage. It is not associated with the life of any person important to the nation's or California's past. CA-SDI-18,429 is not a structure or other built object, so it cannot represent the work of an important creative individual nor have high artistic values. It cannot represent any facet of construction, as it is not a built object. CA-SDI-18,429's potential to yield additional information important to San Diego's past has been exhausted by the RECON testing program, and the site can be adequately described using the materials recovered from the current results. It is RECON's opinion that any cultural material recovered during a data recovery phase conducted at CA-SDI-18,429 would be a replication of the materials already recovered and would not add significantly to the understanding of the site. It is RECON's opinion that CA-SDI-18,429 is not a significant historical resource under any of the six criteria in the current City guidelines. In RECON's opinion, the site is not an important archaeological site, as discussed in Division 2, Article 3, of the San Diego Municipal Code, because of its relatively limited variety and density of artifacts and the disturbed nature of the deposit. RECON recommends no additional work at CA-SDI-18,429.

All recovered material from CA-SDI-18,428 and CA-SDI-18,429 will be curated at the SDAC.

This report was prepared in compliance with the CEQA and with policies and procedures of the City. To the best of our knowledge, the statements and information contained in this report are accurate.

# 8.0 Certification and Project Staff

This report was prepared in compliance with the CEQA (Section 21083.2 of the Statutes and Appendix K of the Guidelines) and with policies and procedures of the City. To the best of our knowledge, the statements and information contained in this report are accurate.



Harry J. Price, Principal Investigator

Resumes for key personnel are on file at the City. The following individuals participated in the field tasks or preparation of this report.

| | |
|---|---|
| Harry J. Price | Principal Investigator |
| Richard D. Shultz | Field Director |
| Nathanial Yerka | Field Archaeologist |
| Tom Sowles | Field Assistant |
| Gabe Kitchen | Native American Representative |
| Anthony LaChappa | Native American Representative |
| Sean Bohac | GIS Specialist |
| Benjamin Arp | GIS Specialist |
| Jennifer Gutierrez | Production Specialist |

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# ATTACHMENT 1

# Artifact Catalogue

| CAT . | CLASS | TYPE | MATERIAL | COUNT | WEIGHT | LENGTH | WIDTH | THICKNESS | CONDITION | STATUS | COMMENTS | LEVEL | TASK # | TASK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | Debitage | Trimming | FGPM (Fine grained, porphyritic metavolcanic) | 4 | 2.84 | | | | | | | 0-10 | SS 1 | 2m x 2m shovel scrapes. |
| 1001 | Debitage | Trimming | Quartz | 1 | 0.52 | | | | | | | 0-10 | SS 1 | 2m x 2m shovel scrapes. |
| 1002 | Debitage | Platform creation, cortex removal | FGPM (Fine grained, porphyritic metavolcanic) | 2 | 12.2 | | | | | | | 0-10 | SS 2 | 2m x 2m shovel scrapes. |
| 1003 | Debitage | Finishing, resharpening | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 0.2 | | | | | | | 0-10 | SS 2 | 2m x 2m shovel scrapes. |
| 1004 | Debitage | Trimming | FGPM (Fine grained, porphyritic metavolcanic) | 3 | 3.9 | | | | | | | 0-10 | SS 2 | 2m x 2m shovel scrapes. |
| 1005 | Debitage | Shatter during secondary reduction | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 0.07 | | | | | | | 0-10 | SS 2 | 2m x 2m shovel scrapes. |
| 1006 | Debitage | Trimming | CGPM (course grained, porphyritic metavolcanic) | 2 | 0.61 | | | | | | | 0-10 | SS 2 | 2m x 2m shovel scrapes. |
| 1007 | Debitage | Finishing, resharpening | Quartz | 4 | 1.8 | | | | | | | 0-10 | SS 2 | 2m x 2m shovel scrapes. |
| 1008 | Debitage | Shatter during secondary reduction | Quartz | 7 | 2.33 | | | | | | | 0-10 | SS 2 | 2m x 2m shovel scrapes. |
| 1009 | Debitage | Finishing, resharpening | Quartz | 22 | 5.42 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1010 | Debitage | Trimming | Quartz | 3 | 0.32 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1011 | Debitage | Shatter during secondary reduction | Quartz | 36 | 4.53 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1012 | Debitage | Finishing, resharpening | Obsidian | 2 | 0.43 | | | | | | Obsidian Butte | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1013 | Debitage | Platform creation, cortex removal | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 103.58 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1014 | Debitage | Core reduction, basic shaping | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 101.47 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1015 | Debitage | Finishing, resharpening | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 0.02 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1016 | Debitage | Trimming | FGPM (Fine grained, porphyritic metavolcanic) | 2 | 0.2 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1017 | Debitage | Bifacial thinning flake | Quartz | 1 | 0.34 | | | | | | | 0-10 | SS 3 | 2m x 2m shovel scrapes. |
| 1018 | Debitage | Finishing, resharpening | Quartz | 6 | 5.38 | | | | | | | 0-10 | SS 4 | 2m x 2m shovel scrapes. |
| 1019 | Debitage | Shatter during primary reduction | Quartz | 1 | 0.34 | | | | | | | 0-10 | SS 4 | 2m x 2m shovel scrapes. |
| 1020 | Debitage | Shatter during secondary reduction | Quartz | 6 | 1.11 | | | | | | | 0-10 | SS 4 | 2m x 2m shovel scrapes. |
| 1021 | Debitage | Cortex removal | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 21.4 | | | | | | | 0-10 | SS 4 | 2m x 2m shovel scrapes. |
| 1022 | Debitage | Core reduction, basic shaping | FGPM (Fine grained, porphyritic metavolcanic) | 2 | 19.83 | | | | | | | 0-10 | SS 4 | 2m x 2m shovel scrapes. |
| 1023 | Debitage | Trimming | FGPM (Fine grained, porphyritic metavolcanic) | 3 | 2 | | | | | | | 0-10 | SS 4 | 2m x 2m shovel scrapes. |
| 1024 | Debitage | Shatter during primary reduction | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 58.56 | | | | | | | 0-10 | SS 4 | 2m x 2m shovel scrapes. |
| 1025 | Debitage | Finishing, resharpening | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 0.08 | | | | | | | 0-10 | SS 5 | 2m x 2m shovel scrapes. |
| 1026 | Debitage | Finishing, resharpening | Quartz | 1 | 0.18 | | | | | | | 0-10 | SS 5 | 2m x 2m shovel scrapes. |
| 1027 | Debitage | Shatter during secondary reduction | Quartz | 1 | 0.14 | | | | | | | 0-10 | SS 5 | 2m x 2m shovel scrapes. |
| 1028 | Debitage | Bifacial thinning flake | Chert | 1 | 0.05 | | | | | | Chalcedony | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1029 | Debitage | Finishing, resharpening | Chert | 2 | 0.25 | | | | | | Chalcedony | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1030 | Debitage | Shatter during secondary reduction | Chert | 1 | 0.05 | | | | | | Chalcedony | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1031 | Debitage | Bifacial thinning flake | Quartzite | 1 | 0.26 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1032 | Debitage | Core reduction, basic shaping | CGPM (course grained, porphyritic metavolcanic) | 1 | 4.86 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1033 | Debitage | Trimming | CGPM (course grained, porphyritic metavolcanic) | 2 | 1.07 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1034 | Debitage | Core reduction, basic shaping | Quartz | 1 | 2.8 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1035 | Debitage | Finishing, resharpening | Quartz | 17 | 5.11 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1036 | Debitage | Shatter during primary reduction | Quartz | 1 | 0.78 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1037 | Debitage | Shatter during secondary reduction | Quartz | 43 | 12.93 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1038 | Debitage | Cortex removal | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 2.37 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1039 | Debitage | Core reduction, basic shaping | FGPM (Fine grained, porphyritic metavolcanic) | 2 | 17.15 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1040 | Debitage | Finishing, resharpening | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 1.4 | | | | | | | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 1041 | Debitage | Finishing, resharpening | Quartz | 1 | 0.36 | | | | | | | 0-10 | SS 7 | 2m x 2m shovel scrapes. |
| 1042 | Debitage | Trimming | Quartz | 1 | 0.68 | | | | | | | 0-10 | SS 7 | 2m x 2m shovel scrapes. |
| 1043 | Debitage | Shatter during secondary reduction | Quartz | 1 | 0.4 | | | | | | | 0-10 | SS 7 | 2m x 2m shovel scrapes. |
| 1044 | Debitage | Cortex removal | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 265.12 | | | | | | | 0-10 | SS 7 | 2m x 2m shovel scrapes. |
| 1045 | Debitage | Core reduction, basic shaping | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 2.4 | | | | | | | 0-10 | SS 7 | 2m x 2m shovel scrapes. |
| 1046 | Debitage | Trimming | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 0.23 | | | | | | | 0-10 | SS 7 | 2m x 2m shovel scrapes. |
| 1047 | Debitage | Shatter during primary reduction | FGPM (Fine grained, porphyritic metavolcanic) | 2 | 2.17 | | | | | | | 0-10 | SS 7 | 2m x 2m shovel scrapes. |
| 1048 | Debitage | Finishing, resharpening | Quartz | 3 | 0.17 | | | | | | | 0-10 | SS 8 | 2m x 2m shovel scrapes. |
| 1049 | Debitage | Shatter during primary reduction | Quartz | 1 | 0.11 | | | | | | | 0-10 | SS 8 | 2m x 2m shovel scrapes. |
| 1050 | Debitage | Trimming | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 1.61 | | | | | | | 0-10 | SS 9 | 2m x 2m shovel scrapes. |
| 1051 | Debitage | Finishing, resharpening | Quartz | 1 | 2 | | | | | | | 0-10 | SS 11 | 2m x 2m shovel scrapes. |
| 1052 | Debitage | Finishing, resharpening | Obsidian | 1 | 0.25 | | | | | | Obsidian Butte | 0-10 | SS 15 | 2m x 2m shovel scrapes. |
| 1053 | Debitage | Core reduction, basic shaping | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 4.75 | | | | | | | 0-10 | SS 15 | 2m x 2m shovel scrapes. |
| 1054 | Debitage | Shatter during secondary reduction | FGPM (Fine grained, porphyritic metavolcanic) | 1 | 1.51 | | | | | | | 0-10 | SS 15 | 2m x 2m shovel scrapes. |
| 9000 | FLA | Utilized flake | Quartz | 1 | 0.18 | 12 | 7 | 2 | Whole | | Quartz crystal; utilized on one edge; unifacial micro flaking | 0-10 | SS 6 | 2m x 2m shovel scrapes. |
| 9001 | FLA | Utilized flake | Quartz | 1 | 0.23 | 8 | 10 | 3 | Whole | | Quartz crystal; flake fragment; snap fracture; wear wraps around fracture plane; utilized on both edges; unifacial micro flaking on one edge, bifacial on the other | 0-10 | SS 6 | 2m x 2m shovel scrapes. |

| CAT . | CLASS | TYPE | MATERIAL | COUNT | WEIGHT | LENGTH | WIDTH | THICKNESS | CONDITION | STATUS | COMMENTS | LEVEL | TASK# | TASK CODE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1000 | Debitage | Core reduction, basic shaping | FGPM | 3 | 22.15 | | | | | | | 0-10 | SS1 | 2m x 2m shovel scrapes. |
| 1005 | Debitage | Core reduction, basic shaping | FGPM | 4 | 88.65 | | | | | | | 0-10 | SS2 | 2m x 2m shovel scrapes. |
| 1006 | Debitage | Finishing, resharpening | FGPM | 1 | 0.23 | | | | | | | 0-10 | SS2 | 2m x 2m shovel scrapes. |
| 1007 | Debitage | Trimming | FGPM | 1 | 3.81 | | | | | | | 0-10 | SS2 | 2m x 2m shovel scrapes. |
| 1001 | Debitage | Finishing, resharpening | Quartz | 1 | 0.08 | | | | | | | 0-10 | SS2 | 2m x 2m shovel scrapes. |
| 1002 | Debitage | Trimming | Quartz | 1 | 0.43 | | | | | | | 0-10 | SS2 | 2m x 2m shovel scrapes. |
| 1003 | Debitage | Primary shatter | Quartz | 1 | 0.21 | | | | | | | 0-10 | SS2 | 2m x 2m shovel scrapes. |
| 1004 | Debitage | Trimming | Quartzite | 1 | 3.23 | | | | | | | 0-10 | SS2 | 2m x 2m shovel scrapes. |

# CONFIDENTIAL ATTACHMENTS

## Are not for public review