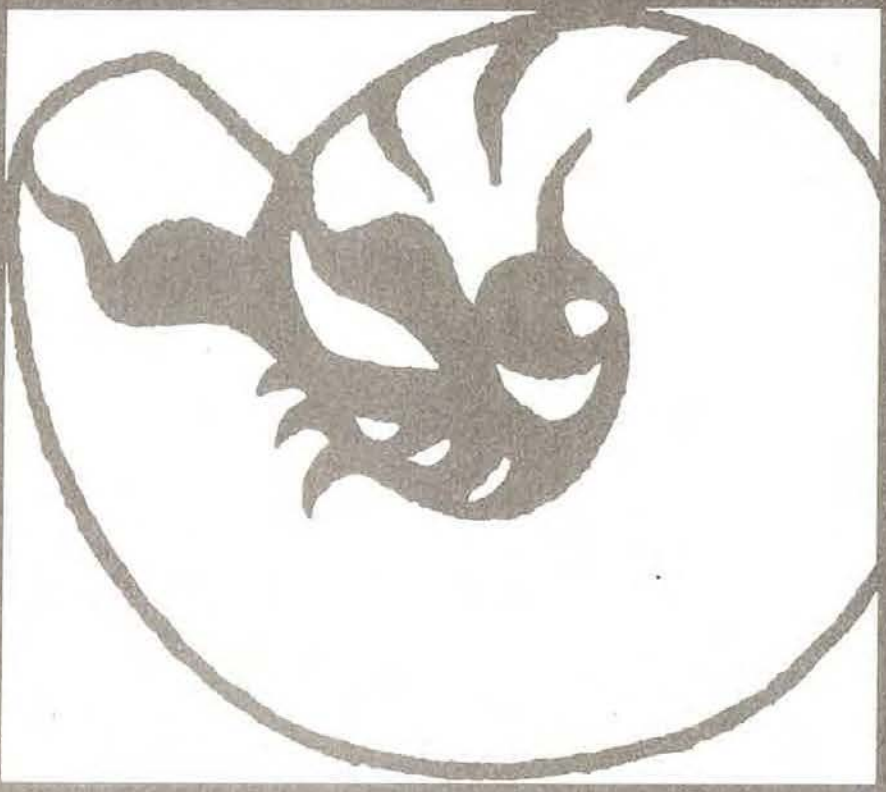
Cultural and Tribal Cultural Resources

APPENDIX E

RMW Cultural Report Jun 1999

APPENDIX E



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DATE:	June 1999
TITLE:	**Volume 1:** Cultural Resources Reconnaissance of the Unocal Property, 2,800 Acres in Simi Valley and Moorpark, Ventura County, California
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SUBMITTED TO:	Unocal 376 South Valencia, Room A-170 Brea, California 92823
CONTRACT NUMBER:	RMW Project Number 99-1358
MAP:	USGS Simi Valley West, California 7.5 Minute Quadrangle 1951, Photorevised 1969
ACREAGE:	Approximately 2,800 acres
KEYWORDS:	Simi Valley, California; Moorpark, California; Townships 2 and 3 North, Ranges 18 and 19 West, San Bernardino Base and Meridian; Primary Numbers 56-100108 through 56-100120; Primary Numbers 56-001579 through 56-001599

MANAGEMENT SUMMARY

Background: Unocal, address as on title page, is contemplating converting approximately 2,800 acres in Simi Valley and Moorpark, Ventura County, California, from oil production and ranching to residential and commercial development. To date, no development plans have been formulated.

Purpose and Scope: This study was undertaken to provide Unocal with planning data relative to the cultural resources existing on the 2,800 acre study area. While the lack of evaluative studies precludes definite statements of archaeological/historical site importance, and lack of a development plan precludes assessment of project impact, general statements regarding probable site data potential and probable impact were formulated and included in the report. These general statements are for planning purposes only, and may change as new data becomes available.

Dates of Investigation: The field portion of the study was accomplished in April and early May 1999. This report, including the accompanying site records, was prepared during May and early June 1999.

Major Findings: Thirty four prehistoric sites, historic sites and isolated finds were recorded during the project. The prehistoric sites include one apparently major encampment, a rockshelter in an ideal setting (but with no currently visible artifacts), four vegetable resource collecting/processing areas, four chipped tool production areas, two food preparation areas, a tar seep (again, with no artifacts visible), eight quarry areas and 13 isolated finds. Three of the historic sites are related to agriculture/ranching and another is related to oil production. The total of 38 sites exceeds the total of 34 recorded deposits, since some deposits have evidence of multiple activites and two of the sites that are primarily historic in character have prehistoric elements.

The cultural deposits are located throughout the 2,800 acre property. The prehistoirc deposits seem to indicate use of the entire study area. While isolated agricultural/ranching remains are seen throughout the study area, the most extensive remains are found in Brea Canyon. Oil production remains are found throughout the property.

In addition to the recorded deposits, several areas of interest were noted that were not deemed worthy of recordation. For example, a metal building on the property contains false building fronts and fake trees that were apparently part of a motion picture set.

Evaluation: Definite evaluations of the cultural sites cannot be made, since no evaluative research has been accompished. Excavation has yet to be accompished at any of the sites, and no archival research, other than examination of retrospective aerial photographs, has been accomplished for the historic deposits. Only general statements regarding importance can therefore be made. Some of the sites have the apparent potential to yield significant data, while others are only marginally important. These estimates of site value are subject to change as

additional data becomes available. The prehistoric isolated finds recorded during the project are considered as not important, since recordation has documented all of the scientific data they contain.

Undertaking Effect: The effect the project will have on the cultural resources cannot be assessed, given the lack of a development plan. Again, only general statements regarding whether or not a particular deposit appears to be within a prime building area can be made. The statements are subject to change when a development plan becomes available.

Constraints on Investigation: Heavy vegetation obscured the surface in much of the study area.

Recommendations Summary: The prehistoric sites located during the study are to be subjected to surface collection and evaluative excavation of sufficient scope to establish the importance (or lack of importance) of each site. There is one exception to this recommendaton. Unocal 3 is a tar seep and requires no further research. The isolated finds are not considered as sites, so require no further research. Further treatment of the prehistoric sites is dependent on the results of the evaluative studies. Sites found to be not important will require no further research, while those found to be important will require either preservation or a data recovery excavation.

The historic sites located during the study are to be subjected to surface collection, evaluative excavation and archival research of sufficient scope to establish the importance (or lack of importance) of each site. Further treatment of the historic sites is dependent on the results of the evaluative studies. Sites found to be not important will require no further research, while those found to be important will require either preservation or a data recovery excavation.

A historic study should be undertaken to provide planners with data related to past property ownership, uses and important events.

Given the poor visibility at the time of the field work, it is recommended that approval of each tract within the property contain a condition that the clearing and initial stages of grading be monitored by an archaeologist.

In order to provide planners with the maximum amount of information possible, the recommended archival research, evaluative excavations and preparation of the historic study should be undertaken as soon as possible. The recommendation for monitoring will be accomplished during the initial construction stages for each tract.

Disposition: Two artifacts, a quartzite core and a chert core, were collected during the current project. These artifacts are temporarily stored at RMW Paleo Associates and will be permanently curated as directed by Unocal. All field records, notes, maps and photographs generated by RMW personnel during the course of the project are filed at RMW Paleo Associates, Incorporated.

TABLE OF CONTENTS

Volume 1:

Volume 2:

INTRODUCTION

Undertaking: Unocal, Incorporated, address as on title page, is considering development on 2,800 acres of property located in Simi Valley and Moorpark, Ventura County, California. No development plan has yet been produced for the property. The current study was undertaken to determine the level of prehistoric and historic activity in the area, with the goal of providing data for use in the planning process. Given the lack of a development plan, impacts to those sites and features identified during this study can only be addressed in a general fashion, and are subject to change when a development plan is available.

Personnel: Ronald M. Bissell, Registered Professional Archaeologist, is the Principal Investigator for the study and conducted field work, research, site record preparation and report preparation. Joan C. Brown, Registered Professional Archaeologist, prepared the prior research and cultural setting portions of the report. Marco Bonafacio assisted with the field research and prepared the site records and maps accompanying the report. Albert Knight, David Ferraro and Carol Bissell completed field research. Resumes for all project personnel are contained in Appendix 1.

SETTING

Natural: The map on the following page depicts the boundaries of the study area. The large feature labeled "Not a Part" on the map is an active landfill that has been in service for many years.

Geography: The Unocal study area includes three major canyon areas and the higher elevations surrounding them. Easternmost is Brea Canyon, which drains most of the eastern part of the study area and terminates at Arroyo Simi a short distance south of the study area. Alamos Canyon also terminates at Arroyo Simi, but has a larger catchment. Alamos Canyon follows a northerly course from Arroyo Simi, but gradually turns to the northeast. The canyon eventually leaves the study area property and turns directly east, eventually to reenter the study area in its northeastern extreme. The third canyon is unnamed, but essentially defines the western boundary of the study area. All of these drainages flow from the northeast to the southwest. Elevations within the study area vary from about 1,400 feet at the northeastern extreme of the property to about 600 feet at the southwestern extreme.

The property has been an active oil field for many decades. While most of the oil field facilities have been removed, there are several active wells remaining in the western part of the property. The area is currently used for cattle grazing, and dry farming was practiced for many years on the areas of gentle slope.

Vegetation: The study area hosts a broad variety of vegetation types. These include sage scrub growth on the steeper slopes, as well as in some of the gentler terrain areas that are difficult to access. Oak woodland is found in many of the canyon areas, and riparian growth is found along some of the streams. The leveler areas are primarily covered with various introduced species of grasses and trees. During prehistoric and early historic times, the slopes

The Kelly Barn, Documented by RMW Paleo, 1994

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APPROXIMATE BOUNDARY OF THE UNOCAL STUDY AREA, SIMI VALLEY AND MOORPARK, VENTURA COUNTY, CALIFORNIA

Portion of USGS 7.5 Minute Quadrangle,
Simi Valley West, 1951, Photorevised 1968
Scale: 1:24,000
North is up

of the study area would most likely have been covered by sage scrub, with grasslands, riparian and oak woodland growth in the canyons. Freshwater marshes were probably occasionally formed behind natural dams when the smaller canyons were blocked by landslides. Each of these vegetation associations are briefly discussed below.

Coastal Sage Scrub: In a natural state, sage scrub would have covered much of the study area. During most of archaeological time, the plants and animals of the sage scrub were extensively exploited by the aboriginal population for food, construction material, clothing and medicines.

Grasslands: Prior to the arrival of Europeans, and for a considerable period thereafter, grasslands probably dominated the broader canyon floors of the study area, and would have been pronounced in the Simi Valley to the southeast. The seeds produced in the natural grasslands were a rich food resource. It is known from areas to the south that burning was used by prehistoric peoples as a means of enhancing the growth of favored species. Such activity could have been practiced in the study area vicinity. Rabbits and deer inhabited the grasslands, and would have been hunted by the prehistoric population.

Riparian Woodland: The riparian woodland develops along stream channels and contains many resources used by the Native Americans. Riparian woodlands are quite rich in the vegetable resources required by prehistoric people and hosts many animal and bird species. The riparian woodland provided not only food, but resources for basketry, clothing, housing, medicines and ornaments. Riparian woodland undoubtedly existed along many of the study area drainages during prehistoric times. Isolated patches of riparian growth exist in the study area today.

Freshwater Marsh: Freshwater marshes resemble the riparian woodlands in terms of the species that are present, but are usually surrounded by a more extensive woodland. Such marshes would have represented a most valuable resource for native populations. Some small marshy areas are present today, but were probably more prevalent in the past. The local geologic formations are prone to landslides, and past landslides would have dammed the drainages, creating marshes behind the dams. Given the rapid sedimentation within the study area, such marshes would not have been long lived, but would have provided a most valuable resource when present.

Oak Woodland: Acorns were a staple food during the latter phases of the prehistoric period. The development of technology to allow use of acorns as a food resource was quite important, since larger and more stable populations could be supported. Many of the canyons within the study area host extensive oak woodland growth.

Animals and birds, required resources for prehistoric people, also make use of the vegetation. While some animals range through several plant communities, many are restricted to a more limited range of vegetation, and some are restricted to a single community. For example,

riparian growth is primary deer habitat for deer at the lower elevations, while rabbits can be found in every vegetation community.

A few of the known Native American uses of plants are indicated in the following table (Vanderpot, Altschul and Grenda 1993). Table 1 is far from comprehensive; it is probable that Native Americans made use of most plants for one purpose or another. For example, Merill (1923) lists some 95 plants known to have been used by California Native Americans just for basketry, and Almstedt (1977) lists 75 plant species as being used for medicines. The table is meant to serve only as examples of plant exploitation.

Table 1: Native American Uses of Local Vegetation

Scientific Name	Common Name	Native American Use
Artemisia californica	California Sagebrush	Medicinal
Artemisia douglasiana	Mugwort	Arrow Shafts
Eriogonum fasciculatum	Flat-top Buckwheat	Medicinal
Platanus racemosa	California Sycamore	Medicinal
Quercus agrifolia	Coast Live Oak	Food, Fuel
Quercus chrysolepis	Canyon Live Oak	Food, Fuel
Quercus cornelius-mulleri	Scrub Oak	Food, Fuel
Quercus dunnii	Scrub Oak	Food, Fuel
Quercus engelmannii	Engelman Oak	Food, Fuel
Salix ssp.	Willow	Basketry, Construction, Twine, Bows
Salvia apoana	White Sage	Food, Medicinal
Salvia mellifeera	Black Sage	Food, Medicinal
Sambucus caerulea	Elderberry	Medicinal, Beverage, Food, Dye, Construction
Sambucus mexicana	Elderberry	Medicinal, Beverage, Food, Dye, Construction
Toxicodendron radicans	Poison Oak	Medicinal
Xylococcus bicolor	Mission Manzanita	Beverage, Food, Tools, Fuel

Vegetation Summary: It is clear the prehistoric occupants of the study area and vicinity had an extremely broad range of vegetation communities (and the complementary animals) from which to acquire the resources needed for their life style. The broad range of available vegetation types was extremely important, since failure of one vegetation association due to disease or short term weather changes did not spell complete disaster for the society. Other resources were always available, except during periods of extended failure, such as protracted drought. Even then, the coastal vegetation (much of which can survive on fog drip), marine resources and the resources from the higher elevations could still be relied on. In a pristine (pre-European) state, the area around the study area was quite rich in vegetable and animal resources. A more detailed discussion of study area flora and fauna is found in Kuhn (1997).

Climate: Southern California climatic conditions are usually described as "Mediterranean," meaning that only two distinct seasons are experienced, a relatively wet, mild winter and a relatively moderate, dry summer. The Mediterranean climate is quite rare and is found in North America only along the southern California coast.

Rainfall in the study area averages about 28 centimeters per year. Rainfall almost always occurs during the cool, winter months (Pryde 1984). The average rainfall is occasionally greatly exceeded and the result is destructive flooding. Today a network of aqueducts brings water from the mountains and rivers to the north and east, so the effects of drought are considerably ameliorated. But in the past, when external water was not available, prolonged drought could bring disaster to local inhabitants when plant species necessary for survival did not produce. Not infrequently, periods of flooding and drought will follow each other, with several successive seasons of reduced vegetation growth. An example of this occurred in the 1860s when flooding followed by several years of drought killed as much as 70 % of California stock herds (Cramer 1988).

Temperatures in southern California are not extreme. Hard freezes are not unknown, but are rare. Temperatures in excess of 39 degrees Celsius are also rare.

The local climate has changed rather dramatically during the time period when people have been present. It is thought that people first appeared in North America during the closing stages of the Pleistocene. The local climate was then much cooler and wetter. Local flora and fauna would have been quite different under such climatic conditions. Heusser (1978) presents a convincing case that the southern California region hosted dense pine forests near the end of the Pleistocene. As the climate gradually became drier and warmer, the pine forest retreated to higher elevations. A small remnant of the pine forest is still found at the Torrey Pines State Reserve in San Diego County.

The change from cooler, wetter conditions dominated by pine forest to warmer, drier conditions dominated by scrub and chaparral growth has been rather gradual. Nevertheless, there have been periods, some apparently rather lengthy, when the climate suddenly deviated from its overall gradual trend toward warmer and drier conditions. The number of such fluctuations, their

amplitude, their duration, and the effect on human populations are matters of much dispute. See Drover, Koerper and Langenwalter (1983) for a detailed discussion. It is certainly known that climatic incursions did occur, and probably affected human population activities, distributions and growth.

Geology: The principal geologic exposure in the study area is the Sespe Formation. The Sespe Formation was deposited during middle Eocene to late Oligocene time, some 45 to 24 million years ago and consists of flood deposits laid down in river channels and the associated flood plains (Squires 1997). The terraces associated with the Sespe Formation are quite important to this study, since many of these have been uplifted, exposed and were used by prehistoric people as a source for lithic material. A high percentage of the terrace material is quartzite, but quartz, granitics and metavolcanic materials are also present.

The alluvial sediments that today fill the canyons of the study area were apparently rapidly deposited. Soil development is poor to non existent in many of the canyon floor areas. Archaeological deposits would be quickly buried under such conditions.

Cultural:

Prehistoric Overview: The date of first occupation of North America by humans has not been firmly established. Good evidence exists placing humans in California by 10,000 B.C.E. (Before Common Era). Earlier dates, as old as 200,000 B.C.E., have been argued for sites such as Calico, near Barstow, California, but most archaeologists have not accepted these deposits as human in origin. Given their supposed age, such deposits could not have been created by *Homo Sapiens*, but would have to have been the product of either *Homo Neanderthal* or *Home Erectus*. There is no evidence that either of these human stocks had the technology to cross wide expanses of open ocean or to survive under true arctic conditions. One or both of these technologies had to be in place before the New World could have been colonized.

Nevertheless, some solid evidence is beginning to emerge indicating that people arrived in the New World some few millennia before the generally accepted dates. Both the Monte Alban site in Chile and the Meadowcroft Rockshelter in Pennsylvania (as examples among several) have older strata reliably dated to about 12,500 B.C.E. New Word entry would have been earlier than this date, since some length of time was required for dispersion from the Bering Strait area (or from the west coast if colonization was by sea faring people (Dixon 1993). The latter scenario, of colonization by people moving by sea down the west coast, has important implications for California archaeological studies.

The earliest generally accepted archaeological deposits in the western United States date to approximately 10,000 to 8,000 B.C.E. Deposits of this age are most frequently found in the Great Basin area and along the California coast. These early people shared numerous traits.

1. Their survival adaptations apparently depended on resources found around freshwater lakes, major streams and coastal estuaries, since such areas are where most sites are found. Lakes, streams and estuaries are quite rich in food and material resources. Hunting of

animals and birds attracted to the water, fishing, collecting of shellfish and collecting of vegetable resources were probably all practiced, but there is admittedly a scarcity of tools used for vegetable resource processing.

2. Lithic technology was quite advanced. Tools often bear evidence of sophisticated percussion and pressure manufacturing techniques, and heat treatment of stones was often used. The tool assemblages from the period argue that the bow and arrow were not used, but that the atlatl was in use. The most common artifacts from the period are hammerstones, perforators, choppers, scrapers, scraper planes, large leaf shaped points (perhaps knives), triangular shaped points with broad, tapering stems, fluted lance points and crescents (finely worked tools of uncertain utility). Unfortunately, few artifacts other than those made of stone have survived. A handful of shell and bone artifacts, predominately from the coastal sites, have survived. Undoubtedly, utilitarian objects constructed from shell, bone, wood, fiber and skin were also used.

The earliest generally accepted North American people belong to what is now generally referred to as the Fluted Point Tradition (Moratto 1984:79), named for the large, fluted and very finely worked points found at many sites. Since their first discovery near Clovis, New Mexico in 1926, such points have been found in nearly every state. Within California, fluted points have been found near Tulare Lake, Borax Lake, China Lake, Lake Mojave, in the Mojave Desert and in Cuyamaca Mountain passes. In the mid-continent area, fluted points are often found in association with large animal kills, but this is not the case in California. This difference, along with others, has led to the identification of the deposits on the Pacific Ocean side of the Rocky Mountains as the Western Pluvial Lakes Tradition. California sites of this early age are infrequently stratified and dateable material is most often lacking. The relationship between the more or less continent wide Fluted Point Tradition and the Western Pluvial Lakes Tradition is not clear, given the general lack of reliable dating of the sites from the latter tradition. It is quite possible that people moved into the continent down the eastern flank of the Rocky Mountains, spreading to the east and west. In this case, the Western Pluvial Lakes Tradition would be a local adaptation, slightly later in time, of the Fluted Point Tradition. Alternatively, if settlement resulted from maritime peoples moving southward along the Pacific Coast and then overland into the continental interior, the Fluted Point Tradition may well be an outgrowth of an earlier Western Pluvial Lakes Tradition.

Early archaeological researchers in southern California generally worked in isolation and gave localized names to the various archaeological periods they were studying. The result was a plethora of names for each segment of the archaeological sequence, even though the same broad characteristics could be found over a wide region. One of the early researchers in southern California was Malcomb Rogers. An astute and tireless observer, Rogers recorded a large number of sites, completed many excavations and defined cultural periods and characteristics. His work, beginning in the late 1920s, formed the basis for later archaeological research in the region. In an early paper, Rogers (1929) defined two early cultures in the coastal region, identified as the Shell Midden People and the Scraper-Maker Culture, and decided they had appeared in that order. Later, Rogers (1939, 1945) reversed the order of these manifestations

and changed the names to San Dieguito for the older and La Jollan for the younger. Cultures similar to the San Dieguito were being defined (some by Rogers himself) in the areas to the east. Later researchers, seeing the similarities, subsumed all these early cultures into the San Dieguito Complex and, later, the Western Pluvial Lakes Tradition (Wallace 1962, Warren 1967, Bedwell 1970).

Regardless of the terminology, these early sites share certain characteristics. As defined by Moratto (1984: 93), these characteristics are:

1. A tendency for sites to be located on or near the shores of former pluvial lakes and marshes or along old stream channels.
2. Dependence on hunting various animals, fowling, collecting and gathering vegetal products.
3. An absence of ground stone artifacts such as millingstones, hence a presumed lack of hard seeds in the diet.
4. A developed flaked stone industry, marked especially by percussion flaked foliate knives or points, Silver Lake and Lake Mojave points, lanceolate bifaces, and points similar to the long stemmed variety from Lind Coulee (Hester 1973).
5. A toolkit commonly including chipped stone crescents, large flake and core scrapers, choppers, scraper planes, hammerstones, several types of cores, drills, gravers, and diverse flakes.

The type site for definition of the San Dieguito is CA-SDI-149, the C. W. Harris site. Located on the San Dieguito River about 15 kilometers from the current coast, CA-SDI-149 is far southeast of the current study area. Rogers first investigated the site in 1938 and additional excavations were accomplished by Warren and True in 1961. The San Dieguito component of the deposit was interpreted as a series of campsites on gravel bars within the broad river floodplain. Radiocarbon dates established that the occupation occurred between 7430 B.C.E. and 6140 B.C.E. Artifacts recovered from the San Dieguito component include ovoid bifaces that may be knife blanks, two forms of leaf shaped knives, a crescent, leaf shaped points, short bladed shouldered points, gravers, choppers, core and pebble hammerstones, cores, and a variety of scrapers. The San Dieguito suite of identifying characteristics, listed above, was derived from this data (Warren 1966).

Use of the radiocarbon dating technique following World War II allowed the development of rather precise archaeological chronologies. The first such chronology was developed by Wallace (1955), who described four periods applicable to the southern California region. Wallace's earliest period, Early Man, dates from an unknown time near the end of the Pleistocene to about 5,500 B.C.E., and is the equivalent of the San Dieguito Period described earlier. Wallace labeled the succeeding period the Millingstone, so named because of the predominant lithic tools associated with it. These tools, manos and metates, were used to process the small, hard seeds primarily associated with sage scrub vegetation. Settlement size seems to have increased from the Early Man Period. An annual round of seasonal migrations was likely practiced as movements coincided with ripening vegetal resources. Some formal burials are also evident.

This successful adaptation to local conditions persisted essentially unchanged until approximately 3,000 B.C.E.

The Millingstone was followed, in Wallace's scheme, by the Intermediate Period. The major change in the Intermediate was the introduction of the mortar and pestle, probably from the north. The mortar and pestle, when coupled with knowledge of how to leach tannic acid from the meal, allowed exploitation of the acorn as a food resource. Population growth was a result of the availability of a broadened resource base.

Wallace's final phase is termed the Late Prehistoric Period. In the Late Prehistoric, trade with distant areas was more pronounced than during earlier epochs and there was a greater utilization of food resources, with more land and sea mammal hunting to complement collecting. The pattern of life in the Late Horizon was quite complex. A far greater range of artifacts was being produced, and a more sophisticated degree of workmanship was exhibited. The observation that the bow and arrow was now utilized to a greater extent is based on the recovery of great numbers of small, finely chipped projectile points. Other items include steatite containers, shell fishhooks, perforated stones, bone tools, personal ornaments, asphalt adhesive and elaborate mortuary customs. In addition, the population increased and larger villages evolved (Wallace 1955:223). Late sites contain beautiful and complex objects of utility, art and decoration. Most of the rock art found today in the region is thought to date to this period.

The people living in the study area on arrival of the Spanish are known as Chumash. The cultural sequence of the Chumash precursors has long been studied. Early researchers interpreted the episodes of apparent rapid change in material culture as the result of successive waves of migration. More recent work has established that local development was far more important than migration in bringing about changes in the material culture.

Chester King (1981) produced a detailed analysis of Chumash chronology from burial lot seriation. King's work is based primarily on changes in the frequency of shell artifact types over time. With some refinement based on new knowledge, King's work is still valid today. The following discussion is based primarily on King's work.

King proposed a basic three period division, Early, Middle and Late, with each period subdivided based on discernable changes in artifact typologies over time. The Early Period in King's framework includes Wallace's (1955) Millingstone Horizon and approximately half of Wallace's Intermediate Horizon. During its initial phase, hunting continued as the primary subsistence strategy. Projectile points were large, but not as well made as in the San Dieguito Period. Many of the tools can be interpreted as those necessary for the exploitation of wood and fibers for use as clothing, shelter and similar utilitarian objects. There was also a reliance on marine resources, as attested by shell mounds in the coastal regions.

Around 5500 B.C.E., a major change in subsistence strategy occurred. Less dependence was placed on animal resources and more on plant resources. Manos and metates appear in large numbers for the first time. Bone awls appear at roughly the same time, perhaps indicating that

basketry was then being produced. Marine resources continued to be utilized.

Greater reliance on seeds and ocean resources meant that a given group could follow the same general route from year to year as resources in different areas ripened and became available. This led to increased isolation from nearby groups and eventually to noticeable differences in artifact typology. The Channel Islands were first colonized to a significant degree at this time. The mortar and pestle appeared near the end of this period, allowing utilization of the acorn as a food resource. Leisure time increased, as indicated by the growing numbers of non-utilitarian objects of art, ritual and decoration.

Evidence of trade becomes pronounced during the later phases of the Early Period. Steatite from the Channel Islands and obsidian from inland areas are found at most sites.

King's Middle Period, beginning about 1250 B.C.E., is the equivalent of the second half of Wallace's Intermediate Horizon and the beginning of the Late Prehistoric Horizon. The period is characterized by an increase in the number and types of shell beads and personal ornaments. Of particular note is the change from rectangular to circular *Haliotis* and *Olivella* beads. The annual round settlement pattern was still used in the early Middle Period, but permanently occupied settlements may have been the norm by the end of the period.

King's Late Period begins about 1100 C.E., well into Wallace's Late Prehistoric Horizon (Koerper 1987:21). The Late Period saw the introduction of *Olivella* callus beads and clam disk and cylinder beads. There was a steady increase in the population during the period, and objects of art and decoration become still more frequent. Shell beads became a medium of exchange during the Late Period, and, in comparison to earlier times, are far more common in burials of persons who were apparently high in the social order.

Ethnographic Data: The Chumash territory, at the time of arrival of Europeans, included several of the Channel Islands and the coastal regions from north of San Luis Obispo to Malibu Canyon. They also controlled a large inland area extending to the Carrizo Plain and Castaic.

The Chumash subgroup residing in and around Simi Valley is known as the Ventureño Chumash, so named due to their association with Mission San Buenaventura. The Ventureño Chumash are the most southerly of the Chumash subgroups. The Ventureño Chumash territory, aside from the fairly level Oxnard Plain, was primarily mountainous and stretched from the headwaters of the Ventura and Santa Clara Rivers and Mount Piños in the north to Malibu Canyon on the east. The western boundary was just east of the headwaters of the Santa Ynez and Cuyama Rivers. To the south was the Pacific Ocean (Grant 1978a:506). The Ventureño Chumash were in contact with the Gabrielino, the people who occupied the area to the east (Bean and Smith 1978:547).

Kroeber (1925) estimated the Chumash population at 8,000 to 10,000 at first contact with the Spanish, which occurred with the arrival of the Cabrillo expedition on 12 October 1542.

Brown (1967 in Grant 1978a) estimates the population at 15,000, while Cook and Heizer (1965:21) believe 18,000 to 22,000 to be the correct figure. The Ventureño Chumash population was estimated by King (1969 in Grant 1978b:519) to number between 2,500 and 4,200 in 1770.

The Chumash name originally was applied to a small group living on one of the Channel Islands, but eventually was applied to all persons living in the area described above who spoke one of several dialects belonging to a common language. The Chumash have been divided into several subgroups on the basis of linguistic variation. The language family to which they belong is part of the Hokan linguistic stock. Shipley (1978) divided the Chumash language family into two groups: the island and central groups. The Ventureño Chumash are part of the central language group, which includes the Ventureño-Emigdiano language, Barbareño language, Ynezeño language and Purisimeño language.

Villages were made up of several hemispherical dwellings, storehouses, one or more sweat houses, a cemetery marked off by rows of stones or planks and usually placed away from the living area, a circular ceremonial area of tule mats, and a game field surrounded by low walls (Landberg 1965 in Koerper 1987:12). Houses were sometimes as large as 15 meters in diameter and housed as many as 50-70 individuals. These dwellings were circular, constructed of poles arched together and covered with layers of woven grass. The houses were divided into rooms and the sleeping areas contained beds made of wooden platforms raised above the ground (Kroeber 1925:557-58).

The Chumash fashioned exquisite baskets used for a variety of tasks. Basketry was used as plates and bowls, as seed beaters, for collecting foodstuffs, for straining and leaching, for fishing, for gambling, for storage and for ritual purposes. Some of the baskets were woven so tightly that they held water, and when coated with asphaltum, could store water for extended periods (Miller 1988:49).

The coastal groups constructed the plank canoe, or "tomol", allowing them to regularly cross to the Channel Islands and maintain an active trade. The separate planks were lashed together and caulked with asphaltum. The canoes held, by some accounts, up to 20 people who probably employed double-bladed paddles to negotiate the sea (Kroeber 1925:558). Complex and advanced equipment for the exploitation of marine resources complemented the plank canoes. Because of the relative distance to the coast, Simi Valley Ventureño were not likely oriented to maritime resources, but probably did have economic and social ties to large coastal villages (Singer 1977 in Koerper 1987:12).

Art flourished in the Chumash area, manifesting itself in the form of elaborate rock paintings, and complex, skillfully executed artifacts of shell, bone, stone and wood. Both utilitarian tools as well as ceremonial and ritual objects were highly decorated with various dyes and binding agents. Some of the finest artifacts were produced by artisans who were members of guild-like associations of part-time craft specialists (Blackburn 1975, Hudson 1977 in Koerper 1987:11).

Chumash rock art was the equal of any in the United States. Chumash rock art has been associated with ritual observances and is usually found at remote locations. Cupules, pit and groove petroglyphs, are an ancient art form seen earliest in Asia. Often found near rock art sites, some cupules may have been utilized to hold pigment or to serve some non-utilitarian, ritual function (Miller 1988:132-134). Pictographs usually employ a variety of colors and many are of abstract designs, perhaps suggesting that the Chumash were on the verge of a written language (Grant 1978b).

Village chief positions were patrilineal and hereditary, but instances are known of a daughter or sister assuming the position of a chief when no male heir was available. However, the position was always subject to the approval of the people (Grant 1978b:510-511). The power of the chief was strictly limited, usually to functions involving groups from outside the village, and presiding at ceremonies. There was careful attention to rank and differential access to some valued goods.

Chumash religion was well developed and integrated into everyday life. Rituals and ceremonies were observed throughout the year, but the most important were probably those performed around the time of the winter solstice when a large festival was held in honor of the sun, and the autumn harvest festival, a celebration of the earth as provider of all food and a time of thanksgiving. Ceremonial observances were controlled by a federation of shamans known as the 'Antap (arguably more powerful than the chiefs). This society of astronomers and astrologers was the religious leadership of the community and was responsible for a wide range of activities, including determination of times for the various festivals and ritual observances, conducting initiation rites, forecasting the future, rainmaking, presiding over funerals and other similar functions. The bodies of deceased persons were given a wake in a sacred enclosure and were then taken by procession to the grave site. There they were buried face down in a flexed position amidst personal objects and effigies. Graves were indicated by stone, wood or bone markers. Graves of chiefs and other prominent people were sometimes decorated by a tall inscribed pole and were opulently decorated (Miller 1988:121-128).

Trade relationships between inland, coastal and island groups were well developed. Island Chumash traded beads, shell, fish bones, otter and seal skins, steatite, chert bifaces, and baskets. In return, they would receive from coastal groups acorns, pine nuts, chia sage, deer and rabbit skins, bows and arrows, serpentine bowls and obsidian. The coastal groups would in turn trade with inland groups who were in contact with foreign tribes to the east (Davis 1974 in Miller 1988:112). This trading network increased the diversity of goods available in all Chumash territory and led to a certain amount of craft specialization.

Near Ventura, on 12 October 1542, at the Village of *Šišolop* (probably the largest and most important of the Ventureño settlements), Juan Rodríguez Cabrillo first encountered major groups of coastal California Native Americans. He declared the country a possession of the Crown of Spain and named the village Pueblo de las Canoas for the many canoes that came to meet his arriving ships. The Spaniards were warmly welcomed by the Chumash with a feast, and the villagers traded their goods to the Spanish for glass beads (Grant 1978b:518).

The expedition of Gaspar de Portolá was the first overland expedition through Alta California, and was undertaken in 1769 with the objective of founding a presidio and a mission at San Diego and negotiating a route to the north. San Diego was to be used as a starting point for the establishment of a colony at Monterey. The first of 21 California missions, San Diego de Alcalá was founded on 16 July 1769 (Castillo 1978:100). After traveling through Southern California and encountering numerous Native American peoples along the way, Portolá's group reached the village of Santa Clara (near Fillmore) and there first met members of the Ventureño Chumash. As Portolá traveled down the Santa Clara River to the coast, he encountered the village of *Šišolop* and realized it was the same village described by Cabrillo more than 200 years earlier (Grant 1978b:518). In 1782, Mission San Buenaventura, the second of the Chumash missions, was founded by Father Junipero Serra at the site of the village (Koerper 1987).

Historic Era:

Simi Valley: During early historic times, the Spanish government controlled what would later become the state of California. The Spanish government granted several large tracts of land to various individuals, usually as a reward for services rendered. The largest local land grant was in excess of 90,000 acres and was named the Rancho San Jose de Garcia de Simi, or the Simi Rancho. The grant was made to Santiago Pico around 1795 by Governor Diego Borcia. Santiago's sons and successors, Patricio and Miguel, were soldiers of the Santa Barbara Company. During the Pico tenure of the land, several complaints were lodged against them by the Fathers of the San Fernando Mission. The Fathers complained that the Pico brothers forced them to remove their sheep from the mission lands causing large numbers of them to die from lack of adequate range and water. Eventually, the Pico brothers were forced to sell their land. With the Mexican Revolution, Spanish control ended in 1821. Rancho Simi was eventually purchased by Don Jose de la Guerra y Noriega, a member of one of Santa Barbara's most prominent families. This change in ownership was validated on 25 April 1842 by Mexican Governor Juan B. Alverado (Cameron 1967:4-5; Gunter 1969:12).

In the mid 1840s, war broke out between the United States and Mexico. The Treaty of Guadalupe Hidalgo ending the Mexican-American War was signed and ratified in 1846. One treaty result was the ceding of what is now the state of California to the United States of America. Don Jose de la Guerra y Noriega petitioned the United States Government to legalize his holdings, and the petition was granted on 29 June 1865. The Simi Rancho, on which the City of Simi Valley was later established, was inherited by Don Jose's children upon his death (Cameron 1967; Gunter 1969).

Simi is the oldest major population center within the Simi Valley. The name Simi first appeared on maps dating to 1858 and 1859, and is thus one of Ventura County's oldest towns (Harrington 1961). The term "Simi" is thought to be derived from the Native American word for the historically known village of "Shimiji," which was located within the Simi Valley (Cameron 1963). "Simi" is first mentioned by name in the Spanish term for the Simi Rancho: Rancho San Jose de Garcia de Simi.

During the 1860s, several of the California ranchos were subdivided as a result of falling cattle

prices due to a prolonged drought. Rancho land was therefore cheap to purchase and settlers from throughout the country headed west to acquire land. Thomas A. Scott of the Pennsylvania Railroad purchased large portions of Ventura County in the 1870s for oil exploration. Mr. Scott placed Thomas R. Bard in charge of his holdings, who, in turn, rented the land to local residents for sheep grazing.

Stage Coach service began in the 1860s and ran from Santa Barbara over the Santa Susana Pass (previously called the Fremont Grade) to a station along the main Butterfield line near Pacoima. However, in 1875 the Butterfield Stage Coach service was rerouted through Conejo, thus bypassing Simi Valley. The lack of public transportation through Simi Valley made life difficult for Simi Valley residents, as alternative forms of transportation were not available. Public transportation was not available through the Simi Valley until 1888 when a new stage coach line was again routed through the Simi Valley (Cameron 1963).

The Santa Fe Railroad line was completed to Los Angeles in 1885. Soon after, several railroad lines were completed to Los Angeles, creating stiff competition and cheap fares, and facilitating a migration of people heading west to California. As a result, more settlers made their way from Los Angeles to Simi Valley during the 1880s and 1890s. In 1900 the construction of a tunnel through the Santa Susana mountains was initiated, and was completed in 1904 (Cameron 1963). This route was known as the Southern Pacific Coast Line and eventually extended from Santa Barbara through Oxnard to Los Angeles (Cameron 1967). The first railroad station in the valley was named "Santa Susana" after the local mountain range (Cameron 1974).

Oil production also played a role in the early development of Simi Valley. During the first years of the century there were several items in local newpapers indicating that oil wells were being drilled or that petroleum companies were being incorporated. For example, the *Ventura Free Press*, on 15 November 1901, contains an article stating that the Simi Valley Oil Company was putting down their fourth well (Havens 1997:70 and 113).

As a result of the westward expansion, Simi Valley's population began to expand and business boomed. This resulted in the formation of several social organizations and institutions, as well as business/agricultural ventures. In 1901 the Simi Valley School District was formed, with the first wood frame school house being completed in 1902. This school house was replaced by a brick building in 1917. In 1915, the Women's Club was formed, followed by the Lion's Club in 1928 (Cameron 1963). Electricity was available throughout Simi Valley by 1922.

Agriculture was booming as early as the 1920s. The Simi Valley Walnut Growers Association packing plant was constructed in 1921 and expanded in 1929. The walnut packing plant operated until 1960 when it was forced to cease operations due to reduced demand. In 1925, W. F. Loomis developed a 320 acre fig orchard on Tapo Road.

Apricots were one of the major agricultural products of the Simi Valley. A total of 1,150 acres of apricots were growing in Santa Rosa Valley, Simi and Santa Susana by 1920 (Cameron 1967:25), and many more acres were planted in Moorpark. Just prior to the start of World War

II, a large portion of the apricots were sent to European markets, particularly Germany. With the formation of the allied blockade, the number of exports, including apricots, was severely reduced. As a result, the local farmers switched crops, replacing the apricot orchards with Valencia orange orchards. However, demand for Valencia oranges fell and the main orange packing plant in Simi Valley closed its doors in 1967 (Aleahmad 1990).

Starting as early as the 1920s, but culminating in the 1950s, several of the old, large ranches were subdivided and subsequently developed. This phase of major development started as a solution to the high housing prices in the San Fernando Valley to the east. This period of major development was in full swing by the early 1950s, but slowed in the early 1970s, around the time the City of Simi Valley was incorporated in 1971 (Aleahmad 1990). The population of Simi Valley soared in the 1960s. The population was about 5,000 people in 1950; 8,000 people in 1960; and about 22,000 in 1963. The population increase between 1960 and 1963 is thought to be a result of the city's assurance of an adequate water supply and sewage system (Cameron 1963). As of 1970, the population of the City of Simi Valley was 61,150 people (Aleahmad 1990).

Moorpark: R. W. Poindexter was a native of Pennsylvania who migrated to northern California in the 1870s and to the Los Angeles area in 1885. He formed a partnership with D. R. List and specialized in the development of large ranch projects. In 1888, the land on which Moorpark now sits was acquired by Poindexter through reorganization of local water companies. The land acquired by Poindexter was Tract L of the old Simi Rancho, and was originally called Little Simi. Poindexter ran cattle on the property, but soon began the development of Moorpark. On 1 June 1990, Poindexter filed an application for a post office at Moorpark, and received approval on 8 August 1900.

The Southern Pacific Coast Line railroad from Santa Barbara through Oxnard, Moorpark and Simi Valley to Los Angeles was completed in 1904 and provided a major incentive for development in the Moorpark area, since local products could be easily and cheaply shipped. Agriculture and ranching were both mainstays of Moorpark's early economy, the major products being apricots, walnuts and beans. By 1920, Moorpark had 1,200 acres in apricots, and the first Apricot Festival was held in 1926.

Over the years the agricultural crops produced in and around Moorpark evolved to include vegetables, grains and citrus fruits. Poultry and egg production has also become important during recent decades.

The Moorpark increase in population has been rather slow, but steady. The population of 100 people in 1900 grew to about 900 by 1937, 2,300 by 1948 and is currently in excess of 28,000. Moorpark was incorporated on 1 July 1983 (Cameron 1967, Gunter 1969).

ARCHIVAL RESEARCH /RESULTS

A literature review was completed by the South Central Coastal Information Center (SCCIC) at the University of California, Los Angeles, to determine if prehistoric or historic sites had been

previously recorded within or near the project area. In addition to the project area, information regarding archaeological sites and investigations within a one mile radius of the study area was compiled. A check was also made of the SCCIC file of historic maps, the National Register of Historic Places, the California State Historic Resources Inventory, the California Points of Historic Interest and the listing of California Historical Landmarks.

The historic maps examined include the following quadrangles: Piru 1921 (U.S.G.S.); and Piru 1941 (War Department, U.S. Army Corps Of Engineers). The 1941 Piru map depicts the Ornandez Ranch in Brea Canyon within the study area.

The California State Historic Resources Inventory lists two properties within a one mile radius of the current project area that have been evaluated for historic significance. They are the Colony House, a historic residence, and the Simi Adobe (Strathearn House). Both of these properties are also listed on the National Register of Historic Places. The Rancho Simi, which includes the Simi Adobe (Strathearn House), is No. 979 in the listings of California Historical Landmarks.

The Information Center records indicate that 44 archaeological sites are recorded within a one mile radius of the project area. A brief description of those sites is given below in Table 2. Sixty five archaeological studies have been conducted within the one mile radius. A bibliography of those reports is contained in Appendix 2. Five of the studies have portions within the current study area boundaries. Those studies are Maki (1996), Peak and Associates (1992), Scientific Resource Surveys (1982), Singer (1980) and Singer and Atwood (1988).

The 1996 Maki study, for a water reclamation pipeline, consisted of a field survey of a 1.5 linear mile segment located in the southern portion of the current project area. A portion of the southern-most boundary of the current project was included in a study by Peak and Associates in 1992 during their reconnaissance for an extensive pipeline project. Neither of these studies located any cultural resources near the current study area.

Scientific Resources Survey (1982) examined 300+ acres between Alamos and Brea Canyons in the south central portion of the current project area. The bulk of the area covered by this survey is within the existing landfill, but a small portion extends into Alamos Canyon within the current study area. No cultural resources were recorded during this project.

Singer (1980) completed a reconnaissance of 340 acres that includes a portion of Brea Canyon Road and a wide strip north of the existing landfill. No cultural resources were recorded during the Singer project. During the current project, three cultural resources were recorded within the area examined by Singer.

Singer and Atwood (1988) examined a section of land located in the southwest part of the current project area for an expansion of the college reservoir. The examination was restricted to a small area on a ridge near the western extreme of the Unocal property. Again, no cultural resources were recorded.

To summarize, no cultural resources have been recorded on the Unocal property. Very little of the 2,800 acre Unocal property has been examined for cultural resources.

Table 2: Recorded Sites Within One Mile of the Unocal Study Area

SITE #	DESCRIPTION	SOURCE AND DATE
CA-VEN-95	Site appears small, runs about 75 feet along creek, artifacts include; a tarring pebble, core tool, quartzite flake and a tri-facial mano.	Boyer and Craig (1967a)
Supplement	Site disturbed, well located in respect to access to water and canyons.	Kuhn (1977)
Supplement	"It is generally agreed that CA-VEN-95 is the site of the main village of Simi also referred to as "Sime", "Shimiyi", "Shimiji", or "Simiji".	Kuhn (1980a)
Supplement	Numerous quartzite cores, granitic and quartzite manos, quartzite flakes, hammerstones, and fused shale flakes.	Kuhn (1980b)
CA-VEN-96	"A large village site." Two manos, core tools and several flakes.	Boyer and Craig (1967b)
CA-VEN-226	Artifact scatter with three areas including; a metate fragment, mortar fragment, quartzite scraper, quartzite flakes, chert flakes, fused shale flakes, hammerstones, cores and core tools.	Singer and King (1970)
Supplement	Two major concentrations include; manos, hammerstones, flakes, tools, chipping waste.	Leonard (1974/75a)

Table 2: Recorded Sites Within One Mile of the Unocal Study Area		
SITE #	**DESCRIPTION**	**SOURCE AND DATE**
CA-VEN-340	Processing camp includes six manos, two hammerstones, cores, three large tools, about 100 pieces of chipping waste (most are fused shale).	Leonard (1974/75b)
Supplement	A large village site that contains at least five burials in two cairns, fire hearths, chipping waste, cores, scrapers, knives, projectile point and knife fragments, hammerstones, chopping and scraping tools, fragmentary pestles, sandstone bowl and mortar fragments, and food remains. "Site very important, probably the historic village of Shimiyi; may rep. 500-1000 years of use."	Leonard (1975)
CA-VEN-341	Limited purpose encampment site includes; tools, chipping waste, manos, and a metate fragment.	Pence (1976)
CA-VEN-342	Surface scatter of tools and chipping waste spread over a large area.	Leonard (1974/75c)
CA-VEN-343	Scatter of lithic debris including about 200 flakes, primarily fused shale.	Leonard (1974/75d)
CA-VEN-344	Scatter of lithic debris over slope and summit with a large tool concentration on knoll; about 100 pieces of fused shale, cores, hammerstones, mano fragment.	Leonard (1974/75e)
Supplement	100% of site grubbed and 50% of midden destroyed before City intervened.	Kuhn (1980c)
CA-VEN-345	Flake scatter similar to VEN-343 and 344. Site destroyed by freeway construction.	Leonard (1974)

Table 2: Recorded Sites Within One Mile of the Unocal Study Area		
SITE #	**DESCRIPTION**	**SOURCE AND DATE**
CA-VEN-346/H	Site of Robert P. Strathearn house. Several buildings including the Strathearn House, de la Guerra Adobe, and other structures; historic era trash deposits. Aboriginal chipping waste and grinding implements.	Henton (1975)
Supplement	Main ranch house adobe of the Simi Rancho (de la Guerra adobe) circa 1795.	Edberg (1978)
CA-VEN-508	Grinding tools and flakes.	Leeds and Brady (1977)
CA-VEN-509	Surface of 50 x 50 meter area covered with flaking waste.	Lopez (1977)
CA-VEN-633	Light lithic scatter consisting of cores and flakes.	D'Altroy (1979a)
CA-VEN-634	Cores, flakes, and a scrapper.	D'Altroy (1979b)
CA-VEN-635	Cores and flakes.	D'Altroy (1979c)
Supplement	Surface collection and test excavation by William Clelow in 1984 yielded 13 artifacts. Site destroyed by backhoe trench.	Bissell (1998a)
CA-VEN-636	Moderately heavy lithic scatter, possible midden; numerous cores and flakes, a scraper, and projectile point base.	D'Altroy (1979d)
Supplement	Historic concrete water tank base, pond, pipes, and metal water tank. Heavy vegetation could obscure small artifacts.	Bissell (1998b)
CA-VEN-638	Small lithic scatter includes three manos, flakes, and cores.	D'Altroy (1979e)
CA-VEN-639	An extensive lithic scatter includes over 100 flakes, numerous cores and cobbles, a scraper, and a scraper burin.	D'Altroy (1979f)
CA-VEN-643	Fused shale and chert on the surface. Site has been destroyed by the construction of the railroad and street.	Pence (1979)

Table 2: Recorded Sites Within One Mile of the Unocal Study Area		
SITE #	**DESCRIPTION**	**SOURCE AND DATE**
CA-VEN-674	Food processing site includes numerous manos, flakes, and fire-cracked rocks; disturbed by off-road vehicles.	Kuhn (1980d)
CA-VEN-693	Lithic scatter includes flakes, fire cracked rocks, a core and a hammerstone. Site disturbed by grading, road building and tree planting.	Kuhn (1980e)
CA-VEN-778	Moderate to high density scatter includes 40 manos and mano fragments, 10 metate fragments, two bowl/mortar fragments, 25 cores, two hammerstones, three choppers, six scrapers and 120 waste flakes. Site slated for surface collection and test excavation.	Botkin (1983)
CA-VEN-784	Lithic quarry and workshop impacted by freeway construction. Site contains manos, core tools, hammerstones, numerous metavolcanic, chert and fused shale flakes.	Romani , Romani, and Wlodarski (1984)
CA-VEN-1008	Sparse scatter consists of a mano, hammerstone and two scrapers.	Schmitz (1989)
CA-VEN-1130	Large midden deposit, partially buried by alluvium, includes manos, hammerstones, debitage, fire-cracked rock and a bedrock grinding slick.	Whitley and Simon (1994a)
CA-VEN-1131	Low density lithic scatter/quarry workshop associated with lag quartzite cobble deposit, includes chopper, cores, and flakes.	Whitley and Simon (1994b)
CA-VEN-1132	Low density scatter includes flakes and shatter.	Whitley and Simon (1994c)
CA-VEN-1133	Low density scatter associated with a lag cobble deposit includes primary flakes, shatter and a hammerstone.	Whitley and Simon (1994d)

Table 2: Recorded Sites Within One Mile of the Unocal Study Area		
SITE #	**DESCRIPTION**	**SOURCE AND DATE**
CA-VEN-1134	Principally a quarry workshop associated with a lag cobble deposit, possible midden camp in center of knoll. Artifacts include flakes, shatter, cores and a hammerstone.	Whitley and Simon (1994e)
CA-VEN-1135	Large midden buried by colluvium. Artifacts noted are metates, hammerstones, Middle Horizon fused shale point base and debitage.	Whitley and Simon (1994f)
CA-VEN-1136	Low density lithic scatter consisting of flakes.	Whitley and Simon (1994g)
CA-VEN-1137	Small midden deposit and quarry associated with a lag cobble deposit includes debitage, hammerstones, and a chopper.	Whitley and Simon (1994h)
CA-VEN-1138	Two buried midden deposits and a quarry workshop associated with a lag cobble deposit. Artifacts include debitage, a Side-Notched dart point and a mano.	Whitley and Simon (1994i)
CA-VEN-1139	Low density scatter associated with a lag cobble deposit includes flakes and an obsidian point base.	Whitley and Simon (1994j)
CA-VEN-1140	Large midden deposit buried by colluvium. Artifacts include manos and debitage (fused shale, quartzite, chert, fine-grained volcanics).	Whitley and Simon (1994k)
CA-VEN-1141	Medium density quarry associated with a lag cobble deposit includes hammerstones; quartzite, chert and fused shale debitage.	Whitley and Simon (1994l)
CA-VEN-1142	Low density quarry associated with a lag cobble deposit includes quartzite flakes and shatter.	Whitley and Simon (1994m)
CA-VEN-1143	Small midden deposit and lithic scatter. Artifacts include a mano, metate fragment; fused shale and quartzite debitage.	Whitley and Simon (1994n)

METHODS

The Unocal study area contains two distinct types of terrain. The first is generally open and relatively flat. These areas are on canyon floors and on broad, relatively level knolls that separate some of the canyons. In general, the areas of level terrain are covered with dense grasses and grains of introduced species. It is obvious that most of these areas have been used for agricultural purposes. The other type of terrain consists of steep slopes and narrow ridges that, for the most part, are densely covered with sage scrub vegetation.

Two methods of archaeological reconnaissance were employed. A traditional transect method was employed in those areas of gentle slope. Transects were spaced at intervals of 10 to 15 meters. The transect method was not used in the area of steep slopes. In such areas, all ridge lines, canyon floors and slopes up to about 30% were examined. Steeper slopes were examined only where examination from the canyon floors indicated that features such as rock shelters could be present.

It is estimated that about 80% of the study area surface was examined. However, within that 80% the visibility varied from very good in limited areas to practically nil in some areas. The bulk of the field work was completed in April following a winter of rather light rain. Spring growth was pronounced in many areas and in rapid development in many others. It is estimated that within the 80% of the study area that was examined, approximately 50% of the surface could be examined in detail.

Retrospective aerial photographs of the study area were examined at the Fairchild collection housed at Whittier College. This examination was completed by the Principal Investigator. The most useful coverage dated to 1928.

FINDINGS

General: Thirty four archaeological sites and isolated finds were recorded during the current study. In addition, nine other areas of interest that were deemed unworthy of recording were noted. The location of each of these sites/features is shown on the map contained in Confidential Appendix 3. A brief discussion of each site or feature is given below. Additional details regarding each of the recorded resources can be found in Confidential Appendix 4, which contains the recording documents.

The following discussion utilizes the identifiers of Unocal 1 through 34 in discussing the deposits on the study area property recorded during the current project. However, the Primary Numbers assigned by the South Central Coastal Information Center are the numbers by which the deposits will be identified within the data base. Accordingly, a concordance of the two numbering systems is presented in the following table.

Table 3: Concordance of Unocal and Primary Numbers			
Unocal Number	**Primary Number**	**Unocal Number**	**Primary Number**
Unocal 1	56-001583	Unocal 18	56-001582
Unocal 2	56-001584	Unocal 19	56-001593
Unocal 3	56-001585	Unocal 20	56-001594
Unocal 4	56-100120	Unocal 21	56-001581
Unocal 5	56-001586	Unocal 22	56-001595
Unocal 6	56-001587	Unocal 23	56-001596
Unocal 7	56-100109	Unocal 24	56-100114
Unocal 8	56-001588	Unocal 25	56-100115
Unocal 9	56-100108	Unocal 26	56-001597
Unocal 10	56-100110	Unocal 27	56-100116
Unocal 11	56-100111	Unocal 28	56-100117
Unocal 12	56-001589	Unocal 29	56-001580
Unocal 13	56-100112	Unocal 30	56-001579
Unocal 14	56-001590	Unocal 31	56-100118
Unocal 15	56-100113	Unocal 32	56-001598
Unocal 16	56-001591	Unocal 33	56-100119
Unocal 17	56-001592	Unocal 34	56-001599

Prehistoric Sites and Isolated Finds:

Unocal 1: This feature is a rockshelter located near the western boundary of the Unocal property. The shelter is approximately 20 meters across and there is a broad apron to its front (west). Roof fall has filled the shelter so that the opening is only about 30 centimeters in height. Nevertheless, one can see into the shelter about four meters. No artifacts were seen at the rockshelter, but it is in an ideal location relative to local resources and faces to the west where it catches the late afternoon sun. The shelter would have made an ideal encampment area for a family sized group of people.

Unocal 2: Two unifacial manos (one with battered end), a quartzite chopper, a quartzite core, a quartzite secondary flake, a chert micro flake and a cairn are seen within this site area.

The site is interpreted as a specialized use area for the collection and processing of vegetable resources. The age of the cairn is not known. It may be historic, but this is seen as unlikely, since many other cobbles litter the area. If the purpose was to clear the area for agriculture, it seems that the other cobbles would also have been placed in the cairn. It is known that prehistoric people buried their dead under cairns during certain time periods.

Unocal 3: No artifacts were seen at this site, which is a tar seep in a narrow canyon in the west central part of the Unocal property. The tar seep is in excess of 20 meters in length and is quite deep. It is clear that the feature has been present for a long time. Certainly, prehistoric people would have known of the resource and would have collected the asphaltum for waterproofing and adhesive purposes, but such activity would leave few traces. The feature was recorded primarily as a means of alerting future researchers of its presence.

Unocal 4: This isolated find consists of two quartzite flakes seen in a cattle trail in a very brushy area. The find is located in the western part of the study area near the southern property boundary.

Unocal 5: This quarry area is located in a cobble outcrop that probably represents a remnant terrace. The site is located on a west facing slope in the west central part of the study area. Assayed stones (stones that have been broken to evaluate the quality of the material), some quartzite flakes and a core of black quartzite were seen in the site area. The core was collected for material comparative purposes.

Unocal 6: This isolated find consists of two quartzite cores and some apparent angular shatter, as well as a cobble with two flakes removed. It is on a ridge above a south facing slope in the west central part of the study area.

Unocal 7: This isolate was found a short distance to the north of Unocal 6, and consists of a single quartzite secondary flake.

Unocal 8: This quarry was found a short distance to the north of Unocal 7, in a cobble outcrop that is probably a remnant terrace. Two cores and several flakes and shatter were seen in the area, as were assayed stones.

Unocal 9: Located in the north central part of the study area, this isolate consists of a quartzite boulder that has a small depression on one surface that appears to have been used. The use may have been the cracking of acorns and walnuts. The cobble is approximately 30 by 20 by 15 centimeters in size.

Unocal 10: This isolate was found atop a high ridge in the portion of the study area that lies south of the Route 118 Freeway. It is a black chert artifact that is a fragment of either a projectile point or spokeshave. The artifact is about 2.3 by 1.8 centimeters in size.

Unocal 11: This isolate was found in the northern part of the study area immediately adjacent to an abandoned landing strip. The area is extensively disturbed. The artifact is a black chert core with numerous flake scars. The artifact was collected for material comparison purposes.

Unocal 12: This specialized use station was apparently used for the production of chipped lithic tools. It is found on a slope along the eastern edge of Alamos Canyon, a short distance north of the freeway right of way. The site is in two loci. Locus 1 contains cores, a hammerstone fragment, a chopper, primary flakes, secondary flakes (some micro in size) and shatter. Locus 2 contains two large primary flakes. The material includes quartzite, chert, metavolcanics and fused shale. There are but few naturally occurring cobbles in the site area, so the material was obviously imported.

Unocal 13: This isolated find was found on a small ridge in the north central part of the eastern portion of the Unocal property. The artifacts are a quartzite core and a quartzite primary flake. The core is approximately 13.5 by 19.5 by 7.5 centimeters in size.

Unocal 14: This quarry area was found on a narrow ridge between Brea Canyon and the landfill in the southern part of the Unocal property. There are many assayed stones and flakes, all of quartzite, within an area about six meters in diameter.

Unocal 15: This specialized use station was an area for the production of chipped lithic tools. The site is located on a narrow ridge between Brea Canyon and the landfill in the southern part of the Unocal property. Within a very small area are about 10 high quality quartzite flakes. There are no naturally occurring cobbles in the area, so the material from which the flakes were made was imported to the site.

Unocal 16: This quarry area was found on a narrow ridge between Brea Canyon and the landfill in the southern part of the Unocal property. There are many assayed stones and flakes, all of quartzite, within an area of about 10 by 15 meters.

Unocal 17: This quarry area was found on a narrow ridge between Brea Canyon and the landfill in the southern part of the Unocal property. There are many assayed stones and flakes, all of quartzite, within an area of about 20 by 25 meters.

Unocal 19: This site is probably the most extensive and complex of the prehistoric sites discovered during the project. The site is located on a terrace above the junction of two creeks in Brea Canyon. Manos, a hammerstone, a muller, flakes and thermally modified stones were seen in the site area. One chert flake was heat treated and found in a rodent spoil pile in the central part of the site. It is thought that the site is an encampment that has a rather extensive accumulation of archaeological material.

Unocal 20: This quarry area is located in the next canyon to the north of Unocal 19.

The site measures about 15 by 10 meters. Within a cobble area that is probably a remnant terrace are found many assayed stones and flakes. The primary material is quartzite, but some metavolcanics and quartz are also present.

Unocal 22: This specialized use station is located in the eastern part of the Unocal property near the southern boundary. The site is an area for the production of chipped lithic tools. A unifacial tool fragment and four flakes, all quartzite, were found in a small area that contains no natural cobbles, indicating the material was imported.

Unocal 23: This specialized use station apparently served multiple purposes. The presence of a mano and a scraper indicates the collection and processing of seed resources. The presence of flakes indicates that chipped lithic tools were produced or maintained here. Assayed stones within the site area argues that it also served as a quarry. The site is located in the eastern part of the Unocal property near the southern boundary.

Unocal 24: Located a short distance to the north of Unocal 23, this isolate is a quartzite hammerstone.

Unocal 25: Located a short distance to the north of Unocal 23 and 24, this isolated find is a quartzite core.

Unocal 26: This specialized use station is located within a road to the east of Brea Canyon, along the unnamed stream that passes Unocal 19 (an apparent prehistoric encampment) some distance to the west. Within the road cut is an area of about 15 by five meters containing very dark soils, numerous thermally modified stones, charcoal, two groundstone fragments and five flakes. The site is probably an earth oven or large hearth, disrupted by road construction.

Unocal 27: Located in the east central part of the Unocal study area, this isolated find consists of a bifacially worked quartzite cobble. It represents either an unfinished tool that was abandoned or a chopper that was used on a single occasion.

Unocal 28: Located near a ridge top in the east central part of the study area, this isolated find consists of two quartzite flakes.

Unocal 29: This large and complex site is located in the easternmost branch of Brea Canyon, north east of where the canyon bifurcates. The site is primarily historic in character (see following discussion), but a single, unifacial granitic mano was found in the site area.

Unocal 30: This large and complex site is located in Alamos Canyon near the northern boundary in the eastern part of the Unocal property. The site is primarily historic (see following discussion), but one of the four loci is an apparent disrupted hearth or earth oven. At the prehistoric locus, thermally modified stones are found in an area about four meters in diameter.

Unocal 31: This isolated find is located on a ridge in the northeastern part of the Unocal study area. Within a small area are a quartzite core, two quartzite flakes and two fragments of angular shatter.

Unocal 32: This specialized use station is located in the upper reaches of the eastern branch of Brea Canyon. The site was apparently used for the collection and processing of vegetable resources, since three manos were found at the site. All of the manos were found on a slope immediately above a sediment filled canyon. It is possible that a buried deposit exists in the area.

Unocal 33: This isolated tool was found in the east central part of the Unocal property. The tool is a small metate on a granitic cobble. The grinding area on the tool is quite small, about 15 centimeters in diameter, perhaps indicating that the tool served some specialized grinding function.

Unocal 34: This quarry is located in the northern part of the Unocal property on a ridge immediately west of Alamos Canyon. The brush is so heavy in the area that an estimate of site size could not be made. There are many assayed stones in the site area, and some flakes are also visible. The primary material is quartzite, but some metavolcanic material was also noted.

Historic Sites:

Unocal 18: This site is the most complex of the historic deposits found on the Unocal property. The site is located in Brea Canyon and one of its tributary canyons that enters from the northwest. Examination of retrospective aerial photographs indicates that several buildings existed in the site area as early as 1928. The 1928 photographs also reveal that all of the surrounding canyons, including all of the branches of Brea Canyon to the north and east, were then filled with orchards. The site contains many features, the most important of which are:

1. A root cellar constructed of concrete and concrete blocks. The lintel is embossed with large numerals "1938," apparently indicating the date of construction. Both wing walls that protect the entrance from slope wash have embossed in them a "W" and "WHARTON + RANCH."
2. A shed with a very large metal sink on the interior and another lying just outside. These sinks were apparently once part of a kitchen that was designed to support a large number of people. The floor of another shed is nearby.
3. Two retaining walls constructed of Grimes Canyon fused shale. The longer wall is penetrated by steps. Behind the two walls is another irregular wall made of local cobbles and concrete.
4. An earthen dam behind which is a sediment filled pond.
5. Old farming equipment, including the seed tank from a grain drill, complete with instruction plates and setting levers, and a paddle wheel from a grain harvesting machine.

Unocal 21: This site lies in a small box canyon to the west of Brea Canyon in the east

central part of the study area. The site contains a scatter of bricks, concrete rubble with rebar, asphalt road segments, the top of an oil squirt can, a debris filled concrete ring that may be a well and much other debris. Many of the bricks are embossed "SIMONS." The Simons brick company was a Los Angeles firm that operated from 1902 to 1941 (Gurcke 1987).

Unocal 29: This complex historic site is located in the easternmost branch of Brea Canyon a short distance to the east of where the canyon bifurcates. The only building still in existence at the site is a relatively modern outhouse. The 1928 aerial photographs reveal that at least three buildings existed in the site area at that time. It will be recalled that the surrounding canyons were filled with orchards in 1928. The stand of eucalyptus trees existing in the site area are prominent on the 1928 aerials. Near the site center is a concrete and metal water control feature. The initials "ARW" are embossed in the concrete of the water control feature. An old water tank, parts of an old cook stove, a hand made barbecue grill and a great deal of concrete and tile rubble are within the site area. A bathtub is found in the canyon several hundred feet east of the site. A large pile of sawn logs is found in the central part of the site area. The site also has a prehistoric element, consisting of one mano.

Unocal 30: This site is a rather large tank, several concrete pads, pipe (both installed and in piles) and other debris in Alamos Canyon in the northern part of the east end of the study area. The current USGS map depicts a water well at this location, so the site probably represents the well, water storage and distribution facilities. The site also contains a prehistoric feature consisting of an area of thermally modified stones.

Unrecorded Areas of Interest: Several areas were noted during the field work that were not deemed worthy of recording, but still add to knowledge of the Unocal study area. These areas are discussed below and the locations are identified by letters on the Resource Location Map contained in Confidential Appendix 3.

A and B: These two small rockshelters are located in an unnamed canyon in the western part of the study area. There is no apparent cultural deposition, but one shelter could not be closely approached because it was occupied by a bee colony. Both shelters have essentially no aprons. It is unlikely that either shelter was used during prehistoric times.

C: An abandoned landing strip is found in the northern part of the Unocal property. Seven whole white glass dinner plates, two plastic trays and older silverware (knives and forks) are found under an oak tree a short distance to the southeast of the landing strip. A short distance south of this feature is a breached earthen dam (one of several on the property), and just south of the dam is a fire ring filled with ash. The condition of the fire ring indicates it is a relatively modern feature.

D: Associated with the abandoned landing strip is a large metal shed. The shed is filled with scenery, building facades and false trees. Apparently, this material is from a motion picture that was once filmed in the area.

E: Located in the extreme southern tip of the Unocal property, this area contains a large amount of wood and metal binding strap debris. Much of the debris is apparently the remains of large tree boxes, abandoned after some nearby landscaping project.

F: Located in Alamos Canyon in the north central part of the Unocal property, this feature is the concrete base of a water tank. The tank itself is off the base and lies in an adjacent drainage. Immediately to the northeast and off the Unocal property is an area of stock corrals and old parked farm machinery, including combines, bean harvesters and wagons.

G: At this location in the northern part of the east end of the study area, a 12 inch diameter riveted pipe is seen extruding from a cliff face.

H: This canyon, in the northern part of the westernmost branch of Brea Canyon, contains scattered tile and milled wood. There is an apparent earth platform in the extreme northwestern end of the canyon and backhoe teeth marks are visible on a vertical cliff face. The remains of gravel roads can be seen in the area. This is one of the canyons that was planted in orchards in 1928.

I: This area, located on the north wall of Brea Canyon immediately west of the point where the canyon bifurcates, is extensively damaged. The damage was from an attempt to mine the area for oil shale.

Findings Summary: The table below summarizes by type what is known of the sites and features located on the Unocal property.

Table 4: Sites by Type Recorded on the Unocal Study Area

TYPE	SITE IDENTIFIERS*	COMMENTS
Prehistoric		
Encampment/Village	Unocal 19	Thought to have extensive subsurface deposit
Rockshelter	Unocal 1, A, B	Unocal 1 filled with roof fall
Specialized Use Area, Vegetable Resource Processing	Unocal 2, 23, 29, 32	Unocal 2 contains a cairn of unknown use and age.
Specialized Use Area, Chipped Tool Production	Unocal 12, 15, 22, 23	
Specialized Use Area, Food Preparation	Unocal 26, 30	

Tar Seep	Unocal 3	No artifacts

Table 4 (Continued): Sites by Type Recorded on the Unocal Study Area

TYPE	SITE IDENTIFIERS*	COMMENTS
Isolated Find	Unocal 4, 6, 7, 9, 10, 11, 13, 24, 25, 27, 28, 31, 33	
Quarry	Unocal 5, 8, 14, 16, 17, 20, 23, 34	All are in apparent remnant terraces
Historic		
Agricultural/Ranching	Unocal 18, 29, 30, C, F, H	
Oil Production	Unocal 21, G, I	
Motion Picture Production	C, D	
Landscaping	E	

* Some Site Identifiers are repeated in the table, since more than one activity is apparent at the site.

DISCUSSION/INTERPRETATION

The sites, isolated finds and features, recorded and unrecorded, on the Unocal property represent a broad spectrum of prehistoric and historic activities.

With the exception of Unocal 19, and perhaps Unocal 1, the prehistoric sites are specialized use areas, quarries or isolated finds. These remains document prehistoric exploitative use of the area for food and lithic resources. Unocal 19 is probably an encampment, representing a longer term, more intensive use of the area. Unocal 1, a rockshelter, may also be in this category, but it is not unequivocally established that a cultural deposit is present. Unocal 3 also contains no visible artifacts, but collecting asphaltum from a tar seep would have left little evidence. It is unlikely that people from the villages along Arroyo Simi would not have made use of this nearby and valuable resource.

Most of the prehistoric sites and features are probably related to the large village sites known to exist along Arroyo Simi to the south of the study area. Arroyo Simi was certainly the most reliable source of water in the immediate area, so it is logical that the major sites were located there. Brea and Alamos Canyons, and their many tributaries, provided relatively easy routes of travel into the study area. Undoubtedly, many of the deposits on the Unocal property represent collecting forays from the Arroyo Simi villages into the study area property.

The historic sites represent long term use of the area for agriculture, ranching and oil production. The areas of gentle terrain on the property have been dry farmed for many years. Even though

the area is presently used for ranching, Singer (1980) noted that oat harvesting was in progress during his study of the area. Extensive orchards were present in the area in 1928, and apparently had been in place long enough for full growth. It is unknown what these orchards were, but Havens (1999) feels the most likely possibility was apricots. No trace of these orchards can currently be seen.

Evidence that the agricultural activity on the property reached large proportions is found at Unocal 18. This site contains the apparent remains of a kitchen area that was designed to serve a large number of people. The adjacent root cellar (constructed in 1938 and identifying the area as the Wharton Ranch) is also quite large. The construction of the root cellar is somewhat curious. The large "1938" embossed in the lintel is superbly done, and seems to be somewhat overdone for a ranching or agricultural operation. The same is true of the walls near the root cellar, two of which are constructed of Grimes Canyon fused shale. Importing such material required considerable time and effort, and seems to be something more than what the typical ranch or farm would have undertaken. Perhaps there was some other activity at this site that is presently unknown.

Unocal 18 and Unocal 29 are probably contemporary. The 1928 aerial photographs show extensive building at both sites at the time the photographs were taken. It will be recalled that the surrounding canyons were all planted in orchards at this time.

Oil production evidence is found throughout the property. Unocal 21 was clearly related to oil field operations, and there are many other remains throughout the property, including some still active wells in the western part of the property.

The visible historic remains indicate that the area has been in active use for a long period of time, extending to the present day, and that activities have been quite varied. Agriculture, ranching and oil production are well represented. There were apparently other less intense activities, such as motion picture production, that were accomplished on the property. An example of a modern activity on the property is represented by a log and soil amphitheater constructed in Alamos Canyon and used by the Boy Scouts of America. A local informant told the research team that two now abandoned ponds in the eastern part of the property were used by a past tenant for raising alligators. Clearly, the study area has a long, colorful and varied history.

That history is not well understood, because current knowledge is based on only field observations and informants. Archival research, other than examination of aerial photographs, has not been accomplished.

It is not possible to assess the importance of the prehistoric and historic archaeological sites recorded during this study. Isolated finds are considered as not important, since the act of recording documents all the scientific data they possess. None of the sites have been subjected to evaluative excavation to determine their importance. It is also not possible at the present time to assess the effect that any future construction will have on any of the sites, since a detailed development plan has not been produced.

Nevertheless, it is possible to offer some general statements regarding the *probable* value of the recorded sites, so long as it is understood that the evaluations may change as new data becomes available. Verification of the probable value of the sites will require further research. The probable data potential and the research required for each recorded site is discussed below. Isolated finds are not included in these discussions, but they do establish rather extensive prehistoric use of the area.

Unocal 1: Even though no artifacts were seen at this site, the data potential is seen as quite high. The site is in an ideal location and, prior to the roof fall, would have been an excellent place for an encampment by a family sized unit. The roof fall will have protected and preserved any cultural deposit that may be present. The site is immediately adjacent to Alamos Canyon near what appears to be a prime construction area. While the site will probably not be subjected to direct impacts, it will be subjected to the secondary impacts caused by an increased local population. The site should be subjected to an evaluative excavation to determine if it contains a cultural deposit, and if it does, the extent and degree of preservation.

Unocal 2: This site has only a few surface artifacts, but more may be present in the subsurface. The age of the cairn is unknown, but the data potential for the site is closely tied to the cairn. If the cairn is prehistoric, the data potential is probably quite high. On the other hand, if the cairn is a historic feature, the data potential is probably quite low. The site is in an area of gentle terrain that appears to be a prime construction locale. If so, the site will be subjected to the direct impact of construction. The site should be subjected to a surface collection and evaluative excavation to determine the extent and degree of preservation of subsurface material. The evaluative excavation must include the cairn.

Unocal 3: This site is a large tar seep that was probably used by prehistoric people as a source of asphaltum. Collecting of asphaltum would have left few traces in the soils around the site. The data potential for the site is contained in knowledge of its presence. The site area is in a rather steep sided canyon that is probably not a good candidate for construction. No further research effort need be completed relative to this deposit.

Unocal 5, Unocal 8, Unocal 14, Unocal 16, Unocal 17, Unocal 20, Unocal 34: These sites are all quarry areas and are very similar. All are in remnant terrace areas where many cobbles are exposed, and contain cores, hammerstones, assayed stones, flakes and shatter. The sites are likely to have but little depth. Most of the sites are on property that is probably marginal for construction, but the sites are fragile, since they are primarily surface deposits. The data potential is not high for the quarries, since finished tools would have been transported away for use elsewhere. It is recommended that each site be subjected to a surface collection and sufficient excavation to verify that the subsurface has little artifactual content.

Unocal 12: Even though relatively small in size and with relatively few visible artifacts, this site contains a wide range of material types and the artifacts were produced by both percussion and pressure flaking techniques. The data potential for the site is seen as relatively high. The site is

on a slope area, but is near the broad floor of Alamos Canyon. If not subject to direct impacts, the site will certainly be subject to the secondary impacts caused by an increased local population. It is recommended that the site be subjected to a surface collection and an evaluative excavation to determine its true artifact content, depth and degree of preservation. The excavation work should extend into the ridge immediately north of the site, since the visible material may have been eroded from there.

Unocal 15: This site is similar to Unocal 12, but is smaller in size, has fewer artifacts and only a single material (quartzite) is present. The site has a low data potential. The site is on a ridge in an area of steep slopes and will probably not be subject to direct impact. It will be subject to indirect impacts caused by an increased local population. The site probably has but little depth, so is fragile. It is recommended that the site be subjected to a surface collection and an evaluative excavation to determine its true artifact content, depth and degree of preservation.

Unocal 18: This complex historic deposit was probably the center of agricultural and ranching activities on the Unocal property, and may also have played a role in the oil production activities. The data potential is seen as quite high, though much of the data will be found in archival resources rather than within the site itself. The site occupies a canyon floor area that appears to be a prime area for construction. It will therefore be subjected to direct impacts. It is recommended that the site be subjected to archival research, complete documentation of visible features and evaluative excavation to determine its importance.

Unocal 19: This site is probably the most extensive and complex of the prehistoric sites discovered during the project. While visible artifacts are limited, some were seen in rodent spoil piles, indicating the site has some depth. The balance of the visible artifacts were apparently brought to the surface during construction of dirt roads that surround the site. The site is in a canyon floor area that appears to be a prime area for construction. It will therefore be subject to direct impacts. It is recommended that the site be evaluated through completion of a surface collection and excavation of sufficient scope to determine its horizontal limits, depth, artifact content and degree of preservation.

Unocal 21: This historic site was related to the oil production industry and is in a small canyon adjacent to Brea Canyon, a prime building area. If the site is not subject to direct impacts, it will certainly be open for indirect impacts from an increased area population. The data potential for the site is not high, and will probably be derived mostly from archival resources. It is recommended that the site be subjected to archival research, complete documentation of visible features and evaluative excavation to determine its importance.

Unocal 22 and Unocal 23: These two small specialized use stations are located in similar terrain near each other in the southeastern part of the property. Unocal 23 appears to be more complex than Unocal 22, but the data potential for the two sites is seen as low. The terrain in the site areas is gentle, but surrounding slopes are steep. Even if no construction takes place in the site areas, they will be subjected to secondary impacts created by an increased local

population. It is recommended that the sites be evaluated through completion of a surface collection and excavation of sufficient scope to determine the horizontal limits, depth, artifact content and degree of preservation.

Unocal 26: Even though this site has been seriously damaged by road construction, the data potential is quite high. The site contains charcoal that can be technically dated by the radiocarbon method. This is the only area where dateable material was observed on the Unocal property. The canyon containing the site is narrow and steep sided, and will probably not be subject to construction. The site will be subject to the secondary impacts of an increased local population. It is recommended that the site be evaluated through completion of a surface collection and excavation of sufficient scope to determine the horizontal limits, depth, artifact content and degree of preservation. The excavation should focus on the recovery of suitable material for technical dating.

Unocal 29: This complex historic deposit was probably contemporary with Unocal 18, discussed above. The major activities were apparently associated with agriculture and ranching. The data potential is seen as quite high, though much of the data will be found in archival resources rather than within the site itself. The site occupies a canyon floor area that appears to be a prime area for construction. It will therefore be subjected to direct impacts. It is recommended that the site be subjected to archival research, complete documentation of visible features and evaluative excavation to determine its importance.

Unocal 30: This site has both prehistoric and historic components. The prehistoric activity is represented by a disrupted hearth or earth oven, while the historic activity is associated with a water well. The data potential for both components is seen as low. The site is located in Alamos Canyon in the northeastern part of the property where the terrain is quite steep, even though the site itself is in a relatively level canyon floor. The area will probably not be used for construction, so the site will be subjected only to the secondary impacts of an increased local population. Much of the data potential for the historic component will be found in archival resources, rather than at the site itself. It is recommended that the site be subjected to archival research, complete documentation of visible features and evaluative excavation to determine its importance.

Unocal 32: This site was found to contain three manos, but there is a possibility for a buried deposit in the adjacent canyon floor. The data potential for the site rests in whether or not a buried deposit is present. The potential is high if such a deposit is present, but low if it is not. The terrain near the site is gentle, so the area will probably be subjected to direct impacts. It is recommended that the site be evaluated through completion of a surface collection and excavation of sufficient scope to determine the horizontal limits, depth, artifact content and degree of preservation.

Other Concerns: The recommendations given above for each site do not necessarily represent the total research that may be required. No further research is required if a site is determined to

be not important as a result of the evaluative excavation. On the other hand, if a site is determined to be important, it will require either preservation effort or a data recovery excavation, depending on the degree of impact by the proposed construction in or near the site area.

Historic debris is found throughout the study area. Many historic features (especially those related to oil production) were noted, but were not documented. To document and record all such material would require a great deal of time and effort. Most of the material clearly has but little historic importance. However, there may be some historic sites and deposits that are currently only marginally visible, but which contain data vital to a full understanding of area history.

The same situation exists for prehistoric deposits, and is probably more pronounced. It was earlier noted that the canyons on the property are sediment filled, with only marginal soil development. Any prehistoric sites on the canyon floors would have been rapidly buried, and would have left no currently visible traces. Such buried sites will possess very high data potential, since the rapid burial will have insured maintenance of site integrity. There may even be surface sites that were not detected during this project. The vegetation growth was extreme in some areas, and may have obscured otherwise visible sites.

The history of the Unocal property is not well understood because no archival research, other than examination of retrospective aerial photographs, was accomplished during the project. A study to determine the history of the Unocal property should be undertaken to provide data relative to past use of the land for agriculture, ranching and oil production. The study should document all important events that have taken place on the property, and be in sufficient detail to serve as a planning document for the development.

The Unocal property is so large that it will probably be developed in various tracts. It is recommended that approval for each tract contain a requirement for monitoring by a qualified archaeologist during the clearing and initial grading stages. Any sites detected during the process should be subjected to evaluation and data recovery as required.

Recommendations Summary: The recommendations contained in the above discussion are summarized in the following table. Follow up studies are not indicated, but will be required if a site is found to be important.

Table 5: Summary of Recommendations

Site(s)	Recommended Actions
Unocal 1	Evaluative excavation
Unocal 2	Surface collection and evaluative excavation (including cairn)

Table 5 (Continued): Summary of Recommendations	
Site(s)	**Recommended Actions**
Unocal 3	No further research required
Unocal 5, 8, 14, 16, 17, 20 and 34	Surface collection and evaluative excavation
Unocal 12	Surface collection and evaluative excavation (including ridge to the north)
Unocal 15	Surface collection and evaluative excavation
Unocal 18	Archival research, documentation of all features and evaluative excavation
Unocal 19	Surface collection and evaluative excavation
Unocal 21	Archival research, documentation of all features and evaluative excavation
Unocal 22, 23	Surface collection and evaluative excavation
Unocal 26	Surface collection and evaluative excavation (focused on recovery of dateable material)
Unocal 29	Archival research, documentation of all features and evaluative excavation
Unocal 30	Archival research, documentation of all features and evaluative excavation
Unocal 32	Surface collection and evaluative excavation (determine if buried deposit exists)
Unocal 4, 6, 7, 9, 10, 11, 13, 24, 25, 27, 28, 31, 33	Isolated finds. No further research required
Completion of a Historic Study	Document past land use, ownership and important events that have occurred on the property
Tract Approval	Condition of approval requiring cultural resources monitoring of clearing and initial grading stages, with site recording and follow up studies as required

Timing: In order for planners to have as complete information as possible, it is recommended that the archival research, the evaluative excavations and the historic study recommended above be completed at the earliest possible time. Knowledge of which of the recorded sites are

important and which are not may well influence decisions made during the planning process.

The final recommendation, for monitoring of clearing and initial grading stages, will be accomplished during the initial construction stages for each individual tract.

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REFERENCES CITED

Aleahmad, L.
1990 *Simi Valley: Toward New Horizons*. Windsor Publications, Inc. U.S.A.

Almstedt, Ruth Farrell
1977 Diegueno Curing Practices. *San Diego Museum Papers*, 10. San Diego

Bean, Lowell John and Charles R. Smith
1978 Gabrielino. In *Handbook of North American Indians: California*, Robert F. Heizer, editor, Vol. 8, pp. 538-549. Smithsonian Institution, Washington, D.C.

Bedwell, S. F.
1970 *Prehistory and Environment of the Pluvial Fork Rock Lake Area of South-Central Oregon*. PhD Dissertation, Department of Anthropology, University of Oregon.

Bissell, Ronald M.
1998a Archaeological Site Record Supplement (CA-VEN-635). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1998b Archaeological Site Record Supplement (CA-VEN-636). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Botkin, Steve
1983 Archaeological Site Record (CA-VEN-778). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Boyer, J. and S. Craig
1967a Archaeological Site Record Supplement (CA-VEN-95). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1967b Archaeological Site Record Supplement (CA-VEN-96). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Cameron, J.S.
1963 *Simi Grows Up: The Story of the Simi, Ventura County, California.* Printed by Anderson, Ritchie and Simon, U.S.A.

1967 *Moorpark: The Star of the Valley*. Publisher Unknown.

1974 *Historical Tour of Simi Valley*. Alert Letter Shop, Simi Valley.

Castillo, Edward, D.
1978 The Impact of Euro-American Exploration and Settlement. *Handbook of North American Indians: California*. Robert F. Heizer, editor, Vol. 8, pp. 99-127. Smithsonian Institution, Washington D.C.

Cook, Sherburne and Robert F. Heizer
1965 The Quantitative Approach to the Relations Between Population and Settlement Size. University of California Archaeological Survey reports 64: 1-97. Berkeley.

Cramer, Esther Ridgway
1988 The Pastoral Period. In *A Hundred Years of Yesterdays*, Orange County Register, Santa Ana, California

D'Altroy, Terence
1979a Archaeological Site Record (CA-VEN-633). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1979b Archaeological Site Record (CA-VEN-634). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1979c Archaeological Site Record (CA-VEN-635). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1979d Archaeological Site Record (CA-VEN-636). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1979e Archaeological Site Record (CA-VEN-638). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1979f Archaeological Site Record (CA-VEN-639). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Dixon, E. James
1993 *Quest for the Origins of the First Americans.* University of New Mexico Press, Albuquerque.

Drover, Christopher E., Henry C. Koerper and Paul Langenwalter
1983 Early Holocene Human Adaptation on the Southern California Coast: A Summary Report of Investigations at the Irvine Site (CA-ORA-64), Newport Bay, Orange County, California. *Pacific Coast Archaeological Society Quarterly*, 19(3 and 4):1-84.

Edberg, Bob
1978 Archaeological Site Record Supplement (CA-VEN-346H). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Grant, Campbell.
1978a Chumash: Introduction. *Handbook of North American Indians: California.* Robert F. Heizer, editor, Vol. 8, pp. 505-508. Smithsonian Institution, Washington D.C.

1978b Eastern Coastal Chumash. *Handbook of North American Indians: California.* Robert F. Heizer, editor, Vol. 8, pp.509-519. Smithsonian Institution, Washington D.C.

Gunter, N.
1969 *The Moorpark Story.* Moorpark Chamber of Commerce, Moorpark, California.

Gurcke, Karl
1987 *Bricks and Brickmaking: A Handbook for Historical Archaeology.* The University of Idaho Press, Moscow, Idaho.

Harrington, R. E.
1961 *Early Days of Simi Valley.* Alert Letter Shop, Simi Valley.

Havens, Patricia
1997 *Simi Valley: A Journey Through Time.* Published by the Simi Valley Historical Society and Museum.

1999 Personal communication.

Henton
1975 Archaeological Site Record (CA-VEN-346H). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Hester, T. R.
1973 Chronological Ordering of Great Basin Prehistory. *Contributions of the University of California Archaeological Research Facility*, 17.

Heusser, L.
1978 Pollen in Santa Barbara Basin, California: A 12,000 Year Record. *Geographical Society of America Bulletin,* 89:673-678.

King, Chester D.
1981 The Evolution of Chumash Society: A Comparative Study of Artifacts Used in Social System Maintenance in the Santa Barbara Channel Region Before A.D. 1804. PhD. Dissertation, University of California, Davis.

Leonard, N.
1974/75b Archaeological Site Record (CA-VEN-340). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1974/75c Archaeological Site Record (CA-VEN-342). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1974/75d Archaeological Site Record (CA-VEN-343). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1974/75e Archaeological Site Record (CA-VEN-344). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1975 Archaeological Site Record Supplement (CA-VEN-340). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Lopez
1977 Archaeological Site Record (CA-VEN-509). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Maki, Mary
1996 A Phase I Cultural Resources Survey Of 1.5 Linear-Mile Pipeline For The Simi Valley Water Reclamation Pilot Project Ventura County, California. Report on file at the South Central Coastal Information Center at the University of California, Los Angeles.

Merill, Ruth E.
1923 Plants Used in Basketry by the California Indians. *University of California publications in American Archaeology and Ethnology,* 20(13);215-242. Berkeley.

Miller, B. W.
1988 *Chumash: A Picture of their World.* Sand River Press, Los Osos, California.

Moratto, Michael J.
1984 *California Archaeology.* Academic Press, San Diego.

Peak and Associates
1992 Consolidated Report: Cultural Resources Studies For The Proposed Pacific Pipeline Project. Report on file at the South Central Coastal Information Center at the University of California, Los Angeles.

Pence, R.L.
1976 Archaeological Site Record Supplement (CA-VEN-341). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1979 Archaeological Site Record (CA-VEN-643). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Pryde, Philip R.
1984 Climate, Soils, Vegetation, and Wildlife. In *San Diego: An Introduction to the Region,* edited by Philip R. Pryde, pp. 31-49. Kendall/Hunt, Dubuque, Iowa.

Rogers, Malcomb J.
1929 Archaeological Field Work in North America during 1928, California. *American Anthropologist*. 31(3):341.

1939 Early Lithic Industries of the Lower Basin of the Colorado River and Adjacent Desert Areas. *San Diego Museum of Man Papers*, 3.

1945 An Outline of Yuman Prehistory. *Southwestern Journal of Anthropology*. 1(2):167-198.

Romani, John, Gwen Romani, and Bob Wlodarski
1984 Archaeological Site Record (CA-VEN-784). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Schmitz, Blanche
1989 Archaeological Site Record (CA-VEN-1008). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Scientific Resource Surveys, Inc.
1982 A Portion Of The Proposed West End Industrial Area (+ 300 Acres) In The Alamos And Brea Canyons Area, City Of Simi, Ventura County. Report on file at the South Central Coastal Information Center at the University of California, Los Angeles.

Shiner, Joel L.
1949 A Fernandeño Site in Simi Valley, California. *The Masterkey*, Vol. 4, pp. 79-81.

Shipley, W. F.
1978 Native Languages of California. *Handbook of North American Indians: California*. Robert F. Heizer, editor, Vol. 8, pp. 80-90. Smithsonian Institution, Washington D.C.

Singer, Clay A.
1980 Cultural Resource Survey And Impact Evaluation For The Proposed Brea Canyon Airport Location, Simi Valley, Ventura County. Report on file at the South Central Coastal Information Center at the University of California, Los Angeles.

Singer, Clay A. and John E. Atwood
1988 Cultural Resources Survey And Impact Assessment For The Proposed Expansion Of The College Reservoir Near Moorpark, Ventura County, California. Report on file at the South Central Coastal Information Center at the University of California, Los Angeles.

Singer, C. and L. King
1967 Archaeological Site Record (CA-VEN-226). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Toren, George A.
1998 Phase I Archaeological Survey For The Proposed Expansion Of The Simi Valley Landfill And Recycling Center Simi Valley, California. Report on file at the South Central Coastal Information Center at the University of California, Los Angeles.

Vanderpot, R., H. Altschul and D. R. Grenda
1993 Whelan Lake (CA-SDI-6010): A La Jollan Campsite on the Lower San Luis Rey River, San Diego County, California. On file at RMW Paleo Associates.

Wallace, William
1955 A Suggested Chronology for Southern California Coastal Archaeology. *Southwestern Journal of Anthropology*, 11: 214-230.

1962 Prehistoric Cultural Development in the Southern California Deserts. *American Antiquity*. 28(2):172-180.

Warren, C. N.
1966 The San Dieguito Type Site: M. J. Rogers' 1938 Excavation on the San Dieguito River. *San Diego Museum Papers*, 5:1-39.

1967 The San Dieguito Complex: A Review and Hypothesis. *American Antiquity*, 32(2):168-185.

1968 Cultural Tradition and Ecological Adaptation on the Southern California Coast. *Eastern New Mexico University Contributions in Anthropology* 1(3): 1-15

Whitley and Simon

1994a Archaeological Site Record (CA-VEN-1130). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994b Archaeological Site Record (CA-VEN-1131). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994c Archaeological Site Record (CA-VEN-1132). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994d Archaeological Site Record (CA-VEN-1133). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994e Archaeological Site Record (CA-VEN-1134). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994f Archaeological Site Record (CA-VEN-1135). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994g Archaeological Site Record (CA-VEN-1136). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994h Archaeological Site Record (CA-VEN-1137). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994i Archaeological Site Record (CA-VEN-1138). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994j Archaeological Site Record (CA-VEN-1139). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994k Archaeological Site Record (CA-VEN-1140). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994l Archaeological Site Record (CA-VEN-1141). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994m Archaeological Site Record (CA-VEN-1142). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994n Archaeological Site Record (CA-VEN-1143). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

Whitley and Simon

1994o Archaeological Site Record (CA-VEN-1144). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994p Archaeological Site Record (CA-VEN-1145). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994q Archaeological Site Record (CA-VEN-1146). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994r Archaeological Site Record (CA-VEN-1147). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994s Archaeological Site Record (CA-VEN-1148). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

1994t Archaeological Site Record (CA-VEN-1149). On file at the South Central Coastal Information Center at the University of California, Los Angeles.

APPENDIX 1

PERSONNEL RESUMES

Ronald M. Bissell
RMW Paleo Associates, Inc.
Principal/Registered Archaeologist

Professional Experience

1986 - Present.	Principal Archaeologist, RMW Paleontological Associates, Incorporated
1983 - 1986.	Independent Consultant Archaeologist
1976 - 1983.	Information Specialist and Administrative Services Officer, Leighton and Associates
1956 - 1976.	United States Army. Rank at retirement was Major of Field Artillery

Publications

1983 Archaeological Site CA-ORA-572, a Two Component Site in Fullerton, California. *Master's Thesis on file at the Library, California State University, Fullerton, California*

1983 A Previously Unrecognized Grinding Technology from CA-ORA-572. *Paper presented to the Southwestern Anthropological Association, April 1983. Expanded version published in the Quarterly of the Pacific Coast Archaeological Society, Volume 19, Number 3, July 1983*

1989 Orange County's First Fairgrounds, 1890-1900. *Proceedings of the Conference of Orange County History*

1993 Archaeological Site CA-VEN-630: A Solstice Observatory in Simi Valley, *Proceedings of the Society for California Archaeology, Volume 7*, Ventura County, California

1994 Archaeological Site CA-ORA-1058: Six Cairns in Orange County, California.

Degrees

1983	Anthropology, M.A., Archaeological Emphasis. California State University, Fullerton, California
1977	Library Science, M.S. California State University, Fullerton, California
1972	Bachelor of Arts, Geology and History, San Diego State University, San Diego, California
1989	Introduction to Federal Projects and Historic Preservation Law. Sponsored by the Advisory Council on Historic Preservation and the General Services Administration Training Center

Credentials

Registered Professional Archaeologist with ROPA (Register of Professional Archaeologists)
Certified as an Archaeologist by the County of Orange Environmental Management Agency. Also certified by the Counties of Ventura, Los Angeles, Riverside, San Bernardino, Kern, Kings, Fresno, Tulare, Madera and San Diego
Certified as Open Water Scuba Diver by the Professional Association of Diving Instructors.

Memberships

Register of Professional Archaeologists
Pacific Coast Archaeological Society
Society for California Archaeology
Southwestern Anthropological Association
California Mission Studies Association
American Library Association
California Library Association
South Coast Geological Society

Joan C. Brown
RMW Paleo Associates, Inc.
Registered Archaeologist

Professional Experience

1988 - Present	Senior Archaeologist, RMW Paleo Associates, Inc.
1987- 88	Natural History Museum of Los Angeles County Foundation, Molding & Casting of Fossils
1987	Field Director: Historical archaeology sites. Heritage Park Project, Santa Fe Springs, California
1985	Analysis of faunal remains from archaeology sites. Archaeological Associates, Sun City, California
1983-85	Paleontological field salvage. RMW Paleo Associates, Inc. Mission Viejo, California
1983-85	Archaeological site surveying, salvage and laboratory work, including faunal analysis. CSUF
1982-83	Field Director: Pacific Coast Archaeology Society, Crystal Cove State Park survey, recording & analysis of 7 sites
1982	Paleontological field salvage. Los Angeles County Museum National Geographic Grant.
1981	Laboratory preparation of fossil specimens. Los Angeles County Museum, NSF Grant
1980-81	Paleontological field salvage. Scientific Resource Surveys, Inc. Santa Ana, California
1978-79	Archaeological site surveying. Christina Brewer and Company, Laguna Beach, California
1979- present	Associate: Natural History Museum of Los Angeles County

Publications

1984 A Fossil Baleen Whale from the Capistrano Formation in Laguna Hills, California, pp. 11-18: in *The Natural Sciences of Orange County, vol. 1, Natural History Foundation of Orange County*

1987 PCAS Project at Crystal Cove State Park: pp. 1-6 in *Pacific Coast Archaeological Society Quarterly, vol. 23*

1989 A Taxonomic Analysis of Avian Faunal Remains from Three Archaeological Sites in Marina Del Rey, Los Angeles County, California. *Archives of California Prehistory vol. 30. Coyote Press, Salinas, California*

1991 Speciality Studies in Faunal Analysis. Unpublished report on file, *Archaeological Advisory Group, Newport Beach, California, Archaeological Associates Limited, Sun City, California and CSUF*

____ Analysis of Marine Mammal Bones from A Pre-Historic Site in Marina Del Rey, Los Angeles, County, California. *Southern California Academy of Sciences Bulletin, The Natural History Museum of Los Angeles County* (in press).

Degrees & Certifications

M.A. (Anthropology: Emphasis in Archaeology) 1988. CSUF. Thesis: *Avifauna remains from Archaeology Sites*
B.A. (Anthropology) 1982. CSUF
A.A. (Social Science) 1979. Saddleback College Mission Viejo, California
Registered Professional Archaeologist with ROPA (Register of Professional Archaeologists)

Membership

Pacific Coast Archaeology Society
Society for California Archaeologist
Register of Professional Archaeologists

CAROL A. BISSELL

24762 Via Del Rio
Lake Forest, California 92630
(714) 837-9582

EDUCATION: Associate of Arts Degree, Business Administration, Saddleback Community College, Mission Viejo, California, 1975

EXPERIENCE:

1991-1992: Crew Member, Reconnaissance, Sequoia National Forest, Kern and Tulare Counties, California. In excess of 10,000 acres were examined during the project and more than 60 archaeological sites were recorded.

1993: Excavator, Millingstone Age site in La Habra, Orange County, California.

1994: Excavator, four Millingstone Age sites in eastern Orange County, California.

1994: Volunteer Assistant, excavation of Late Period site in Santa Ana Mountains, western Riverside County, California, for California State University, Fullerton field methods class.

1994-1995: Excavator, early to late period site in Rose Canyon, San Diego County, California.

1995: Crew Member, Reconnaissance, Forecast Property, Oceanside, San Diego, County, California.

Marco Bonifacic
RMW Paleo Associates, Inc.

Experience:

September 1998 to Present	Archaeological and Paleontological Field Monitor for RMW Paleo Associates, Inc.
February 1998 to September 1998	Web Development Editor for Harcourt Brace Professional Publishing
December 1997 to February 1998	Electronic Publishing Assistant for Harcourt Brace Professional Publishing
December 1996 to October 1997	Assistant to the Head Curator of the Archaeology Dept. of the Obihiro Centennial Museum.
September 1996 to September 1997	English Conversation Instructor/Editor for JOY International.

Education

B.A., Anthropology and English, May 1995, University of California at Berkeley
Completed archaeological field school, August 1996, University of Alaska at Fairbanks

Memberships

San Diego Museum of Man

ALBERT KNIGHT, B. A.
11236 Sheldon Street
Sun Valley, California 91352-1116
818-252-3466

DATE OF BIRTH 24 March, 1950, @ Long Beach, California

EDUCATION

B. A. University of California, Santa Barbara, Anthropology, 1983
Various extension classes in archaeology,
University of California Los Angeles, 1988-1992

PROFESSIONAL HISTORY - REPRESENTATIVE EXPERIENCE

Enviromental Inspector/Cultural Resources Inspector,
Pacific Pipeline Systems, Inc., December 1998.
Contact: Dr. Ken Lord, c/o Lanny W. Reed, 93 Woodcrest Lane,
Aliso Viejo, CA 92656 (949-448-0306)

Cultural Resources Monitoting @ Sage Ranch,
Santa Monica Mountains Conservancy, July 1997.
contact: Paul Edelman, SMMC 5750 Ramirez Canyon Road,
Malibu CA 90265 (310-589-3200, 128)

Ethnographic Interview with Kawaiisu Elder Andy Greene, for State of California Department of Parks and Recreation, June 1994
Contact: Mr. Michael Sampson, State of California Department of Parks and Recreation, 8885 Rio San Diego Dr., Suit 270,
San Diego, CA 92108 (619-220-5323)

Cultural Resources Monitor, for Central Coast Aquaduct project, July 1994-January 1995
Contact: Mr. Barry Price, Applied Earth Works, 5088 North Fruit St.
Fresno CA

Cultural Resources Survey/Cultural Resources Monitor, for Pacific Gas Transmission Pipeline Expansion project, southern San Joaquin Valley segment, 1993.
Contact: Barry Price

Cultural Resources Monitor, for Pacific Gas Transmission Pipeline project, Sacramento Valley/San Joaquin Valley Delta segment, 1992.
Contact: Barry Price

Cultural Resources Surveys, Excavations and Monitoring; Paleological. Monitoring, for Irvine Coast project, 1988-1989
Contact: Dave Smith, c/o The Keith Companies,
Orange County, California

Cultural Resources Monitor/Paleological Monitor, for All American Pipeline, Febuary-October, 1986
Contact: Michael Glassow, University of California Santa Barbara

Additional References:

Dr. John Johnson, Santa Barbara Museum of Natural History, Curator Department of Anthropology, 2559 Puesta Del Sol, Santa Barbara, CA 93101 (805-682-4711 x306)

Dr. Chester King, Topanga Archaeological Consultants, P. O. Bx 1324, Topanga CA 90290 (310-455-2981)

PUBLICATIONS AND PAPERS

The Rock Art of the Western Mojave Desert: A Reevaluation. Pp. 41-60 in Journal of the Kern County Archaeological Society. Vol. 4, 1993.

Recent Damage to Cultural Resources in Los Angeles County, California. Pp. 6-9 in Society for California Archaeology Newsletter, Vol. 28, No. 3, 1994.

Recent Inestigations at Burro Flats (CA-VEN-1072), Ventura County, California. Pp. 11-12 in Society for California Archaeology Newsletter, Vol. 29, No. 8, 1995.

Notes on the Rock Art of South Central California, 1962-1969- The John W. Cawley Papers at the Santa Barbara Museum of Natural History. Organized and Annotated by Albert Knight. Unpublished Manuscript on file @ Anthropology Department, Santa Barbara Museum of Natural History. August 1997.

The Rock Art of Los Angeles County, California. In Press (to be published 1999).

AFFILIATIONS: Department Associate in Anthropology, Santa Barbara Museum of Natural History (from 1996); Vice-President Santa Susana Mountain Park Assoiation (1995-1998); Memberships: Society for California Archaeology; Archaeological Conservancy; Historical Society of Southern California; San Fernando Valley Historical Society; Redrock Canyon Interpretive Association

RESUME March 31, 1999

David Dominic Ferraro
27141 Via Noveno, Mission Viejo, CA 92691 Home (949) 830-3514

Over the past 26 years, I have accumulated at least 20 full time years of experience in archaeology including more than 280 weeks of supervisory field experience and 29 weeks of supervisory laboratory experience. I have a broad background in all phases of archeological studies. In addition, I have considerable experience monitoring construction projects for both archaeological and paleotological remains. I am 40-hour HAZWOPER trained and have just received by 8-hour update.

PROFESSIONAL EXPERIENCE:

Project Director, Project Archaeologist, Field Director, Database Designer/Manager, Drilling Supervisor, Stratigrapher/Geomorphologist, Field Site Manager, Laboratory Director, Archaeological Monitor, Paleontological Monitor, and Field Archaeologist.

PROFESSIONAL SKILLS:

- Planning, implementation, and supervision of archaeological studies including site inventory, site evaluation, and data recovery excavations.
- Familiar with Federal and State legislation and regulations governing antiquities.
- Geomorphology, Pedology, Sedimentology, and Aerial Photo Interpretation.
- Analysis of archaeological assemblages and their distribution in time and space.
- Expertise in the archaeology of coastal southern California and the Mojave and Colorado deserts, and southern Great Basin. Familiar both historic and prehistoric diagnostic artifacts.
- Database design and management.
- 40 Hour Health and Safety Trained and Experienced.
- Technical report preparation.
- Cartographic skills in land survey and drafting.
- Familiar with application heavy equipment in archaeological studies (backhoe, skip loaders, core rigs, and bucket augers)
- Ethnobotany in archaeological assemblages and the use of floatation methods. Trained in plant taxonomy.
- Proficient in the use of AutoCAD 14, Word Perfect, Dbase IV, and Surfer software.
- Familiar with Access, Paradox, PhotoShop, and Word software.
- Proficient in programming in Dbase IV, Basic and Fortran.

EDUCATION:

1978 Bachelor of Arts degree, Anthropology, University of Nevada, Las Vegas. In additions to the anthropological curriculum, I completed courses Soils and Weathering, Mineralogy, Optical Mineralogy, Petrology, X-ray Diffraction, Historical Geology, and Glacial and Quaternary Geology.

1998 40 Hour Hazardous Waste Operations and Emergency Response Training (California Title 8 CCR 5192 and OSHA 29 CFR 1910.120.10)

1999 1999 8 Hour Hazardous Waste Operations and Emergency Response Annual Refresher Course (California Title 8 CCR 5192 and OSHA 29 CFR 1910.120.10)

RESUME April 5, 1999

David Dominic Ferraro
27141 Via Noveno, Mission Viejo, CA 92691 Home (949) 830-3514
email: davidferraro@netscape.net

QUALIFICATIONS SUMMARY:

Over the past 26 years, I have accumulated at least 20 full time years of experience in archaeology including more than 280 weeks of supervisory field experience and 29 weeks supervisory laboratory experience. With a broad background in all phases of archeological studies, I have considerable excavation experience sites including testing and/or data recovery of more than 120 sites and have been the primary supervisor of 50 site excavations. I have authored or contributed to numerous scientific reports. I have worked extensively in the Mojave and Colorado Deserts and along the Southern California Coast. Although I have worked primarily as a prehistoric archaeologist, my survey and excavation experience includes both historic and ethnohistoric sites.

Since 1980, he has used computers extensively to document and analyze archaeological collections as well as site databases. I devised a large site record database designed to unify divergent data on a number of different site records forms used in the Western United States. I have designed two database systems that input, retrieve, and analyze excavation data. In addition I have developed proficiency in the use of word processing, statistical and CAD software

My research interest lie in both cultural ecology and site formation processes, and I have developed interdisciplinary skills in geology, pedology, palynology and botany. Since 1981, I have conducted geomorphic studies using pedological and sedimentological data to define landscape evolution of more than 25 site. In three of these studies I have supervised trenching programs with aggregate lengths of greater than 1 km. I have a working knowledge of soils in both the California and Nevada deserts and coastal California in settings that included colluvial, fluvial, aeolian, marine, lacustrine, and lagoon environments. In the past two years, I have has studied three lagoon systems located a Newport Bay, Playa del Mar, and Point Mugu on the California Coast. At Playa del Rey I supervised portions of a large-scale drilling program, that collected 231 continuos core samples, to discover subsurface archaeological sites in Ballona Lagoon on the California coast.

PROFESSIONAL EXPERIENCE:

Project Director, Project Archaeologist, Field Director, Database Designer/Manager, Drilling Supervisor, Stratigrapher/Geomorphologist, Field Site Manager, Laboratory Director, Archaeological Monitor, Paleontological Monitor, and Field Archaeologist.

PROFESSIONAL SKILLS:

- Planning, implementation, and supervision of archaeological studies including site inventory, site evaluation, and data recovery excavations.
- Familiar with Federal and State legislation and regulations governing antiquities.
- Geomorphology, Pedology, Sedimentology, and Aerial Photo Interpretation.
- Analysis of archaeological assemblages and their distribution in time and space.
- Expertise in the archaeology of coastal southern California and the Mojave and Colorado deserts, and southern Great Basin. Familiar both historic and prehistoric diagnostic artifacts.
- Database design and management.
- 40-Hour Health and Safety trained and experienced.
- Technical report preparation.
- Cartographic skills in land survey and drafting.
- Familiar with application of heavy equipment in archaeological studies (backhoe, skip loaders, core rigs, and bucket augers)
- Ethnobotany in archaeological assemblages and the use of floatation methods. Trained in plant taxonomy.
- Proficient in the use of AutoCAD 14, Word Perfect, Dbase IV, and Surfer software.
- Familiar with Access, Paradox, PhotoShop, and Word software.
- Proficient in programming in Dbase IV, Basic and Fortran.

EDUCATION:

1978 Bachelor of Arts degree, Anthropology, University of Nevada, Las Vegas. In additions to the anthropological curriculum, courses Soils and Weathering, Mineralogy, Optical Mineralogy, Petrology, X-ray Diffraction, Historical Geology, and Glacial and Quaternary Geology were completed.

1998 40 Hour Hazardous Waste Operations and Emergency Response Training (California Title 8 CCR 5192 and OSHA 29 CFR 1910.120.10.

1999 8 Hour Hazardous Waste Operations and Emergency Response Annual Refresher Course (California Title 8 CCR 5192 and OSHA 29 CFR 1910.120.10.

MILITARY SERVICE:

U.S. Army, 2 years, Medical Corpsman
Discharge: Honorable
Foreign Service: Republic of South Vietnam
Awards: Distinguished Flying Cross, Bronze Star with "V" device, Air Medal with "V" device, Army Commendation Medal with "V" device, Army Commendation Medal with Oak Leaf Cluster, Air Medal with 14 Oak Leaf Clusters.

APPENDIX 2

LITERATURE SEARCH

South Central Coastal Information Center
California Historical Resources Information System
UCLA Institute of Archaeology
A163 Fowler Building
Los Angeles, California 90095-1510
(310) 825-1980 / FAX (310) 206-4723 / sccic@ucla.edu

Los Angeles
Orange
Ventura

February 9, 1999

Joan Brown
RMW Paleo Associates
23392 Madero, Suite L
Mission Viejo, CA 92691
949-458-9058

RE: Records Search Request for the Simi Valley West Quadrangle

Dear Ms. Brown,

As per your request received on February 5, we have conducted a records search for the above referenced project. This search includes a review of all recorded historic and prehistoric archaeological sites within a one-mile radius of the project area as well as a review of all known cultural resource survey and excavation reports. In addition, we have checked our file of historic maps, the National Register of Historic Places, the California State Historic Resources Inventory, the California Points of Historical Interest, and the listing of California Historical Landmarks in the region. The following is a discussion of our findings for the project area.

PREHISTORIC RESOURCES:

Forty-five prehistoric sites have been identified within a one-mile radius of the project area. None are located within the project area (see enclosed map).

HISTORIC RESOURCES:

No historic archaeological sites have been identified within a one-mile radius of the project area. There is one built environment resource (56-180600) located within a one-mile radius of the project area. It is not located within the project area.

Inspection of our historic maps -- Piru (1921 and 1941), 15' series – indicated that in 1921, the Southern Pacific Railroad was in place. There were numerous improved roads south of the project area. By 1941, State Route 118 was marked. Several intermittent waterways were shown in the vicinity.

The California State Historic Resources Inventory lists two properties that have been evaluated for historical significance within a one-mile radius of the project area. They are not located within the project area (see enclosed list).

The National Register of Historic Places lists two properties within a one-mile radius of the project area. Neither of these is located within the project area. They are:

Simi: T2N R18W SEC 7 Colony House, 137 Strathearn Pl, Simi 9/18/78 78000824

Simi: T2N R18W SEC 7 Simi Adobe-Strathearn House, 137 Strathearn Pl, Simi vicinity 5/19/78 78000825

The listings of the California Historical Landmarks (1990) of the Office of Historic Preservation, California Department of Parks and Recreation, indicate that there is one California Historical Landmark within a one mile radius of the project area. It is not located within the project area. It is:

> No. 979 Rancho Simi
> This is the site of the headquarters of the Spanish Rancho San Jose de Nuestra Senora de Altagarcia y Simi. The name derives from "Shimiji," the name of the Chumash village here before the Spanish. At 113,00 acres, Rancho Simi was one of the state's largest land grants. Two prominent Spanish and Mexican family names are connected with the Rancho: Santiago Pico who first received the grant, and Jose de la Guerra who purchased the Rancho in 1842. Two rooms of original adobe remain, part of the Strathearn home built in 1892-93. Located at Robert P Strathearn Historical Park, 137 Strathearn Place, Simi Valley.

The California Points of Historical Interest (1992) identifies no properties within a one-mile radius of the project area.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS:

Sixty-four surveys and/or excavations have been conducted within a one-mile radius of the project area. Thirteen of these have been conducted within the project area (see enclosed map and bibliography). Fifteen additional investigations are located within the Simi Valley West and Santa Susana quadrangles and potentially within the project area. These investigations are not mapped due to insufficient locational information.

Please forward a copy of any reports resulting from this project to our office as soon as possible. Due to the sensitive nature of site location data, we ask that you do not include record search maps in your report. If you have any questions regarding the results presented herein, please feel free to contact our office at (310) 825-1980.

Invoices are mailed approximately two weeks after records searches are completed. This enables your firm to request further information under the same invoice number. Please reference the invoice number listed below when making inquires. Requests made after invoicing will result in the preparation of a separate invoice with a $15.00 handling fee.

South Central Coastal Information Center
California Historical Resources Information System
UCLA Institute of Archaeology
A163 Fowler Building
Los Angeles, California 90095-1510
(310) 825-1980 / FAX (310) 206-4723 / sccic@ucla.edu

Los Angeles
Orange
Ventura

Sincerely,

Janette Anne Dinishak
Information Center Staff

Enclosures:

(X) Map
(X) Bibliography
(X) Site list
(X) HRI
(X) Survey reports
(X) Confidentiality Form
( ) Invoice # 7692

AGREEMENT OF CONFIDENTIALITY

I, the undersigned, have been granted access to archaeological site data for Ventura, Los Angeles, and Orange Counties housed at the Archaeological Information Center, University of California, Los Angeles.

I fully understand the confidential nature of the information contained in these records, and I agree to respect that confidentiality.

I will attempt to ensure that specific site location information is not distributed in public documents or made available to unauthorized individuals within my institution or agency. I also understand that prior written consent of the Information Center or State Historic Preservation Officer is required for any exceptions to the above stipulations.

Furthermore, I agree to forward to the above Information Center, no later than 30 days after completion of field reconnaissance and investigation, any preliminary reports and complete site records for any sites that are identified. I also agree to forward to the Information Center all subsequent reports on the identified sites, which are pertinent to archaeological resource management.

I understand that failure to comply with any aspect of the above agreement is grounds for denial of subsequent access to the archaeological site data.

Name
Firm
Phone #

_____ _____

Signature of Researcher Date

Invoice #7692

ITEMID: VN181 **DATE:** 1979 **PAGES:** 31

AUTHOR: D'Altroy, Terence N.

FIRM:

TITLE: Survey and Assessment of Archeological ResourceS PRESENT ON 750 ACRES OF TAPO RANGE, VENTURA COUNTY, CALIFORNIA

AREA: 750 ac

SITES: CA-VEN-633, VEN-634, VEN-635, VEN-636, VEN-637, VEN-638, VEN-639

QUADNAME: Simi
Santa Susana

MEMO:

ITEMID: VN239 **DATE:** 1980 **PAGES:** 15

AUTHOR: Lopez, Robert

FIRM:

TITLE: AN Archaeological RECONNAISSANCE of THE NINETY ACRES INVOLVED IN TRACT 3492 MOORPARK, VENTURA COUNTY, CALIFORNIA.

AREA: 90 ac

SITES: CA-VEN-225

QUADNAME: SIMI

MEMO:

ITEMID: VN284 **DATE:** 1980 **PAGES:** 16

AUTHOR: Singer, Clay A.

FIRM:

TITLE: Cultural Resource Survey and Impact Evaluation FOR THE PROPOSED BREA CANYON AIRPORT LOCATION, SIMI VALLEY

AREA: 340 ac

SITES: none

QUADNAME: Simi

MEMO:

ITEMID: VN417 **DATE:** 1982 **PAGES:** 41

AUTHOR: Desautels, Roger J.

FIRM: **SCIENTIFIC RESOURCE SURVEYS, INC.**

TITLE: Cultural ResourceS REPORT ON A PORTION of THE PROPOSED WEST END INDUSTRIAL AREA IN THE ALAMOS AND BREA CANYONS AREA

AREA: 300 ac

SITES: none

QUADNAME: Simi

MEMO:

ITEMID: VN632 **DATE:** 1987 **PAGES:** 15

AUTHOR: White, David R.M.

FIRM: **SOUTHERN CALIFORNIA EDISON COMPANY**

TITLE: Cultural ResourceS INVENTORY FOR THE PROPOSED GRIMES SUBSTATION, VENTURA COUNTY, CALIFORNIA

AREA: 7 ac

SITES: none

QUADNAME: Simi

MEMO:

ITEMID: VN710 **DATE:** 1984 **PAGES:** 155

AUTHOR: Anonymous

FIRM: **Ancient Enterprises, Inc.**

TITLE: BIG SKY RANCH DEVELOPMENT PRELIMINARY SUMMARY of Archaeological TEST INVESTIGATIONS AT BIG SKY RANCH (WEST) SIMI, VENTURA COUNTY, CALIFORNIA

AREA:

SITES: CA-VEN-633, VEN-634, VEN-635, VEN-636, VEN-638, CA-VEN-639, VEN-778, VEN-779

QUADNAME: Santa Susana
Simi

MEMO:

ITEMID: VN723 **DATE:** 1988 **PAGES:** 8

AUTHOR: Singer, Clay A. and John E. Atwood

FIRM: **SINGER AND ASSOC.**

TITLE: Cultural ResourceS Survey and Impact Assessment FOR THE PROPOSED EXPANSION OF THE COLLEGE RESERVOIR NEAR MOORPARK, VENTURA COUNTY, CALIFORNIA.

AREA:

SITES: none

QUADNAME: Simi

MEMO:

INV#7692 SIMI VALLEY WEST QUAD

ITEMID: VN1265 **DATE:** 1992 **PAGES:** 356

AUTHOR: Anonymous

FIRM: **PEAK AND Associates**

TITLE: Consolicated Report: Cultural Resources Studies for the Proposed Pacific Pipeline Project

AREA: 172 li mi

SITES: SEE REPORT

QUADNAME: SEE REPORT

MEMO:

ITEMID: VN1324 **DATE:** 1994 **PAGES:** 128

AUTHOR: Whitley, David, and Joseph Simon

FIRM: **W and S CONSULTANTS**

TITLE: Phase 1 Archaeological Survey and Cultural ResourceS
ASSESSMENT FOR THE MOORPARK SPECIFIC PLAN AREA #8, VENTURA COUNTY, CALIFORNIA

AREA: 4200 ac

SITES: CA-VEN-508, VEN-509, VEN-1130, VEN-1131, VEN-1132,
VEN-1133, VEN-1134, VEN-1135, VEN-1136, VEN-1137,
VEN-1138, VEN-1139, VEN-1140, VEN-1141, VEN-1142,
VEN-1143, VEN-1144, VEN-1145, VEN-1146, VEN-1147,
VEN-1148, VEN-1149

QUADNAME: SIMI

MEMO:

ITEMID: VN1391 **DATE:** 1996 **PAGES:** 17

AUTHOR: MAKI, MARY

FIRM: **FUGRO WEST, INC.**

TITLE: A Phase 1 Cultural ResourceS Survey of 1.5 LINEAR MILE
PIPELINE FOR THE SIMI VALLEY WATER RECLAMATION PILOT PROJECT VENTURA COUNTY, CALIFORNIA

AREA: 1.5 ml

SITES: none

QUADNAME: SIMI

MEMO:

ITEMID: VN1551 **DATE:** 1997 **PAGES:** 50

AUTHOR: Anonymous

FIRM: **W & S Consultants**

TITLE: Phase II Test Excavation and Determination of Significance on a Portion of CA-VEN-1341, Simi Valley, Ventura County, California

AREA: none

SITES: 56-001341

QUADNAME: Simi

MEMO:

ITEMID: VN1599 **DATE:** 1998 **PAGES:** 13

AUTHOR: Toren, George A.

FIRM: **Greenwood and Associates**

TITLE: Phase I Archaeological Survey for the Proposed Expansion of the Simi Valley Landfill and Recycling Center Simi Valley, California

AREA: unknown

SITES: none

QUADNAME: Simi

MEMO: Project Map and Project Location Map Are Both Unclear In Regards to the Actual Area Surveyed, Partial

ITEMID: VN1655 **DATE:** 1989 **PAGES:** 110

AUTHOR: Bissell, Ronald

FIRM: **RMW Paleo Associates**

TITLE: Cultural Resources Management Plan for The Big Sky Ranch Property, Simi Valley, Ventura County, California

AREA: 960 ac

SITES: 56-000779, 56-000633, 56-000634, 56-000635, 56-000636, 56-000638, 56-000639, 56-000778

QUADNAME: Santa Susana, Simi

MEMO:

INV#7692 SIMI VALLEY WEST QUAD

ITEMID: VN125 **DATE:** 1976 **PAGES:** 18
AUTHOR: DeGarmo, Glen D.
FIRM:
TITLE: Cultural Resource RECONNAISSANCE of CALLEGUAS CREEK, SIMI VALLEY TO MOORPARK, VENTURA COUNTY, CALIFORNIA
AREA:
SITES: CA-VEN-95, VEN-225, VEN-227

QUADNAME: MOORPARK
SIMI
MEMO:

ITEMID: VN127 **DATE:** 1978 **PAGES:** 50
AUTHOR: Clewlow, C. William, Jr.
FIRM: **UCLA AS**
TITLE: AN Archaeological and HISTORICAL Assessment of AREAS WITHIN THE TAKELINES OF THE PROPOSED FEATURES OF THE VENTURA COUNTY WATER MANAGEMENT PROJECT
AREA:
SITES: CA-VEN-71, VEN-170, VEN-171, VEN-214, VEN-215, VEN-216, VEN-217 VEN-218, VEN-219, VEN-272, VEN-445 VEN-446, VEN 447, VEN-448, VEN-450, VEN-451, VEN-452 VEN-453, VEN-455, VEN-456, VEN-493, VEN-555
QUADNAME: Ventura
Simi
MEMO:

ITEMID: VN130 **DATE:** 1978 **PAGES:** 4
AUTHOR: Pence, R. L.
FIRM:
TITLE: Archaeological Assessment of A PORTION of VEN-340, THE VILLAGE OF SHIMIYI, SIMI VALLEY, CALIFORNIA
AREA:
SITES: CA-VEN-340

QUADNAME: SIMI
MEMO:

ITEMID: VN15 **DATE:** 1973 **PAGES:** 5

AUTHOR: ROMANI, JOHN F. AND ALAN P. GARFINKEL

FIRM: NARC

TITLE: Assessment of THE Archaeological Impact BY THE DEVELOPMENT of SITE SUP-S-98

AREA: 10 ac

SITES: none

QUADNAME: SIMI

MEMO:

ITEMID: VN164 **DATE:** 1978 **PAGES:** 2

AUTHOR: Kuhn, Michael W.

FIRM:

TITLE: REPORT ON SOME ARTIFACTS FROM CA-VEN-340

AREA:

SITES: CA-VEN-340

QUADNAME: SIMI

MEMO:

ITEMID: VN175 **DATE:** 1975 **PAGES:** 30

AUTHOR: Leonard, N. Nelson, III

FIRM:

TITLE: FURTHER Investigations of THE PROPOSED ICX TRUCK TERMINAL AND SURROUNDING PROPERTY

AREA:

SITES: CA-VEN-340

QUADNAME: Simi

MEMO:

ITEMID: VN177 **DATE:** 1975 **PAGES:** 31

AUTHOR: Leonard, N. Nelson, III

FIRM:

TITLE: Archeological MITIGATION of PROPOSED DEVELOPMENT of LOT 10

AREA:

SITES: CA-VEN-340

QUADNAME: SIMI

MEMO:

ITEMID: VN18 **DATE:** 1974 **PAGES:** 10

AUTHOR: Burger, Robin and Gregory Henton

FIRM: NARC

TITLE: Assessment of THE Archaeological Impact BY THE DEVELOPMENT OF PARCEL NO. 580-02-8 VENTURA COUNTY

AREA: 8 ac

SITES: none

QUADNAME: SIMI

MEMO:

ITEMID: VN181 **DATE:** 1979 **PAGES:** 31

AUTHOR: D'Altroy, Terence N.

FIRM:

TITLE: Survey and Assessment of Archeological ResourceS PRESENT ON 750 ACRES OF TAPO RANGE, VENTURA COUNTY, CALIFORNIA

AREA: 750 ac

SITES: CA-VEN-633, VEN-634, VEN-635, VEN-636, VEN-637, VEN-638, VEN-639

QUADNAME: Simi
Santa Susana

MEMO:

ITEMID: VN21 **DATE:** 1975 **PAGES:** 6

AUTHOR: Rosen, Martin Dean

FIRM:

TITLE: Evaluation of THE Archaeological ResourceS and POTENTIAL IMPACT OF ROUTES 118 AND 23 INTERCHANGE CONSTRUCTION, VENTURA COUNTY

AREA:

SITES: CA-VEN-225, VEN-227

QUADNAME: SIMI

MEMO:

ITEMID: VN242 **DATE:** 1980 **PAGES:** 12

AUTHOR: Lopez, Robert

FIRM: **CONSULTING ARCHAEOLOGIST**

TITLE: AN Archaeological RECONNAISSANCE of LOTS 14 THROUGH 19, UNIT 1 PARCEL MAP 3220 IN THE MOORPARK VICINITY OF VENTURA COUNTY, CALIFORNIA

AREA: 286

SITES: none

QUADNAME: SIMI

MEMO:

ITEMID: VN243 **DATE:** 1980 **PAGES:** 12

AUTHOR: Lopez, Robert

FIRM:

TITLE: AN Archaeological RECONNAISSANCE of THE 254 ACRES INVOLVED IN TENTATIVE TRACT 3439 MOORPARK, VENTURA COUNTY, CALIFORNIA.

AREA: 254 ac

SITES: none

QUADNAME: SIMI

MEMO:

ITEMID: VN30 **DATE:** 1975 **PAGES:** 6

AUTHOR: LEONARD, N. NELSON, III

FIRM:

TITLE: Archaeological RECONAISSANCE of THE EASY STREET and LOS ANGELES AVENUE EXTENSIONS

AREA:

SITES: CA-VEN-96, VEN-340, VEN-346

QUADNAME: SIMI

MEMO:

ITEMID: VN323 **DATE:** 1979 **PAGES:** 27

AUTHOR: Pence, R. L.

FIRM:

TITLE: SUBSURFACE TEST Assessment of VEN-226, SIMI VALLEY, CALIFORNIA

AREA:

SITES: CA-VEN-226

QUADNAME: SIMI

MEMO:

ITEMID: VN340 **DATE:** 1978 **PAGES:** 7

AUTHOR: Singer, Clay A.

FIRM:

TITLE: Cultural Resource Survey and Impact Assessment FOR Tentative TRACT NO. 2667, CITY OF THOUSAND OAKS, VENTURA COUNTY, CALIFORNIA

AREA: 40 ac

SITES: CA-VEN-546

QUADNAME: NEWBURY PARK

MEMO:

ITEMID: VN488 **DATE:** 1986 **PAGES:** 18

AUTHOR: Singer, Clay A.

FIRM:

TITLE: Archaeological MONITORING AT VEN-95, SIMI VALLEY, VENTURA COUNTY, CALIFORNIA.

AREA: 7 ac

SITES: CA-VEN-95

QUADNAME: SIMI

MEMO:

ITEMID: VN522 **DATE:** 1987 **PAGES:** 10

AUTHOR: Singer, Clay A.

FIRM: **CLAY A. SINGER,**

TITLE: Cultural Resource Survey and Impact Assessment FOR THE SIMI RANCH DEVELOPMENT IN THE CITY OF SIMI VALLEY, VENTURA COUNTY

AREA: 244 ac

SITES: Unrecorded Historic Structures

QUADNAME: Simi

MEMO:

ITEMID: VN572 **DATE:** 1988 **PAGES:** 120

AUTHOR: Dames and Moore

FIRM: **DAMES & MOORE**

TITLE: Phase 1 Cultural Resources Survey Fiber Optic Cable Project, Burbank to Santa Barbara, California for US Sprint Communications Company

AREA: 82 li mi

SITES: CA-Ven-27, VEN-196, VEN-202, VEN-240, VEN-241, VEN-341, VEN-342, VEN-550, VEN-643, VEN-644, VEN-655 VEN-729, VEN-789, VEN-895/H, VEN-896/H, VEN-916, VEN-917, VEN-918 & OTHER COUNTIES

QUADNAME: Burbank
Van Nuys, Simi

MEMO: REPORT LA160 COVER LOS ANGELES AREA

ITEMID: VN585 **DATE:** 1988 **PAGES:** 71

AUTHOR: Bissell, Ronald M.

FIRM: **RMW**

TITLE: EXCAVATION of THE EASTERN PORTION of CA-VEN-95 IN THE SIMI VALLEY, VENTURA COUNTY,

AREA:

SITES: CA-VEN-95

QUADNAME: Simi

MEMO:

ITEMID: VN674 **DATE:** 1988 **PAGES:** 3

AUTHOR: Kuhn, Michael W.

FIRM: **CITY OF SIMI VALLEY**

TITLE: City of SIMI VALLEY DEPARTMENT of COMMUNITY DEVELOPMENT 2929 TAPO CANYON ROAD, SIMI VALLEY, CA 93063

AREA: 1 ac

SITES: none

QUADNAME: Simi

MEMO:

ITEMID: VN708 **DATE:** 1986 **PAGES:** 24

AUTHOR: Van Horn, David M.

FIRM: **Archaeological Associates**

TITLE: TEST EXCAVATION AT VEN-95 IN ARROYO SIMI, VENTURA COUNTY, CA

AREA:

SITES: CA-VEN-95

QUADNAME: Simi

MEMO:

ITEMID: VN79 **DATE:** 1976 **PAGES:** 5

AUTHOR: IVIE, PAMELA J.

FIRM: **UCLA AS**

TITLE: AN Archaeological RECORD SEARCH of THE STUDY

AREA:

SITES: CA-VEN-226, VEN-341, VEN-342, VEN-343, VEN-344, VEN 345

QUADNAME: SIMI

MEMO:

INV#7692 SIMI VALLEY WEST QUAD

ITEMID: VN710 **DATE:** 1984 **PAGES:** 155

AUTHOR: Anonymous

FIRM: **Ancient Enterprises, Inc.**

TITLE: BIG SKY RANCH DEVELOPMENT PRELIMINARY SUMMARY of Archaeological TEST INVESTIGATIONS AT BIG SKY RANCH (WEST) SIMI, VENTURA COUNTY, CALIFORNIA

AREA:

SITES: CA-VEN-633, VEN-634, VEN-635, VEN-636, VEN-638, CA-VEN-639, VEN-778, VEN-779

QUADNAME: Santa Susana
Simi

MEMO:

ITEMID: VN719 **DATE:** 1988 **PAGES:** 3

AUTHOR: Kuhn, Michael

FIRM: **CITY OF SIMI VALLEY**

TITLE: Archaeological RECONNAISSANCE REPORT: PD-S-745/Z-S-372 (LATEST SURVEY DATE 5/27/88)

AREA: 1 ac

SITES: none

QUADNAME: Simi

MEMO:

ITEMID: VN727 **DATE:** 1984 **PAGES:** 80

AUTHOR: Macfarlane, Heather and Gwen Romani

FIRM:

TITLE: DRAFT SUMMARY Archeological TEST EXCAVATION CA-VEN-226 SIMI VALLEY, VENTURA COUNTY, CALIFORNIA

AREA:

SITES: CA-VEN-226

QUADNAME: Simi

MEMO:

ITEMID: VN739 **DATE:** 1985 **PAGES:** 94

AUTHOR: Macfarlane, Heather and Gwendolyn Romani

FIRM:

TITLE: Archaeological TEST EXCAVATION CA-VEN-226 SIMI VALLEY, VENTURA COUNTY, CALIFORNIA

AREA:

SITES: CA-VEN-226

QUADNAME: Simi

MEMO:

ITEMID: VN745 **DATE:** 1984 **PAGES:** 15

AUTHOR: Raab, L. Mark

FIRM:

TITLE: REPORT of PARTIAL Archaeological DATA RECOVERY (Phase III), AT SITE VEN-784, CITY OF SIMI VALLEY, CALIFORNIA

AREA:

SITES: CA-VEN-784

QUADNAME: Simi

MEMO:

ITEMID: VN746 **DATE:** 1986 **PAGES:** 7

AUTHOR: Van Horn, David M.

FIRM: **Archaeological Associates**

TITLE: APPENDIX A: ADDITIONAL EXCAVATIONS AT VEN-95

AREA:

SITES: none

QUADNAME: SIMI

MEMO:

ITEMID: VN771 **DATE:** 1989 **PAGES:** 74

AUTHOR: Bissell, Ronald M.

FIRM: **RMW PALEO**

TITLE: Cultural ResourceS RECONNAISSANCE of 1800 ACRES LOCATED IN SIMI VALLEY, VENTURA COUNTY, CALIFORNIA

AREA: 1800 ac

SITES: CA-VEN-1004, VEN-1005, VEN-1006, VEN-1007, VEN-1008, VEN-1009

QUADNAME: SIMI
SANTA SUSANA

MEMO:

ITEMID: VN834 **DATE:** 1976 **PAGES:** 5

AUTHOR: Pence, R.L.

FIRM:

TITLE: EAST VALLEY ANIMAL CONTROL FACILITY, SIMI VALLEY, CALIFORNIA

AREA: 7 ac

SITES: CA-VEN-95

QUADNAME: SIMI

MEMO:

ITEMID: VN857 **DATE:** **PAGES:** 10

AUTHOR: Pence, Robert L.

FIRM:

TITLE: PRELIMINARY Investigations INTO CA-VEN 341

AREA:

SITES: CA-VEN-341

QUADNAME: SIMI

MEMO:

ITEMID: VN868 **DATE:** 1990 **PAGES:** 17

AUTHOR: Pence, Robert L.

FIRM: **PENCE Archaeological CONSULTING**

TITLE: Archaeological RECONNAISSANCE of A PROPOSED PARKING LOT STRATHEARN HISTORICAL PARK

AREA: 1 ac

SITES: CA-VEN-346

QUADNAME: SIMI

MEMO:

INV#7692 SIMI VALLEY WEST QUAD

ITEMID: VN1024 **DATE:** 1991 **PAGES:** 49
AUTHOR: WELLS, HELEN, THERESA CLEWLOW, LEN WINTER AND ROBERT HELMAN
FIRM: **CULTURAL RESOURCES MANAGEMENT SERVICES**
TITLE: WESTSIDE CONVEYANCE SYSTEM Cultural ResourceS INVESTIGATION FINAL TECHNICAL REPORT.
AREA: 140 ac
SITES: VEN-225, VEN-303, VEN-318, VEN-478, VEN-479, VEN-640 VEN-757, VEN-893, VEN-1038, VEN-1039, VEN-1040, VEN-1041H, LAN-640
QUADNAME: NEWHALL
SANTA SUSANA
MEMO:

ITEMID: VN1073 **DATE:** 1991 **PAGES:** 73
AUTHOR: Whitley, David, Joseph Simon and Bruce Gothar
FIRM: **W and S CONSULTANTS**
TITLE: Phase I Archaeological Survey and Cultural ResourceS ASSESSMENT FOR TENTATIVE PARCEL MAP 4687, VENTURA COUNTY, CALIFORNIA
AREA: 458 ac
SITES: CA-VEN-478, VEN-1038, VEN-1042H, VEN-1043, VEN-1044, VEN-1045, VEN-1046 and ISOLATES
QUADNAME: SIMI
MEMO:

ITEMID: VN1153 **DATE:** 1991 **PAGES:** 55
AUTHOR: Peak and Associates, Inc.
FIRM: **Peak & Associates**
TITLE: Class 3 Cultural Resource Assessment of the Proposed Carpinteria and Southern Reroutes, Santa Barbara, Ventura, and Los Angeles Counties, California
AREA: 58 li mi
SITES: VEN-1089

QUADNAME: Burbank
MEMO:

ITEMID: VN1167 **DATE:** 1979 **PAGES:** 10

AUTHOR: Anonymous

FIRM: **CBA\CASTANEDA-BERG & Associates**

TITLE: FOCUSED ENVIRONMENTAL REPORT FOR PD-S-392, TT 3177 DRAFT

AREA: 20 ac

SITES: none

QUADNAME: SIMI

MEMO:

ITEMID: VN1268 **DATE:** 1994 **PAGES:** 50

AUTHOR: Wells, Helen F., Michael R. Walsh, and C.W. Clewlow Jr.

FIRM: **Ancient Enterprises, Inc.**

TITLE: Phase II Archaeological Work in Dry and Tapo Canyons in the Whiteface Specific Plan Area of Simi Valley, California

AREA: 6 ac

SITES: CA-LAN-779, LAN-1004, LAN-1005, LAN-1006, LAN-1007, LAN-1008, LAN-1009

QUADNAME: Santa Susana

MEMO:

ITEMID: VN1271 **DATE:** 1993 **PAGES:** 228

AUTHOR: Heather Macfarlane

FIRM: **Macfarlane Archaeological Consultants**

TITLE: Phase I Archaeological Survey Santa Clara River Alternative Broadway Feeder Option and San Fernando Valley Conveyance Project Simi Valley Feeder Options A, B, C, SubOption, and Perliter Tunnel Los Angeles and Ventura Counties, California

AREA: 43 li mi

SITES: See report for sites and utm information

QUADNAME: Simi
Santa Susana

MEMO:

ITEMID: VN1424 **DATE:** 1964 **PAGES:** 23

AUTHOR: Romoli, Douglas A.

FIRM: **UCAS**

TITLE: UCAS-006 Moorpark Freeway Ventura County

AREA: 4 li mi

SITES:

QUADNAME: Thousand Oaks
Simi

MEMO:

ITEMID: VN1441 **DATE:** 1970 **PAGES:** 38

AUTHOR: Leonard, N. Nelson III, Paul J. F. Schumacher, Charles F. Bohannon, Thomas F. King, and Joseph L. Chartkoff

FIRM: **UCAS**

TITLE: UCAS-255 Calleguas Creek Flood Control Survey, Ventura County

AREA: 34.5 mi

SITES: 56-000215,56-000071,56-000339,56-000095, 56-000096,56-000225, 56-000226,56-000228,56-000121,56-000243,56-000182,56-000174,56-000024,56-000110,56-000167,56-000011,56-000084

QUADNAME: Point Mugu,Camarillo,Newbury Park,Santa Paula,Moorpark,Simi,Santa Susana

MEMO: This report is not mapped along its survey route because an adequate map was not available (see unmappables no

ITEMID: VN1462 **DATE:** 1994 **PAGES:** 415

AUTHOR: King, Chester

FIRM: **Topanga Anthropological Consultants**

TITLE: Prehistoric Native American Cultural Sites in the Santa Monica Mountains

AREA: 13,337 ac

SITES: 19-000229,19-000267,19-000690,56-000003,19-000227,19-000776,56-000110,56-000011,56-000024,56-000089,56-000174,19-000052,19-000384,19-000114,19-000207,19-000264,56-000071,56-000865,56-000261,56-000737,56-000179,56-000095,56-000096,56-000341,56-000342,
19-000186,19-000242,19-000243,19-000413,19-000043,19-000059,19-000060,19-000193,19-000194,19-00008
19-002200,56-0000204,56-000538,56-001157,19-000002,19-000373,19-000324,56-000294,56-000606,19-000669,19-00066,56-000535,19-000807,56-000100,56-000070,56-000065,56-000001,56-00064056-001154,56-000881,56-000880,56-000879,56-000878,56-000877,56-000876,
56-000875,56-000874,56-000873,56-000872,56-000871,56-000869,56-000145,56-000870,19-002154,19-002201,19-002202,56-000146,56-000145,19-001248,19-001341,56-000853,56-000536,56-000271,56-000045,56-000044,56-000124,56-000123,56-000221,56-000222,56-000705,
56-000706,56-000707,19-001352,19-000111,19-001326,19-001327,56-000884,56-000885,56-000883,56-000882,56-000886,19-002160,19-002153,19-002167,19-002168,19-001117,19-002165,19-002164,19-002162,19-002161,19-002159,19-002158,19-002157,19-002163,+ more,see memo

QUADNAME: Point Dume,Triunfo Pass,Malibu Beach,Topanga,Beverly hills,Hollywood,Burbank,Van Nuys,Canoga Park,Cal

MEMO: Same as LA3587. Space did not permit the entry of all referenced sites. Please see report for full listing of site an