Appendix 5.6-A
Phase I Archaeological Survey,
Centennial Study Area
MANAGEMENT SUMMARY

A Phase I archaeological survey was conducted for the ~14,000 acres Centennial study area, northern Los Angeles County, California. This investigation involved an archival records search; a review of existing published and unpublished references on local ethnography, prehistory and history; an on-foot, intensive survey of the subject property; and the identification, recording and preliminary evaluation of sites within the study area. A total of 63 archaeological sites were recorded during the study. Recommendations for the management of these sites are provided in this report.
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1.0 INTRODUCTION

At the request of Impact Sciences, Inc., Agoura Hills, CA, a Phase I archaeological survey was conducted for the Centennial study area, northern Los Angeles County, California (Figure 1). This investigation was intended to:

• Provide a background records search and literature review to determine if any known archaeological sites were present in the project zone and/or whether the area had been previously and systematically studied by archaeologists;

• Conduct an on-foot, intensive survey of the ~14,000 acres study area to identify and record previously undiscovered cultural resources and to examine known sites;

• And to undertake a preliminary assessment of such resources, should any be found within the subject property.

This study was conducted by W&S Consultants of Simi Valley, California, during Spring, Summer and Fall, 2001. David S. Whitley, Ph.D., served as principal investigator.

This manuscript constitutes a report on this Phase I archaeological study. Subsequent sections provide background to the study; the findings of the archival records search; a summary of the field surveying techniques employed; and the results of the fieldwork. We conclude with management recommendations for the treatment of the cultural resources identified within the Centennial study area.
2.0 BACKGROUND TO THE PROJECT

2.1 Project Location and Environmental Setting

The ~14,000 acres Centennial study area is located in northern Los Angeles County, California (Figure 1). The study area straddles the San Andreas Rift Zone in the vicinity of Quail Lake, with the vast majority of the study area lying to the north of Highway 138 approximately one mile east of Interstate 5. A much smaller portion of the study area is located in the northern limits of the La Liebre Mountains, between Highway 138 and Tentrock Canyon, with our study area thereby extending beyond and south of the proposed project area. This places the Centennial study area at the westernmost edge of the Antelope Valley.

Topographically, the majority of the study area represents an area of open, dissected topography, consisting of broad and relatively low E-W trending ridge systems with small intervening drainages. Foothill areas (including valleys and canyons) are present along its northern and southern edges. Elevation ranges from a low of about 2986 feet a.s.l., near the northeastern corner of the property, to a high of just over 4000 feet, along the northwestern edge, with the majority of study area probably lying between 3000 and 3400 feet.

The southern stretch of Oso Canyon, which runs NW-SE, comprises the major topographic feature on the western side of the study area. This is also the largest drainage within the study area and portions of it appear to contain perennial moisture. The West Branch of the California Aqueduct currently runs north-south through the study area, before emptying into Quail Lake, which falls outside of the property. The open flats of the Antelope Valley are located at the easternmost limits of the study area.

Vegetation within the study area varies depending upon aspect, slope, elevation, water and soil conditions. It includes oak savannah, scrub oak chaparral, chaparral, grasslands, and riparian plant communities (see Schoenherr 1992). In general terms oak savannah and scrub oak chaparral tend to predominate in the northwestern portion of the study area, in the vicinity of Oso Canyon. Introduced grasses cover the majority of the study area and these are found on the broad open ridges that constitute the major central area. Riparian habitats are typically localized around water sources and drainages, especially in the Oso Canyon area, but isolated riparian environments are also found around springs within the drainages of the broad open ridges. Scrub oak chaparral and chaparral communities are common on the northern slopes of the La Liebre Mountains which form the southern portion of the study area.

The study area currently consists of range land, open space and agricultural facilities. Portions of the California Aqueduct are internal to but excluded from the project area. Surrounding development is then limited to the old La Liebre ranch headquarters, currently used as a hunting club, and the National Cement quarry and plant.
2.2 Ethnographic Background

The Tejon Ranch region containing the Centennial study area was apparently a contact point between five separate ethnolinguistic groups immediately prior to the arrival of Euro-Americans in California. Combined with the fact that almost no ethnographic research was conducted in this area until well after the period of Spanish missionization – and thus long after the original inhabitants had been removed from their traditional homelands – considerable confusion has existed concerning aboriginal landholdings in this area. However, recent ethnohistorical studies by John Johnson (1978, 1997a, 1997b, 2000; Johnson and Earle 1990; McLendon and Johnson 1999) and David Earle (1990) have done much to clarify this situation. It is now apparent that the general Tejon region was occupied by the Kitanemuk, Southern Valley Yokuts, Interior Chumash, Tataviam and Kawaiisu. Of this group of five, the Kitanemuk, Interior Chumash and Tataviam are likely to lived in and/or used the lands comprising the Centennial study area, *per se*.

The Kawaiisu, for example, occupied the eastern end of the Tehachapi Mountains, the Tehachapi Valley and Greenhorn Mountains, and the northern Mojave Desert towards Inyokern and Trona. This places their territory a considerable distance north and east of the current study area. Likewise the San Joaquin Valley floor was the domain of the southern Valley Yokuts, with the Yauelmani Yokuts extending furthest to the southeast into Tejon Ranch territory (Kroeber 1925). This places the Yokuts on the northern side of the Tehachapis, with this broad mountain range thus intervening between the limits of the current study area.

Interior Chumash (probably speakers of the Ventureño Chumash, itself a Hokan language), in contrast, controlled upper Piru Creek, Grapevine Canyon, and the Gorman area, which is just a few miles west of the Centennial study area limits. Their domain extended eastward beyond Castac (or Tejon) Lake (*not* modern Castaic Reservoir, which is considerably further south) on the Tejon Ranch, where the historic village of *Kashtiq* was located. Their territory then headed southeastwards to Quail Lake, known in Chumash as *Shraqang* (Johnson 1978). They also occupied a village at the mouth of Grapevine Canyon, *Mat'apxwelxwel*, and also another at the mouth of Tecuya Creek to the west of the Tejon Ranch. These last two villages represent the only known incursion of the Chumash onto the San Joaquin Valley floor, but are again outside of the Centennial study area. Nonetheless it is clear that the Chumash either occupied or lived very close to the western limits of the Centennial study area, perhaps including the area immediately around Quail Lake.

The Kitanemuk occupied the south and central "heart" of the Tehachapi Mountains and the adjacent northwestern end of the Antelope Valley (Blackburn and Bean 1978). These are speakers of the Serran branch of the Takic (Uto-Aztecan) language stock, and they are sometimes referred to as Haminat (Earle 1990). They were closely related linguistically to other Serran Takic groups, such as the Serrano proper and Vanyume, who lived along the northern front of the transverse ranges. The Kitanemuk however probably did not extend down onto the San Joaquin Valley floor, which was occupied by the Yokuts. The western edge of Kitanemuk
territory appears to have fallen between Tunas and Paso Creeks, judging from known village locations, with most of their territory extending eastwards. The Kitanemuk, still, may have occupied the northeastern portions of the current study area, near the open flats of the Antelope Valley.

According to Kroeber (1925), a wedge of Tataviam speakers extended up into the Tehachapis, separating the Chumash from the Kitanemuk, perhaps by controlling the headwaters of Pastoria Creek. They also occupied La Liebre Mountains and probably the westernmost end of the Antelope Valley (Johnson and Earle 1990:196). Information on the Tataviam is however very limited since, according to King and Blackburn (1978), they are now extinct and were effectively so prior to the initiation of systematic anthropological studies at the turn of the century. But, based on a few existing word lists, descriptions provided by early travelers, mission placenames, and the recollections of other aboriginal informants, Tataviam is generally accepted as representing a Takic language of the Uto-Aztecan family (ibid). In this sense, it was related to other Takic languages in the Los Angeles County region, such as Gabrielino/Fernandeño (or Tongva) of the Los Angeles Basin proper, and the Kitanemuk.

The Tataviam are believed to have primarily inhabited the upper Santa Clarita drainage from about Piru eastwards to the Agua Dulce/Vasquez Rocks area; southwards as far as Newhall; and northwards to include the middle reaches of Piru Creek (on the west), and the Liebre Mountains and the westernmost fringe of the Antelope Valley on the east (ibid; Kroeber 1925; Earle 1990; Johnson and Earle 1990). Their northeastern boundary most likely ran along the southern foothills of the Tehachapi Mountains – thus within the Centennial study area – and then crossed to the southern slopes of the Sawmill Mountains and the Sierra Pelona, extending as far east as Soledad Pass (Earle 1990:94); Johnson and Earle (1990:195) note that they controlled Quail Lake and La Liebre Ranch. Ethnographically, at least, they do not appear to have controlled the San Andreas rift zone of Elizabeth Lake, Lake Hughes and the Leona Valley, which was occupied by the Kitanemuk, who also inhabited the eastern side of the Antelope Valley from approximately Neenach through the Fairmont Buttes area, to about the mouth of the Soledad Pass. The linguistically closely-related Vanuyme and Serrano, as noted above, inhabited the eastern portion of the Antelope Valley, to the Cajon Pass region.

Only a few historic Tataviam villages have been identified (cf. Kroeber 1925); most of these are located on the southwestern side of Tataviam territory, near Piru Creek and (modern) Castaic Reservoir. But *hwitahovea* is a village in the current study area at La Liebre headquarters; according to Johnson and Earle (1990:195) this was a historic (post-Mission) period village (i.e., the Mission records do not include references to this village), and thus it may have only been occupied after circa 1830. But putatively to the south of this site, an unidentified ridge contains another important village known as *kwissa*’o (Johnson and Earle 1990:195). This is the village alternatively given in the Mission records as *cuechao*, *quechhao* and (less likely) *quissaubit*, from which 53 baptisms at Mission San Fernando occurred (McLendon and Johnson 1999:VIII-12; John Johnson, personal communication 2002). Note, however, that *hwitahovea* is a Serrano/Kitanemuk name (Johnson and Earle 1990:195). It thus seems possible that it is
synonymous with the Tataviam name of kwitsa’o; that is, that these both refer to the same village. As this circumstance suggests, then, a fundamental lack of information on this group exists because, by 1810, all Tataviam had been baptized and they were quickly absorbed by other groups through intermarriage. The last speaker of Tataviam died in 1916 (King and Blackburn 1978).

Despite the proximity of the Chumash, Kitanemuk, Yokuts and Tataviam, historical accounts suggest that amity-enmity alliances may have partly structured regional inter-group relationships. The Chumash appear to have maintained an alliance with the Kitanemuk, and the Yokuts and Tataviam a similar relationship, with more strained relationships between these two alliance groups (Kroeber 1925; Blackburn and Bean 1978). Despite these possible political differences, all of the groups were culturally very similar.

The Chumash, for example, followed a hunting-gathering-fishing subsistence pattern which incorporated a heavy reliance on maritime resources, including pelagic and littoral fishes, and shellfish – at least for groups living along the coast. Indeed, the bountiful sea resources that they exploited along the Santa Barbara coast may have been a key factor in their evolutionary success (Landberg 1965): at the time of the arrival of the Spanish the Chumash had reached levels of population density, and complexities in social organization, unequaled worldwide by other non-farming groups (Moratto 1984:118). These included permanent coastal villages along the Santa Barbara Channel area containing as many as 1000 inhabitants (Brown 1967), as well as a hierarchical sociopolitical organization consisting of at least two major chiefdoms (Whitley and Beaudry 1991). Further, based on recent reconstructions using mission registers, the Chumash appear to have been a matriloclal, and perhaps matrilineal, clan-based society (Johnson 1988).

The Interior Chumash of course lacked direct access to the marine resources that contributed to such unusually high population densities along the Santa Barbara coastline. Adaptation to the environment was therefore more closely tied to terrestrial resources, including especially the acorn-bearing oak, with cultural patterns in general very similar to surrounding interior groups, such as the Yokuts. Notably, however, the Interior Chumash are particularly renowned for their rock paintings or pictographs, important concentrations of which are located on the San Emigdio Ranch and the Carrizo Plain (roughly 25 and 75 miles northwest of the Centennial study area, respectively.) Ethnographic information demonstrates that their cave paintings were made by shamans, and that they depict the supernatural experiences these medicine men had on their vision quests (Whitley 2000).

Less ethnographic information exists on the Kitanemuk and Tataviam (see Kroeber 1925; Blackburn and Bean 1978; King and Blackburn 1978). Like many south-central California groups, however, they may have been organized into recognized and distinct tribelets. These were land-owning groups linked by shared territory and descent from a common ancestor. The tribelet was headed by a chief who was assisted by a variety of assistants. A shaman also existed who served as religious officer but the shaman did not have any direct political authority in a
strict sense. Like other groups in the region, their subsistence emphasized the acorn-bearing oak, with the addition of a wide variety of other plants and game.

Although no ethnographic fieldwork was conducted in the Tejon region until the end of the nineteenth century, the Tejon Ranch area became a multi-ethnic, post-mission period refuge for many Native Americans. Substantial Native American use of the Tejon region in general, thus, continued into the American period. This reflected a number of circumstances, probably the first of which was the initial and relative remoteness of the region from most Euro-American activities. The multi-ethnic nature of this refuge was likewise partly a function of mission conditions, where different tribal groups lived together resulting in an increase in inter-marriage and interaction, as well as the original status of this particular area, where a number of ethnolinguistic boundaries intersected. Equally importantly, the Tejon Ranch was the location of the first Native American reservation in the United States, the Sebastian Reserve, which was created in 1853. The creation of this reservation resulted in the formal establishment of a multi-ethnic Native American enclave though, in reality, this had already been in the making prior to this specific date.

Despite the fact that formal ethnographic work on the Tejon region did not really occur until the early twentieth century, this somewhat intense historical Native American use of the ranch has resulted in a large recorded list of aboriginal place-names. These are important for what they may indicate about pre-contact ethnolinguistic distributions, as well as for the information they provide on the general focus of regional Native American occupation, especially into the historic period. We summarize this information below.

Kroeber (1925) provides the following indigenous place-names on or near the Tejon region: Tecuya, a Chumash village on Tecuya Creek east of the Ranch; Lapau, a Chumash village in Grapevine Canyon; Sasau, Castac Lake; and Tinliu and Pusin Tinliu, near the original Tejon Ranch headquarters. Tinliu, "at the hole," was on Paso Creek, according to Kroeber, was the southernmost Yokuts village, and apparently was at or near the old ranch headquarters. Pusin tinliu is slightly upstream and on Tejon Creek. Although this place-name is commonly (and literally) translated as "place of the dog" (e.g., Giffen and Woodward 1942), Whitley (2000) has argued that the proper transliteration is "spirit helper cave," suggesting that it includes an unrellocated shaman's pictograph site. (Puus or pusin translates both as dog and spirit helper; tinliu is commonly used to denote a cave or rockshelter.) It was probably originally a Kitanemuk village although, as discussed below, it ultimately became the focus for multi-ethnic Native American settlement on the ranch. It is outside of and roughly 20 miles northeast of the Centennial study area.

Another locally-relevant and well-known aboriginal place-name is Kashtiq, which is mentioned in the 1806 account of Father Zaldivia; appears in the records of the San Fernando, Ventura and Santa Barbara missions; and has been identified by various anthropologists as a historic Chumash village. It corresponds to site CA-KER-307, and is located at the eastern end of Castac Lake near Lebec, northwest of the Centennial study area. King (1969) estimated the historic
population of Kashtiq at about 100 inhabitants. There has been some debate about the ethnic affiliation of the inhabitants of this village, with Kroeber (1925) originally assigning it to the territory of the Tataviam (which he called the Alliklik). Johnson (1978) provided additional evidence suggesting that the village was primarily occupied by the Chumash and, as such, represents the easternmost extension of this tribal group. (Note that Johnson's evidence for Chumash occupation of this site may also imply that the Kroeber was mistaken about a possible Tataviam wedge extending northwards between the Chumash and the Kitanemuk, to Pastoria Creek).

Furthermore, Kashtiq is apparently the etymological source for the name “Castac”. This has commonly been translated as “my eyes” (Giffen and Woodward 1942; Bailey 1976). According to historian Frank Latta (1976), the proper translation is “white water,” in reference to the alkali nature of the lake. This translation has been independently verified by Johnson (1978), using John Peabody Harrington’s notes, who translated it as “pond” or “small body of water.” Johnson also suggested that the etymological confusion may have arisen due to transliteration from Chumash to English through Spanish, in which springs or ponds are commonly called ojos de agua; that is, “water eyes.”

Kroeber's Lapau (or Lapnaw), the Yokuts name for this location, is called in Chumash Mat'apxwelxwel and, in Kitanemuk, Shevingatspea. It is a historical village located near the mouth of Grapevine Canyon (Johnson 1997a). In each case this translates as "Cottonwood Place." Based on an analysis of mission records and J.P. Harrington's notes, Johnson (1997a) has demonstrated that this village was occupied primarily although not exclusively by Chumash speakers, with some Southern Valley Yokuts also probably resident. Mission records document births at the village in about 1759 and 1788. No village was described at this location in the account of Fr. José María Zaldivea, who passed through the canyon in 1806, but additional mission and other records suggest that it was occupied again by about 1827. As Johnson notes, it is unclear whether the village was omitted from Zaldivea's accounts simply because it was seasonally unoccupied at the time of his visit, or instead whether it had been abandoned and then re-occupied somewhat later. In either case it is clear that, following the secularization of the mission system, many interior villages were re-occupied as Native Americans returned to their traditional territories. This apparently occurred at both Mat'apxwelxwel and Kashtiq (Johnson 1997b). Regardless of these uncertainties when exactly Mat'apxwelxwel was occupied during the historical period, it has been identified as site CA-KER-4465.

In 1853, Lt. R.S. Williamson traveled through Grapevine Canyon while scouting possible railroad routes through the Tehachapi Mountains and visited Mat'apxwelxwel. At that time it was apparently governed by Antonio, who had been signatory to the unratted Tejon Treaty of 1851 (Heizer 1972).

At about the same time that Williamson was conducting his surveys, Lt. Edward Fitzgerald Beale (discussed in more detail below) established the Sebastian Indian Reservation on the Tejon on the southern edge of the San Joaquin Valley; that is, on the north side of the Tehachapi
Mountains, some distance from the Centennial study area. This was the first Indian reservation in the country. Dividing the reservation into a series of rancherias governed by seven different chiefs, 2500 Indians had been settled and were cultivating 3000 acres of wheat, with 10 miles of irrigation ditches, by 1854 (Giffen and Woodward 1942; Crowe 1957). Antonio was one of these chiefs, with Mat'apxwelxwel possibly representing the westernmost rancheria on the reservation. Others were located at the mouths of the major drainages along the north front of the Tehachapis, where they emptied onto the flats of the San Joaquin Valley. When the reservation was moved to Tulare County a few years later, the remaining Native American inhabitants of the ranch relocated; those from Mat'apxwelxwel first to the village of Kapelexschnach on Tunis Creek and then, in the 1870s, to the Tejon Canyon rancheria of Pusin Tinliu, noted above, where a community existed well into the middle of the 20th century (Johnson 1997a). Descendants of the Native American residents of ranch are now known as the Tejon Band.

Additional information on place-names pertaining to this period have been published by Giffen and Woodward (1942), Latta (1976) and Coluco (1999), among others. Coluco's list is particularly important inasmuch as it was obtained from him by J.P. Harrington in 1923, and Coluco had first moved on the ranch as a ten year old, circa 1850. Coluco provides the following village place-names, which appear to be in a mixture of Chumash and Yokuts languages, and information about them:

Tinliw - This was also known as Tejon Viejo. It was headed by Capt. Antonio Zapatero (who was educated at Mission San Fernando), who had a large adobe house there. Note that this place-name may be in error, as it is usually applied to the Tejon Ranch headquarters. Samuel Bishop, nonetheless, started a ranch here prior to the establishment of the reservation, though he subsequently moved it to Grapevine Canyon. When Edward Beale first moved onto the ranch he made his headquarters at Zapatero's village, and occupied half of his adobe. According to Coluco, the headquarters was only moved to El Paso Creek after two or three years. When the Ghost Dance of 1870 developed and many traveled to the southern Sierra Nevada to participate, the only family that remained at this village was that of Jose. It was ordered abandoned, the houses were torn down, and its remaining occupants moved to Pusin Tinliu.

Tsuitsaw - This was known in Spanish as El Monte en Medio (the Middle Grove). In Kitanemuk it is Toinew Yauliw.

Hoshtsiw - In Spanish this was El Monte de Caporal, or “Caporal’s grove” named after Caporal, a prominent Indian who lived there. It was located about one mile below the Tejon store and ranch headquarters on Paso Creek, at the “Campo de los Vaqueros”. The name was also applied to a place a short distance downstream where there is a deposit of white clay. In 1870, with the Ghost Dance, only Coluco's family and that of Estanislao remained at this village. It was ordered abandoned and they moved to Yauliw.

Laikiw, or El Paso, “the ford.” This is the site of Tejon Ranch store and headquarters commonly known, in Yokuts, as Tinliu. The first U.S. Army encampment was also here, before Fort Tejon was established in Grapevine Canyon. Note, however, that Juan Coluco
gives Tinliw as Zapatero's village (above), probably on Live Oak Creek, whereas Kroeber (1925) and Crowe (1957) also report a Yokuts village named Tinliu at the Sinks of the Tejon, some distance to the north. Hence there is some confusion in the literature about the place-name Tinliu.

Nahantruw - This was across El Paso Creek from the store, and it was where Capt. Remundo lived; that is, this is probably a very localized place-name referring to a portion of the larger village of Tinliu.

Tutruw - This village was located where Las Tunas Creek leaves the hills. Its name means "prickly pear cactus" in Kitanemuk (as does Las Tunas in Spanish). Beale moved some of the Ventureño Chumash who had been living in Grapevine Canyon, at Mat'apxwelxwel, to this village while the Sebastian Reserve was in operation.

Tripohow - The village where Pastoria Creek leaves the hills.

Yauliw - This was located in El Monte (the grove), northeast of the ranch headquarters. There were two or three rancherias here, including one of the largest villages. Antonio del Valle, one of the original Mexican grantees of the Tejon Ranch, had his corral here. During the days of the Sebastian Reserve, about 25 Owens Valley Paiute from Lone Pine were settled here. Coluco lived in a tule house here for a few years, near the homes of Capt. Francisco and Capt. Vicente, after 1870. Eventually, everyone was moved to Pusin Tinliu, although some eventually moved to Cedar Canyon. Latta (1976:128) verifies Vicente's residence at this village and notes that his son was named Santiago.

Santsiw - In Spanish, El Alamo ("the cottonwood"), just east of Yauliw.

Kukukaw - In Spanish, "El Comanche", downstream from Santsiw.

Posun Tinliw - Sometimes given as Pusin Tinliu, this is translated ‘the cave of the dogs’ (see above), but called in Spanish simply La Rancheria. It is on Rancheria or Tejon Creek. This was one of the major villages, with various place-names for minor settlements within it. The inhabitants of the different rancherias were concentrated here starting about 1870.

Kroeber (1925:612) provides a few Kitanemuk village names in his brief summary of their culture (not all of which are Kitanemuk villages, per se). These are as follows:

Nakwalki-ve - This is the principle village "where Tejon Creek breaks out from the hills;" that is, this is the Kitanemuk village known, in Yokuts, as Pusin Tinliu.

Wawopraha-ve - The Yokuts village at Tejon Ranch headquarters on El Paso Creek; that is, Tinliu.

Honewimats - Yokuts village below (north or downstream) of the Tejon headquarters on El Paso Creek; in Yokuts this is Tsuitsau (the same as Coluco's Tsuitsaw).

Chivutpa-ve - Kitanemuk village on Comanche Creek.

Giffen and Woodward's (1942:4) list consists of a map of Kitanemuk territory and sites labeled "Map compiled from field observations by Richard Van Valkenburgh and Malcolm Farmer, 1933, For Los Angeles County Museum.” Van Valkenburgh was, about that time, conducting archaeological excavations in the Castaic Junction area, and was responsible for a number of regional maps of village sites as well as place-name lists. This particular map is interesting
because it appears to represent an effort to establish Kitanemuk (which is referred to as “Gitanemuk” on the map) territory, and it is the most extensive list of Kitanemuk place-names in existence. The orthography for indigenous names is different from that used by Harrington in his transcription of Juan Coluco's place-names, as well as that used by Kroeber. When combined with the fact that these place-names were given to the different ethnographers in one of three (or perhaps even four) Native American languages, it is clear that considerable room for confusion exists. Nonetheless, this map lists the following specifically as Kitanemuk names for Kitanemuk villages:

**Unamia** - On the upper El Paso Creek, above the Tejon Ranch headquarters. This appears to represent the furthest-north Kitanemuk village on this drainage which, in its lower reaches, was occupied by Yokuts. It suggests that the Kitanemuk controlled the headwaters and upland area.

**Mahvie** - A village with a cemetery located on Tejon Creek just above the confluence with Canac Creek.

**Noomimol** - This is midway between Tejon and El Paso Creeks, almost due east of the Ranch headquarters.

**Ueeseuit** - This village is located on Chanac Creek below Cummings Valley.

**Ahcootsetahovie** - This is located on upper Tejon Creek, below the school.

**Whodestecho** - This is just above the school.

**Nacuacavaic** - This is a village with cemetery, above the school; it may be the location of Indian cemetery in Tejon Canyon.

The last three place-names appear to be minor settlements probably within the larger rancheria more commonly referred to (in Yokuts) as *Pusin Tinliu*, the historic Native American settlement on the ranch. Ethnographically, however, this was in Kitanemuk territory (see below).

The Van Valkenburgh and Farmer map also provides a series of Kitanemuk names for apparently Yokuts villages; to the degree that these are correct, they provide additional information about ethnolinguistic territories. These villages are:

**Uneyenatch** - This is on lower Tejon Creek, below the confluence with Chanac Creek.

**Naquarkeyvai** - This is given as the Tejon Ranch Headquarters on El Paso Creek, known in Yokuts as *Tinliu*. It is identified by Kroeber (1925:612) and, following him, Blackburn and Bean [1978:564] as *Nakwalki-ve*. They place it, however, at the location of *Pusin Tinliu*, on Tejon Creek, within Kitanemuk territory. That is, this place-name appears to have been mislocated by Van Valkenburgh and Farmer.

**Honewimate** - This is placed on El Paso Creek, just above the confluence with Tunas Creek.

**Teeshpai** - On Tunas Creek, above the confluence with El Paso Creek.

**Wuwupai** - This is Rose Station, located out towards Wheeler Ridge.

**Couyan** - This may be the village of *Mat'apxwelxwel* at the mouth of Grapevine Canyon. In this case it is identified as Yokuts and given a different name (see below), so it may be another place entirely.
It is hard (if not impossible) to reconcile Van Valkenburgh's and Farmer's toponyms, orthography and transcriptions with those of any other ethnographer, and nothing is known of their informant(s), making an evaluation of their place-name list somewhat difficult. Clearly, however, these differences demonstrate that they were working with different individuals than either Kroeber or Harrington. At least in certain cases, nonetheless, Van Valkenburgh's and Farmer's list can be said to independently verify the other ethnographers' information.

Their map also provides Kitanemuk names for two Chumash villages, both of which are shown in Grapevine Canyon. These are as follows:

- **Tikitspa** - This is located at Fort Tejon, and it appears to be the name for the fort rather than for a Native American village at this location.
- **Sevewgrachapai** - This is placed in Grapevine Canyon, a short distance below Fort Tejon. Clearly this is *Shevingatspea* or, in Chumash, *Mat'apxwelxwel*, but it is mis-located some distance up-canyon on this map.

In addition to these villages, Van Valkenburgh's and Farmer's map also provides a series of Kitanemuk place-names for local physiographic features. These are: *Tongawocot*, Wheeler Ridge; *Moowaykuk*, Grapevine Canyon; *Patsawapaihi*, Castac Lake; *Ahkievaai*, Tehachapi Mountains; *Hunavickita*, “Middle Mountain,” a peak between Tunas and El Paso Creeks; *Cerevit*, a mountain between Tunas and El Paso Creeks; *Coochitohvia*, Tejon Creek; *Ahcuhkinewhoyuk*, the ridgeline south of upper Tejon Creek; *Schcutchitspatch*, Cummings Mountain; *Moomoyuk*, Cummings Valley; *Pacuivuk*, a mountain east of the confluence of Cedar and Tejon Creeks; *Maneeyuk*, a mountain north of the confluence of Cedar Creek; *Whedodovieyuk*, a mountain west of the confluence of Cedar and Tejon Creeks; *Cacanappie*, a mountain east of the confluence of Cedar and Tejon Creeks; *Oshepauit*, a mountain north of Comanche Creek; and *Chiswoopauit*, a spring near the mouth of Comanche Creek.

Notably, Van Valkenburgh's and Farmer's map provides no Kitanemuk names for (or for places within) Pastoria or Live Oak Canyons, with most of the Kitanemuk names starting somewhere between Tunas and El Paso Creeks. (Kitanemuk names for local physiographic features fall east and north of the divide between these drainages, whereas the Kitanemuk names for the physiographic features that are further west are limited to major regional features, such as Castac Lake.) This suggests that Pastoria Creek may not have been within Kitanemuk territory, as first argued by Kroeber (1925). But whether it was occupied by Chumash or Tataviam is still unknown.

Likewise the Van Valkenburgh and Farmer map provides no Kitanemuk place-names for La Liebre ranch. It is unclear whether this reflects the possibility that Kitanemuk territory did not extend into this area, or whether it is due to the vagaries of ethnographic fieldwork and the influences of historical events on the aboriginal population. It does suggest, nonetheless, that La Liebre was not central to the heart of Kitanemuk occupation.
Additional information on historic village locations is provided by Latta (1976). His primary informant was the Mexican-American ranch manager, José Jesus López, who worked on the ranch from about 1874 into the 1930s. Although Latta's information lacks Native American place-names, and hence references the Euro-American names for these locations, it provides very useful information on the occupants and activities that occurred at these spots, especially the Euro-American uses of the village locations. This information may be summarized as follows:

**Rose Station**  - This Yokuts village site, located about six miles NE of the mouth of Grapevine Canyon, was first settled by Euro-Americans circa 1856, by Juan Marmolejo. Originally it was known as Rancho Canoa in reference to the animal watering troughs there. Eventually it was taken over by J.V. Rosemyer. During the 1870s it was the principal Euro-American settlement at the south end of the San Joaquin Valley. The property was purchased by Beale in about 1885 and became part of the Tejon Ranch.

**Tejon Canyon Rancheria** - This is the Kitanemuk village that became the mixed ethnolinguistic community during the historic period. According to Latta (1976:94), Juan Losada was chief of this group. Mateo Martin also lived here, on the south side of the creek, though closer to the ranch headquarters on El Paso Creek – about a half-mile east of them. Martin was a shaman and chief during the reservation days. Mateo Martin's two brothers, Melchor and Camilo, lived with him. Camilo was educated at San Fernando and also signed the 1851 treaty. According to Latta (1976:129), all of the scattered groups were moved here in 1880.

**Zapatero's village** - This is the village ambiguously called *Tinliw* by Juan Coluco (above). While Latta (1976:128) does not provide an aboriginal place-name for it, he states that Zapatero (or Pablo, his baptismal name) was the "most noted chief" on the ranch who lived on a creek that now bears his name, a few miles west of the old ranch headquarters. His "small tribe" farmed milpas just west of the mouth of the creek about a quarter mile above the plains. Zapatero himself lived in a "small Indian hut" across the creek to the east, under a "fine old oak." Elsewhere Latta (1976:143) discusses this as Rancho Viejo, places it on Live Oak Creek about three miles south of its confluence with Pastoria Creek (but see below), and identifies it as the original Sebastian Reserve headquarters. He notes that Samuel Bishop built "extensive adobes" here before 1852 that were already in ruins in 1873. Latta states that the village was abandoned after Fort Tejon was created.

**Pastoria and Sycamore Creeks** - Large rancherias were located at the mouths of these creeks circa 1873.

**Las Tunas Creek** – A large rancheria was also here circa 1873. This is the first creek west of the ranch headquarters on El Paso Creek. Latta (1976:203) states that: "The Indians living along that creek were not all taken to the missions until long after the missions were established." As late as 1875 there were about a dozen small cabins along the creek, each occupied by a different family. Each family had about a one acre milpa where they farmed corn, chilis, onions, beans, potatoes and melons, irrigating their fields from the arroyo which carried water all summer long. These were called the "Tunas Indians." But Latta (1976:293) also says that Zapatero (or Pablo) was a Tunas Indian and headman of the settlement, living at a hot springs at the mouth of the canyon; elsewhere he places him on Live Oak Creek, as does Juan
Coluco (above). Latta further states that Zapatero was educated at Mission San Gabriel, not San Fernando, and that he taught shoemaking (as his name would suggest).

Sinks of the Tunas - Rancheria here until about 1874.

Joaquin's Flat - Located about 4 miles NE of the old ranch headquarters, between Tejon and El Paso Creeks. A rancheria here was occupied by Joaquin (perhaps Joaquin Jose or Jose Joaquin), who was signator to the 1851 Tejon treaty.

El Monte - Rancheria here in 1873, NE of headquarters. It included individuals who had been at Mission San Fernando. Francisco Cota, who signed the 1851 treaty, was the chief.

Between El Paso and Tejon Canyons - On top of a mountain in a white oak flat with a spring, Latta identifies an unnamed village as a "summer camp." This may be Juan Coluco's Noomimol. Regardless of specific identification, it is an indicator of seasonal differences between the villages near or on the valley floor and those in the upland areas.

Comanche Point Rancheria - Named after a part-Comanche Native American who lived at rancheria as late as 1870.

This tabulation and review of known Native American place-names on and around the Tejon Ranch makes clear two very important points with respect to the Centennial study area. First, only one known village is present in the study area, despite the large number of recorded villages on the ranch more generally. This village is hwi'tahovea (site CA-LAN-3256, or CT-60/H), at La Liebre Ranch headquarters.

Second, it is quite clear that effectively all of the historic occupation of the Tejon Ranch by Native Americans, including residence during the brief existence of the Sebastian Reserve and once the Tejon Ranch was in operation, was heavily focused on the lowland zone along the northern edge of the Tehachapi Mountains and the southern margin of the San Joaquin Valley. The Centennial study area, in other words, was peripheral to the primary historical Native American occupation of the Tejon region.

2.3 Archaeological Background

The Tehachapi Mountains region, even though far from remote from other portions of California, has received minimal archaeological attention compared to other areas of the state. In part this is probably due to the fact that the majority of California archaeological work has concentrated in the Sacramento Delta, Santa Barbara Channel and Mojave Desert areas (see Moratto 1984). Although our knowledge of the prehistory of this region is therefore limited in specific details, enough is known to determine that the archaeological record is broadly similar to south-central and central California as a whole (cf. Hewes 1941; Wedel 1941; Fenenga 1952; Elsasser 1962; Fredrickson and Grossman 1977). Based on this fact, the general prehistory of the region containing the Centennial study area can be outlined as follows.

Initial occupation of the region occurred at least as early as the Paleoindian Period, or prior to about 10,000 YBP (years before present). Evidence of this early use of the region has been
revealed by the discovery of characteristic fluted and stemmed points found around the margins of Tulare and Buena Vista Lakes, in the foothills of the Sierra (Fredrickson and Grossman 1977), and in the Mojave Desert. (In each case these are locations that are many miles distant from the Centennial study area.)

Both fluted and stemmed points are particularly common around the lake margins, suggesting a terminal Pleistocene/early Holocene lakeshore adaptation similar that found in other portions of the far west at this same time, although little else is known about these earliest peoples. Additional finds consist of a Clovis-like projectile point discovered in a flash-flood cut-bank near White Oak Lodge in 1953, northeast of the study area (Glennan 1987a, 1987b). More recently, a similar fluted point has been found near Bakersfield (Zimmerman et al 1989), while a number are no known from the Edwards Air Force Base and Boron area of the western Mojave Desert. Although it has now been well-established that human occupation of the state occurred during the Late Pleistocene, little can yet be inferred about the nature and distribution of this occupation.

Substantial evidence for human occupation of California first occurs during the middle Holocene, from roughly 7500 to 3500 YBP. This period is known as the Early Horizon, and is sometimes alternatively referred to as the Early Millingstone along the Santa Barbara Channel. In this southern area, population concentrated along the coast, with minimal visible use of inland areas. Adaptation appears to have emphasized hard seeds and nuts, with tool-kits dominated by mullers and grindstones (manos and metates). Minimal evidence of Early Horizon occupation has been found in most inland portions of the state. In part this is due to a severe cold and dry paleoclimatic period which occurred at this time.

Evidence for an Early Millingstone occupation of this specific region is, admittedly, very limited, and has been found at only two sites, located in the Santa Clara River Valley, to the south. Both of these are near Vasquez Rocks, with temporal attribution based on the presence of a small number of Olivella barrel beads (McIntyre 1990). Such bead types have subsequently proven unreliable temporal indicators, throwing doubt on human inhabitation of this region before about 4000 years ago. Further, recent excavations at one of these putative early locales, the Escondido Canyon Site, failed to uncover evidence for occupation prior to about 2700 years B.P. (Love 1990). Regardless of specifics, it is clear that Early Horizon population density was quite low and, if any kind of specialized subsistence adaptation existed, it was probably tied to plant food gathering rather than hunting.

Environmental conditions improved dramatically after about 3500 YBP, during the Middle Horizon (or Intermediate Period). This period is known climatically as the Holocene Maximum and it was characterized by significantly warmer and wetter conditions than were experienced previously. Archaeologically it was marked by a large population increase and radiation into new environments along the south-central California coast and the Mojave Desert (Whitley 2000). In the Delta region to the north, this same period of favorable environmental conditions was marked by the appearance of the Windmiller culture which exhibited a high degree of ritual elaboration.
especially in burial practices and perhaps even a rudimentary mound-building tradition (Meighan, personal communication, 1985). Along with ritual elaboration, Middle Horizon times experienced increasing subsistence specialization, perhaps correlating with the appearance of the acorn processing technology. Penutian speaking peoples (which would include the Yokuts) are also posited to have entered the state roughly at the beginning of this period and, perhaps, brought this technology with them (cf. Moratto 1984). Likewise we have hypothesized that the so-called "Shoshonean Wedge" in southern California, or the Takic speaking groups that included the Gabrielino/Fernandeño, Tataviam and Kitanemuk, may have moved into this region at this time, rather than at about 1500 BP as first suggested by Kroeber (1925).

Evidence for Middle Horizon occupation of the Upper Santa Clara/Agua Dulce region, in Tataviam territory south of the study area, is substantial, in that it has been found at a number of sites and has been based on radiocarbon, obsidian hydration and typological dating (McIntyre 1990). The Agua Dulce village complex, for example, includes occupation extending back to the Intermediate Period, at which time population of the village may have been 50 or more people (King et al n.d.). Similarly, the inhabitation of the Hathaway Ranch region, near Lake Piru, and on Newhall Ranch, near Valencia, appears to have begun during the Intermediate Period (W & S Consultants 1994). To the northwest, there is little or no evidence for pre-Middle Horizon occupation in the upper Sisquoc and Cuyama River drainages (Horne 1981).

Assuming that the Tejon Ranch/Tehachapi Mountains region was first significantly occupied during the Middle Horizon, as existing evidence now suggests, a parallel can be drawn to the inland Ventura County region, where a similar pattern has been identified (Whitley and Beaudry 1991), as well as possibly the Antelope Valley and western Mojave Desert (Sutton 1988a, 1988b), the southern Sierra Nevada (W & S Consultants 1999), and the Coso Range region (Whitley et al 1988). In all of these areas a major expansion in settlement, the establishment of large site complexes, and an increase in the range of environments exploited, appear to have occurred sometime roughly around 3500 years ago. Although most efforts to explain this expansion have focused on very local circumstances and events, it is increasingly clear that this was a major southern California-wide occurrence, and therefore that any explanation of it must be sought at a larger level of analysis (Whitley 2000).

The beginning of the Late Horizon is set variously at 1500 and 800 YBP, although a consensus seems to be growing for the shorter chronology for this time period. As such, the appearance of the Late Horizon correlates with another major drought at circa A.D. 1200 which decimated major portions of western North America. This is known, climatically, as the Little Ice Age, and it extended from about A.D. 1280 to 1860. In much of inland south-central California and in the Mojave Desert, a large-scale abandonment of sites appears to have occurred at the approximate start of this period. It is not yet clear whether this site abandonment was accompanied by a true reduction in population or instead an agglomeration of the same numbers of peoples into fewer but larger villages. In either case, the Late Horizon presents a series of regional archaeological cultures that are the precursors to ethnographic Native California. The Mojave Desert and Antelope Valley, to the east, however, appear to be all but abandoned during this period. Not
surprisingly, given the extreme drought like conditions, Late Prehistoric villages tend to be strongly tied to permanent water sources.

2.4 Historical Background

Perhaps because of its geographical remoteness for the coast, Euro-American settlement and development of the Tejon Ranch/Tehachapi Mountains region was a little later dating than in other parts of southern California. As a result, its Euro-American history to about the 1850s principally involved the explorers who traversed the area.

As a major obstacle between southern and northern California, the Tehachapis, Upper Santa Clara Valley and Antelope Valley region was traversed by a series of the most famous explorers of California during the earliest part of its history. For example, Pedro Fages crossed the area in 1772, passing through Lake Hughes and Tejon Pass; Fr. Garcés, with de Anza, traveled through the Lake Hughes and Castaic region and probably spent a week on what would become the Tejon Ranch, in 1776; Fr. Jose Maria Zaldivea, coming from Santa Barbara in 1806, found Castac Lake and Cañada de las Uvas (Grapevine Canyon); Jedediah Smith, in 1827, also went through the region during his fur-trapping escapades; as did John C. Frémont and his guides, Kit Carson and Alex Godoy, in 1830 and 1844. And in 1847-1848, Frémont spent the winter in the original Tejon Pass area, now known as Tehachapi Pass, on the Tejon Ranch (Giffen and Woodward 1942; Crowe 1957; Walker 1962; Settle 1963; Boyd et al. 1982; McIntyre 1990).

During the latter portion of this exploratory period, from 1843 to 1846, grants for four large ranches were awarded that, eventually, would be united into the Tejon Ranch by Edward Fitzgerald Beale between 1855 and 1865. Most likely, this flourish of interest in this then isolated portion of southern California was precipitated by the discovery of gold in Placeritas Canyon, to the south of the Tejon, in 1842. The first of these awards was the Rancho Los Alamos y Agua Caliente ("cottonwoods and hot water"), acquired by Pedro Carillo from Governor Micheltorena on 2 October 1843. Less than two months later (11 November 1843), the original Rancho El Tejon ("the badger") was awarded to José Antonio Aguirre and Ignacio del Valle by the governor, representing a grant of almost 100,000 acres. Less than two weeks subsequently (22 November 1843), the approximately 22,000 acres Rancho Castac (Chumash for "spring-eye"; in Spanish "ojo de agua") was obtained by José María Covarrubias. Finally, on 21 April 1846, Rancho La Liebre ("the hare") was granted to José María Flores. It was 11 square leagues, or almost 49,000 acres in size (Giffen and Woodward 1942; Crowe 1957). The Centennial study area primarily falls within Rancho La Liebre, with a small southwestern portion of it extending into fee lands that were not originally part of these land grants.

Probably partly due to remoteness, but also likely influenced by the political and other disruptions that occurred at the end of the 1840s (with the transfer to and settlement of Mexican California by Euro-Americans and the United States government), these land grants were all but unused by their grantees. One result was an early encroachment on them by Euro-Americans who either assumed the lands were unclaimed and therefore open for settlement, or who knew
about the land grants but paid them little heed. For example, in Spring, 1850, Dr. Darwin French moved onto Tejon Ranch proper and built an adobe. Due to unrest among Native Americans in the southern Sierra Nevada, he departed in 1851, subsequently becoming renowned for his involvement in the exploration and settlement of the Death Valley region. Likewise Alonzo Ridley and David McKenzie came into the Tejon region to trade with the Native Americans in May, 1852. Around this same time Samuel A. Bishop moved into the area, settling on what was Castac Rancho (Giffen and Woodward 1942). But probably the best known, and ultimately most important, of the early "settlers" who, in effect, squatted on rancho lands, was Edward F. Beale, who in 1853 created the first Indian reservation on what he thought was unclaimed land, available for government use.

Beale (born 1822, died 1893), as noted above, ultimately united these four ranchos into the El Tejon Ranch between 1855 and 1865. His first purchase was Rancho La Liebre, which he acquired in 1855 for $1500.00 – or about 3 cents per acre. Beale acquired El Tejon for $21,000.00, and Los Alamos y Agua Caliente for $1700.00, in 1865. In 1866 he completed his empire with the purchase of Castac for $65,000.00 (Crowe 1957). This had passed from the original grantee, Covarrubias, to Albert Packard of Santa Barbara, who subsequently sold it to Samuel Bishop. Beale purchased it from Bishop. Because the original Spanish land-grants for these ranchos did not represent a contiguous holding, Beale "re-adjusted" the boundaries of Los Alamos y Agua Caliente northward between Castac and La Liebre to form a unified property (Latta 1976:193). The result was a ranch of about 265,000 acres – roughly half the size of the state of Rhode Island – purchased for approximately $90,000.00 (Crowe 1957).

Note that there are certain discrepancies in the historical accounts concerning these ranchos, particularly La Liebre. While there is agreement that this rancho was first awarded to one José Maria Flores, there were a number of individuals with this name in California in 1846 and there are contradictory statements concerning which one was the recipient. According to Crowe (1957:49), Flores was the well-known secretary of Governor Micheltorena who went on to lead the Californio revolt against John C. Frémont in 1845. Bancroft (1963:741) notes that this Flores eventually left for Sonora, Mexico, in 1847, where he ended his days as a general in the Mexican army. But Bancroft (ibid) furthermore lists another José Maria Flores as the original grantee of La Liebre, and notes that he was the claimant for it in an 1853 U.S. land claim – demonstrating fairly certainly that this was not the same General Flores cited by Crowe who, because of his leadership in the Californio insurrection, was persona non-grata in California at that time. The José Maria Flores who in fact received the original grant, and petitioned for its U.S. recognition in 1853, is otherwise unmentioned in historical accounts. Giffen and Woodward (1942:46) note however that a small silver mine, La Trinidad, was discovered on La Liebre in 1859, but that this never experienced significant production.

Despite the discrepancy in the accounts, La Liebre Ranch was apparently first sold to William C. Walker on 2 August 1855 for $1500. Walker resold the 48,825 acres six days later for the same price to Beale's wife (Crowe 1957:49). This was the first land sale in the Antelope Valley. Shortly after the purchase, Beale built an adobe on the ranch and moved his family there.
Beale is an important, albeit somewhat overlooked, figure in southern California history. A descendant of a series of famous American naval heroes, he began his adulthood as a midshipman (and eventually Lieutenant) in the U.S. Navy. This brought him to California where he was a hero in the Battle of San Pasqual during the Mexican War, and served as the official messenger who brought the first word of the discovery of gold at Sutter's Fort back to Washington, D.C., in 1848 (Crowe 1957). Retiring from the Navy in 1851, he went to work as the California business agent for Commodore Stockton and Aspinwall's steamship company. In nine months he netted $100,000.00 for this company, of which $13,000.00 was his commission. This provided the foundation for his ultimate wealth, and signaled his business acumen (Bailey 1957).

Beale's personal familiarity with the Tejon region apparently began with his appointment as Commissioner of Indian Affairs for California and Nevada, by President Fillmore, in 1852 (Giffen and Woodward 1942). Unlike many associated with federal Indian affairs in the 19th century, Beale was both sympathetic towards and honest with his Indian charges. As noted above, he established the Sebastian Indian Reservation on the Tejon at the foot of the Tehachapis, near the present ranch headquarters on Paso Creek, which contained about 2500 Indians cultivating approximately 3000 acres of wheat, with 10 miles of irrigation ditches, by 1854 (Crowe 1957).

The Sebastian Reserve, as it was officially known, was originally planned to cover 75,000 acres but, probably due to political reasons, was reduced in size to only 25,000 acres, and its boundaries were never surveyed (Giffen and Woodward 1942). It territory is hence unclear, beyond certain specifically identified village locations and the fields around them. What is certain is that the reserve fell on the open flats of the southern San Joaquin Valley, extending southwards to include the mouths of the canyons, where permanent creeks debouched onto the valley floor. Villages were established at these canyon mouths, which provided water for farming, and fields were established immediately below; large deep ditches (rather than fences) were excavated around the irrigated fields to keep out cattle. The mouth of Grapevine Canyon may have contained the westernmost village on the reserve; others are known to have existed at the mouths of Live Oak, Pastoria, El Paso, Tejon and Chanac Creeks (above), as well as at some areas in between. The reservation was, thus, a long distance north of both Rancho La Liebre and the current Centennial study area.

At this same time Beale was also instrumental in convincing the U.S. Army that a fort would be well-situated on the Tejon, both to protect the Indians on the Sebastian Reservation from exploitation by Euro-Americans, and to prevent raiding into the greater Los Angeles Basin by "renegade" Indians from the Tulare County and Colorado River regions.

Initially a contingent of soldiers was quartered on El Paso Creek, at what was then the headquarters of the Sebastian Reserve. They were shifted to Fort Tejon, in what is now referred to as the "Tejon Pass," in 1854, and the modern town of Lebec. The fort fell on Rancho Castac,
which was then owned by Bishop. The fort continued in use, with a break at one point, until the end of the Civil War. A civilian settlement sprung-up around the fort and, at its peak, it was the third largest population center in southern California (after Los Angeles and El Monte). When finally abandoned on 11 September 1864, the fort was returned to Bishop, per the original terms of his agreement with the U.S. Army. Shortly thereafter, Castac Rancho (including the fort) was acquired by Beale.

Beale's success as Commissioner of Indian Affairs was apparently his downfall, as he found that treating the Indians fairly created many enemies among those concerned with using the Bureau of Indian Affairs as a source for illicit gains. He was forced out over trumped-up charges concerning the misappropriation of funds, despite the fact that he received strong support from the press and public. After demonstrating that the charges were invalid, Beale began his acquisition of the Tejon Ranch (Giffen and Woodward 1942). With the purchase of the La Liebre Ranch, Beale moved into the Tejon region. His original home, the adobe at La Liebre Ranch headquarters, is still standing, and is the oldest structure in the Antelope Valley (Settle 1963). Ultimately Beale moved his residence to the El Tejon headquarters on El Paso Creeks. A fire in 1917 destroyed his original adobe there (Crowe 1957).

However, the purchase of the Tejon did not terminate Beale's career as a public official. Subsequently he was appointed the first Surveyor-General of California and Nevada by President Lincoln; a Brigadier General for the State of California militia; and, by President Grant, Minister to the Austro-Hungarian Empire (Crowe 1957). In addition, Beale was instrumental in the creation of the U.S. Army Camel Corps, authorized by Jefferson Davis (who was then Secretary of War) in 1857. With this appointment, he brought camels into the Tejon region, where they were used for a number of years as pack animals (Bailey 1957; Boyd et al 1982).

During this period, and even though Fort Tejon was, for a decade, a "major" population center in southern California (with 920 inhabitants, exceeded only by Los Angeles, with 4385, and El Monte, with 1004), the Tejon was still geographically remote and isolated. Granted, it was traversed by the first stage route, the Butterfield Overland mail stage established in 1858, which had stops at Lake Elizabeth, Cow Springs, Fort Tejon and the "Sinks of the Tejon" ("Los Alamitos," below the confluence of the Tejon and Chanac Creeks) on the ranch (Bailey 1957; Boyd 1983). But the stage was somewhat an impetus to draw outlaws: for many years the ranch was known as the "Refuge of the Bandits", and served as a haunt for Joaquin Murrieta and Tiburcio Vasquez and their gangs (Latta 1976). Moreover, because of various economic competitions with the directors of the Southern Pacific Railroad, the rails were routed 50 miles to the east, through the Antelope Valley, to avoid traversing Beale's land in 1876 (Settle 1963:23), continuing its geographical isolation from other parts of southern California.

Nonetheless the Overland stage route did cross the Centennial study area, skirting Quail Lake before heading to Gorman Station – the last stop before Fort Tejon. Quail Lake was originally known as *La Laguna Seca*, 'dry lake' (Latta 1976:31), and thus presumably did not hold perennial or potable water; hence the stage station at nearby Gorman. This was built by Charles Johnson
and his wife Isabel in 1863, who built a log cabin "public house" at this spot. When Johnson
died his wife continued to run the establishment and it became known as Rancho La Viuda,
'widow's ranch.' She eventually sold it to David Alexander (who also owned Rancho San
Emigdio), and he ultimately sold it to James Gorman, Sr., who was a veteran of the Mexican War
and worked as a meat-hunter for Fort Tejon (Latta 1976).

Initially, the economic emphasis of the Tejon Ranch was in sheep and, at its peak, over 125,000
were grazing on the ranch (Crowe 1957; Latta 1976). It was not until the 1880s, after a number
of years of drought, that cattle were introduced on the ranch (although Beale had recorded the
Tejon brand – the crescent and the cross – in 1865). By 1891, there were about 25,000 head of
cattle and 7500 sheep grazing on the ranch. Following Beale's death in 1893, the ranch was
inherited by his son, Truxton, who completed the transition to cattle (Crowe 1957).

Truxton Beale sold the Tejon Ranch in 1912 to a syndicate headed by Harry Chandler (original
developer of the San Fernando Valley) and General Harrison Gray Otis (founder of the Los
Angeles Times) for $3,000,000.00. Among the blue-ribbon subscribers to the syndicate, each of
whom paid $50,000.00 to enroll, was H.J. Whitley, original developer of "Hollywoodland" (now
known as "Hollywood"), along with a series of other southern California notables. This formed
the nucleus of what has evolved into the modern Tejon Ranch Company. The syndicate
increased the acreage of the ranch to 281,000 acres through a series of strategic purchases.
Because cattle activities did not immediately prove profitable, sales of various rights-of-way to
public utilities initially aided the company's cash flow. More recently, the ranch has operated in
part by leasing acreage to various farming, oil and cattle interests. By 1957, 70% of the land of
the Tejon Ranch was operated under lease (Crowe 1957).

The first commercial oil production on the ranch, by the Reserve Oil and Gas Company, was
developed in August 1937, with the field abandoned by mid-1943. Shortly thereafter the
shallower Richfield Oil Corporation pool was discovered. Originally called the "Grapevine Oil
Field," this is now more commonly known as the "Tejon Oil Field." The western portion of this
field was also drilled by the British-American Oil Producing Company, the Wilshire Oil
Company, Chanslor-Canfield Midway Oil, and the Drilling and Production Company. These oil
fields are location on the flats of the San Joaquin Valley, far to the north of the Centennial study
area.

Oil exploration within La Liebre Ranch, in contrast, was restricted to the drilling of about a half-
dozen test wells in 1953 - 1954. These were shallow wells (approximately 1200 - 2400 feet)
drilled in search of over-thrust oil pools. Bedrock proved to be shallow in this area, however,
eliminating this potential, and the wells were all abandoned as non-producers (Jeff Warren,
personal communication, 2002). No commercial oil production ever occurred within La Liebre
Ranch, as a result.

Today large-scale farming, oil and gas production, and cattle grazing continue on the ranch.
The Centennial study area has, as its current primary use, livestock (cattle) grazing, and
recreational activities (hunting). These reflect the fact that this portion of the ranch is still peripheral to the major economic activities within the landholding. Moreover, this is a further reflection of the fact that the Centennial area historically was peripheral to the major events, activities and developments on the ranch, with the exception of the use for a short period of the La Liebre Adobe as the original Beale residence.
3.0 ARCHIVAL RECORDS SEARCH

An archival records search was conducted at the California State University, Fullerton, Archaeological Information Center (AIC), by AIC staff members to determine: (i) if prehistoric or historical archaeological sites had previously been recorded within the study area; (ii) if the project area had been systematically surveyed by archaeologists prior to the initiation of this field study; and/or (iii) whether the region of the field project was known to contain archaeological sites and to thereby be archaeologically sensitive. The results of this archival records search are included in this document as Appendix A.

The records search at the AIC indicated that no previous archaeological surveying of any kind had been conducted within the Centennial study area, with one exception. This consisted of a linear pipeline corridor near the western edge of the study area. No archaeological sites were recorded within the study area during that survey. Additional surveys had been conducted within the general region containing the Centennial study area, however. Site density overall appeared to be relatively low in this region, judging from these previous studies but, inasmuch as they only covered a very small portion of the region, they were in fact inadequate to judge archaeological sensitivity.

Despite the lack of previous recorded sites at the AIC, the review of historical documents, discussed above, indicated that one archaeological site is adjacent to the study area. This is the Beale Adobe at La Liebre headquarters, and the historical aboriginal village of hwi'tahovea associated with this adobe.
4.0 FIELD SURVEY METHODS

An intensive field survey of the Centennial study area, Los Angeles Counties, California, was conducted by David S. Whitley, Ph.D., Joseph M. Simon, Tamara K. Whitley, M.A., Robert Snibbley, Viki McFadden and Vee Vignole from July through December, 2001. The field methods employed included intensive, on-foot examination of the ground surface; the identification and location of any discovered sites, should they be present within these areas; tabulation and recording of surface diagnostic artifacts; site sketch mapping; preliminary evaluation of site integrity; and site recording, using established procedures and forms. No collection of archaeological remains was made during the Phase I survey.

Because the study area contains topographic variability, different surveying strategies were employed during the survey. In the areas of flat terrain to moderate slopes, the ground surface was examined with the crew spaced at approximate 10 meter intervals, walking transects across the study area to identify artifacts or other archaeological indicators that might be present on the ground surface. The steeper slopes (generally exceeding the angle of repose) were covered by crew-members walking zigzag transects that traversed the slope faces.

In all cases, special attention was paid to depositional environments, such as saddles, swales and toe slopes, where the likelihood of archaeological preservation is enhanced. Further, rock faces, amenable for the creation of rock art or providing locales for quarries, and rock shelters, usable for prehistoric habitation, were carefully examined as high likelihood spots for the presence of prehistoric archaeological remains.

Note further that two different strategies for survey intensity were followed, reflecting the fact that the survey extended beyond the proposed project area. For the majority of the study area, representing the proposed project per se, survey coverage was complete (100%). In addition, intensive coverage occurred along the northern edge of Quail Lake, also immediately outside of the project area. A different strategy was employed for a smaller upland area south of Highway 138 and immediately north of Tentrock Canyon. This hilly zone, designated the "Southern Area" is intended for preservation in open space. Because it falls outside of the project area and will not be developed, it was surveyed purposively, with coverage limited to high probability areas. These included flat open areas, stable landforms in canyon bottoms and other areas containing springs or other water sources; that is, locations where sites are likely to be occur.
5.0 SURVEY RESULTS

5.1 Field Conditions

The field survey was conducted during the Summer and Fall, 2001, after spring vegetation had dried and subsequent to substantial grazing by cattle. In general terms field conditions were then very good to excellent: groundcover tended to be very sparse, allowing for thorough examination of the surface.

5.2 Field Results - Intensive Survey of Project Area

As noted above, survey coverage strategies differed between the project area, *per se*, and the "Southern Area" in open space. All of the project area was surveyed intensively; that is, with 100% coverage. A total of 57 archaeological sites was identified and recorded in this portion of the study area. These sites are described as follows:

**CA-LAN-3194 (Temporary designation CT-1):** Midden at north end of Oso Canyon, primarily on east side of drainage and west of main N-S dirt road, adjacent to dense oak grove, but midden appears to extend onto west bank of creek and therefore extends into the project area. Artifacts include mortar hopper base; rhyolite and chert primary and secondary flakes; fire cracked rock; possible piece of shellfish; and possible fragment of historical glass. Site size estimated at 100 m N-S by 50 m E-W, with site extending a short distance onto west side of arroyo. Artifact density is very low; age is unknown but possibly Late Prehistoric. Site is in good condition.

**CA-LAN-3195 (CT-2):** Possible midden associated with spring. Located on N side of stream bench of E-W trending tributary of Oso Canyon, which enters Oso from W at approximate location of CT-1 (above). Artifacts include large uniface flake/chopper, low-grade metavolcanic fire-cracked rock and possible midden soil; density is very low. Age unknown. Size estimated at 75 m E-W by 15 m N-S. Site is in good condition.

**CA-LAN-3196 (CT-3):** Buried midden deposit at confluence of Oso Canyon and tributary containing 19-003195 (above). Midden is on both sides of steep arroyo cut; north and east side buried by about 40 cm of fines; south and west side daylights in slope; the midden deposit is much as two meters thick. We noted fire-cracked rock and a possible eroding hearth. Site size appears to be 25 m N-S by 75 m E-W. Site is of unknown age and appears to be in good condition.

**CA-LAN-3197 (CT-4):** This is a single, very shallow bedrock mortar (BRM). It is located on a low grano-diorite boulder immediately adjacent to the west side of Oso Canyon Road, just S of where the road crosses the creek. Site size is 1 m diameter; site is in good condition.
CA-LAN-3198 (CT-5): Large midden/village in narrow stretch of Oso Canyon, near its mouth. N-S dirt road through canyon is graded into midden deposit; primary site area is west of road (and creek) and is capped by about 40 cm of colluvium. High density of fire-cracked rock observed in road. Also noted primary and secondary flakes of chert and rhyolite and a broken, small boulder containing a bedrock mortar. Size estimated at about 150 m N-S by 50 m E-W. Site is in good condition but of unknown age.

CA-LAN-3199 (CT-6): This is another very shallow, single bedrock mortar (BRM) on a low grano-diorite boulder. The boulder is located on a low rocky finger-ridge along the west side of Oso Creek, at a bend in the stream, near the canyon mouth. Site size is 1 m in diameter and the site is in good condition.

CA-LAN-3200 (CT-7): Small midden deposit/village on W side of Oso Creek, at large Y-intersection with dirt road leading W to a modern hunting camp (and thus at W tributary canyon mouth to Oso). Road has been graded into midden deposit. Midden soil, fire-cracked rock and five pieces of debitage (2 jasper and 2 basalt comprising 3 primary and 1 secondary flakes; and 1 piece of green tabular Temblor chert) observed. Artifact density is low; size estimated at 100 m diameter. Site condition is good.

CA-LAN-3218H (CT-8H): Historic, silted-in reservoir with concrete spillway and water intake structure, located in Oso Creek approximately 600 m downstream (E) of canyon mouth. Dam and spillway appear to have been destroyed in a major flood event. Large trees are growing in spillway bottom, suggesting some age for feature. Site area approximately 50 m diameter; condition is very poor.

CA-LAN-3219H (CT-9H): Oil drilling site located about 200 m W of Oso Canyon mouth, in E-W tributary canyon mouth. Site is on N side of canyon on N side of E-W dirt road, and just W of low N-S ridge. Artifacts include low to moderate density surface scatter of fire-bricks, 1 sanitary seal can, 1 glass condiment bottle, miscellaneous sheet metal, wire nails, metal pipe, wooden beams, large metal conical threaded bolt, wire cable, three asphalt concentrations, small concrete foundation, and a capped 2 inch metal stand-pipe. Fire brick is embossed with LAP CO over three stars. Also present is a low dirt berm running E from artifact scatter to low N-S ridge, creating a small catch basin. Site area is about 150 m E-W by 50 m N-S. Site is in poor condition and dates from 1953 - 1954, the period of oil exploration on La Liebre Ranch.

CA-LAN-3201 (CT-10): Small cupule site in large sandstone outcrop at head (W end) of canyon containing CA-LAN-3219. Outcrop is southernmost in E-W trending series of small monoliths. It is on S side of the canyon and consists of 3 boulders, one of which is quite high (circa 20 - 30 feet). Cupules are in a small W-facing alcove in this high boulder, about 8 feet above ground. The cupules are on the E side of this alcove and are about 2 cm in diameter and about 2 cm deep. Eleven cupules are present. These consist of two closely spaced and parallel lines of four each, with a third parallel line of three cups about twice the distance below. A broken white quartz cobble, possibly left as an offering, is on the ground immediately below the
cupules. Site area is about 10 m in diameter and the site is in good condition but of unknown age. Cupule sites in this region appear to have been used ethnographically in girls' puberty rituals (Whitley 2000).

CA-LAN-3202H (CT-11H): This is a historic ranch homestead at the W end or top of the E-W tributary canyon leading to Oso Canyon mouth; two cottonwood trees mark the location. The site contains the remnants of a fallen water tower (galvanized tank on a trestle frame on a concrete foundation), and at least two wood-frame structures (with 4x6 floor joists on top of possible fieldstone foundations; one circa 10 x 15 m in size, the second 10 x 5 m). Artifacts include a medium density scatter of framing timber, wire nails, 55 gallon drums, sheet and galvanized metal, wire mattress springs and coils, car seat coil springs, purple glass fragments, metal stove pipe, electrical parts, iron hay rake, and a tubular sheet metal brooder box with a metal tag stating: SHOULD YOU WRITE US REGARDING over THIS BROODER SPECIFY over No C158T over PROTECTED BY U.S. PATENTS over SEARS, ROEBUCK & CO. A small trash pit is present at the south end of the site; this contains tire rubber, 2 enamel pots, a stove-top and broken glass. The site measures roughly 100 m E-W by 50 m N-S, and it appears to be Depression Era in age. It is in fair condition.

CA-LAN-3203 (CT-12): This is a small midden deposit and bedrock mortar (BRM) location situated at the N (top) end of a very small E-W trending valley, N and above the W end of Quail Lake. A large sandstone outcrop forms the approximate W end of the site; this contains 11 mortar holes, one of which still contains an unshaped pestle. Organic midden soil containing 2 hammerstones, calcined animal bone, fire cracked rock and Haliotis shell nacre stretches E and downhill from this outcrop. Possible campstone/hearth features are eroding out of a non-midden soil deposit on a low ridge forming the S edge of the site. Overall site size is about 75 m N-S by 100 m E-W. The site is in good condition but is of unknown age.

CA-LAN-3204H (CT-13H): This is a Depression era/post-prohibition dump located on the south side of a steep slope below a dirt road above the W end of Quail Lake. We observed a dense concentration of glass bottles (e.g., Clorox, vinegar, ketchup, Canada Dry ginger ale, "Clicouot Club" green soda and pint whiskey bottles with post-Prohibition inscriptions); a chipped beef jar; cone top and "church-key" beer cans; pre-World War I car engine cover and headlight reflector pans; sanitary seal cans; AA batteries; 1 gallon kerosene cans; sardine cans; boot souls; pots; galvanized roofing; tire rubber; miscellaneous wire and sheet metal; car seat springs; etc. The site measures approximately 10 m E-W by 25 m N-S and is in good condition. It may be associated with CA-LAN-3202H which is fairly close nearby (and whose dump is smaller than expected, given the size of this ranch homestead). The dump dates to the 1930s.

CA-LAN-3205 (CT-14): This is a BRM station located on a low sandstone outcrop at the north end of a very wide but short canyon overlooking the aqueduct near the western end of the study area. Five mortar holes are present; these vary from shallow to moderate (~10 cm) in depth. The site is in good condition and covers an area about 4 x 1 m in size.
**CA-LAN-3206 (CT-15):** This is a buried midden deposit at the NW limit of a broad and short canyon near the western side of the property. The midden is buried by about 1 m of colluvium, and is evident in the sidewall of a small but deeply entrenched N-S arroyo. The dark organic deposit is approximately 1 m thick itself, and appears to cover an area roughly 20 m N-S by 75 m E-W. In addition to the midden soil, a sandstone bowl fragment, primary and secondary basalt flakes, quartzite biface cobble chopper and fire-cracked rock were observed. The site is in good condition but of unknown age.

**CA-LAN-3207 (CT-16):** This is a single BRM on a large sandstone boulder in the middle of a creek in a deep N-S drainage. The boulder is approximately 2 x 3 m in size, and the drainage is immediately west of the dirt road running N from the Bailey Substation. The site is in good condition but of unknown age.

**CA-LAN-3208 (CT-17):** This is a single shallow BRM on a low sandstone boulder located in a NW-SE trending offshoot of the Bailey Substation Canyon; that is, within this small drainage bottom, which enters the larger canyon from the W, about mid-way to the top. The site measures about 1 m in diameter and is in good condition but of unknown age.

**CA-LAN-3209 (CT-18):** This is a large BRM station located on the S edge of a high and broad ridge system, near the western study area boundary. The site is situated on either side of a very small drainage that comprises the headwaters of the arroyo containing buried site CA-LAN-3206, a few hundred feet below; very steep slope and a "water fall" in the dry drainage separate the two sites. At CA-LAN-3209, four grano-diorite boulders contain BRMs. Boulder #1, on the E side of the arroyo, contains 2 shallow BRMs. Boulder #2, about 50 m to the S and also on the E arroyo side, likewise has 2 shallow BRMs. Boulder #3, due W of #1 and on the W side of the arroyo, has a single shallow BRM. Boulder #4 is a low but large boulder in the channel bottom that contains 4 BRMs. No surface artifacts or midden deposit were observed at this location but, given the concentration of BRMs, it is possible that they may be present. Current overall site size is estimated at about 75 m in diameter. The site is of unknown age and is in good condition.

**CA-LAN-3210 (CT-19):** This is a single, shallow BRM on a low sandstone boulder, on the W side of a small channel that is ultimately tributary to Oso Canyon, and about 1 m above the channel bottom. The site is about 1 m in diameter, is of unknown age, and is in good condition.

**CA-LAN-3211 (CT-20):** This is a sparse lithic scatter measuring about 30 m in diameter. We observed 1 piece of chert angular shatter, 1 quartzite flake and 2 quartzite cobble tools. The site is located approximately 10 m W of a road intersection along southern margin of a saddle, N of the aqueduct inlet to Quail Lake. The site is in good condition but of unknown age.

**CA-LAN-3220 (CT-21):** This site is a low-density cobble quarry/workshop consisting of discontinuous lithic scatters and associated cobble concentrations. These cover an area about 75 N-S by 300 m E-W. We noted angular shatter, cores and cobble tools. These are primarily quartzite with a few igneous cobble tools; total artifact numbers were only about 10 specimens.
so artifact density is very low. The site is located approximately 200 m N of Quail Lake on a long N-S trending ridge line that descends to the northern edge of the lake. It is in good condition but is of unknown age.

**CA-LAN-3223 (CT-24):** CT-24 is a medium density cobble quarry/workshop consisting of discontinuous lithic scatters and associated cobble concentrations. It is roughly 100 m E-W by 150 m N-S in size. We observed about 25 specimens on the site, including angular shatter, cores and cobble tools. These are primarily quartzite but a few igneous cobble tools are also present. The site is located approximately 600 m N of the Quail Lake inlet on a broad knoll that overlooks CA-LAN-3224 and the northern edge of Quail Lake. The age of CA-LAN-3223 is unknown but it is in good condition.

**CA-LAN-3224 (CT-25):** This is a second medium density and relatively large (~150 m N-S by 200 m E-W) cobble quarry/workshop consisting of discontinuous lithic scatters and associated cobble concentrations. We observed about 20 archaeological specimens consisting of angular shatter, cores and cobble tools. As at the previous sites, these are primarily quartzite with a few igneous cobble tools also present. The site is located roughly 450 m N of the Quail Lake inlet along a long, terraced N-S trending ridge-line that descends to a large saddle and knoll on the northern edge of Quail Lake. It is in good condition and its age is unknown.

**CA-LAN-3212 (CT-26):** This is a low-density cobble quarry/workshop consisting of lithic scatter and associated cobble concentrations. It measures about 30 m E-W by 60 m N-S. We observed a total of about 10 quartzite cobble cores and pieces of angular shatter at this location. The site is located approximately 60 m N of Highway 138 along the northern side of a small knoll, near the southwestern limit of the study area. The age of the site is unknown and it is in good condition.

**CA-LAN-3213 (CT-27):** This is a medium density cobble quarry/workshop consisting of a lithic scatter and associated cobble concentration. It measures about 30 m E-W by 50 m N-S. Artifacts present include angular shatter, cores and cobble tools; these are primarily quartzite with a few igneous cobble tools, and they totaled approximately 30 items. CT-27 is located roughly 250 m N of Highway 138 along the top of a small NW-SE trending ridge-line, near the western limits of the Centennial study area. Its age is unknown and it is in good condition.

**CA-LAN-3214 (CT-28):** This is again a medium density cobble quarry/workshop consisting of a lithic scatter and associated cobble concentration. Size of this site is estimated at 90 m E-W by 125 m N-S. We observed approximately 20 examples total of quartzite angular shatter, cores and cobble tools along with two chert flakes at this location. The site is located approximately 300 m N of Highway 138 along the toeslope of a small NW-SE trending ridge-line, near the western study area boundary. It is in good condition. Its age is unknown.

**CA-LAN-3225 (CT-29):** This is a low-density cobble quarry/workshop measuring about 30 m E-W by 150 m N-S. It consists of a lithic scatter and associated cobble concentrations. It
contains about 10 specimens total consisting of quartzite cobble cores and angular shatter. The site is located about 60 m S of CA-LAN-3223 along a narrow N-S trending ridge-line. The site area has been heavily impacted by an MCI underground cable right-of-way which follows the ridge-line through the center of the site. The site's age is unknown.

**CA-LAN-3226 (CT-30):** This site is a low-density cobble quarry/workshop associated with a small cobble concentration. It is approximately 30 m in diameter and we observed 1 quartzite hammerstone and 2 pieces of quartzite angular shatter at this location. This site is located about 100 m S of CT-29, along the southeastern edge of a small N-S trending ridge-line. It is of unknown age but is in good condition.

**CA-LAN-3227 (CT-31):** This is a relatively large (125 m E-W by 215 m N-S) medium density cobble quarry/workshop consisting of discontinuous lithic scatters and associated cobble concentrations. We observed approximately 40 specimens total consisting of quartzite angular shatter, cores, flakes and cobble tools along with a few igneous cobble tools. This site is located approximately 600 m N of Quail Lake along the top of a large E-W trending knoll. It is in good condition and is of unknown age.

**CA-LAN-3215 (CT-32):** This site is a large low but density cobble quarry/workshop. It measures roughly 60 m E-W by 450 m N-S and consists of discontinuous lithic scatters and associated cobble concentrations. Quartzite cobble cores, flakes and angular shatter were present, for a total of about 25 archaeological specimens. The site is located about 100 m S of CT-10 along a long narrow E-W trending ridge-line. CA-LAN-3215 is in good condition but is of unknown age.

**CA-LAN-3229 (CT-34):** This site is another low-density cobble quarry/workshop associated with a small cobble concentration. It is approximately 30 m in diameter and we observed 3 quartzite cobble cores and 1 quartzite flake on the site. It is located approximately 125 m SE of CT-31 along the southwestern edge of a large broad E-W trending ridge-line. It is of unknown age and is in good condition.

**CA-LAN-3230 (CT-35):** This site is a medium density but small (~15 m diameter) cobble quarry/workshop consisting of a lithic scatter and associated cobble concentration. Quartzite angular shatter, cores, and cobble tools (totaling approximately 15 specimens) were noted when the site was recorded. It is located about 250 m N of CA-LAN-3228, along the northeastern edge of a large broad knoll. The site is in good condition but its age is unknown.

**CA-LAN-3231 (CT-36):** This is another low-density cobble quarry/workshop associated with small cobble concentration. It measures about 60 m in diameter and we noted 1 quartzite cobble tool, 4 quartzite cores and 1 quartzite hammerstone on the site surface. It is located approximately 80 m E of site CA-LAN-3223, along the southern rim of the same E-W trending ridge-line. It is of unknown age and is in good condition.
CA-LAN-3232 (CT-37): Another low density cobble quarry/workshop associated with discontinuous cobble concentrations, located along a narrow E-W trending ridgeline that is approximately 125 m W of the paved two-lane National Cement Road. Site area is estimated at 30 m E-W by 150 m N-S. We observed 4 quartzite cobble cores at this location, which is in good condition but of unknown age.

CA-LAN-3233 (CT-38): Site CT-38 is a low-density cobble quarry/workshop measuring about 30 m in diameter that is associated with a small cobble concentration. We recorded 2 quartzite cobble tools, 2 quartzite cores and 2 quartzite flakes and 1 igneous flake at this location, which is of unknown age. The site is located approximately 300 m E of the paved two-lane National Cement Road along the southern toe slope of an E-W trending ridge-line, and it is in good condition.

CA-LAN-3234 (CT-39): This is another low-density cobble quarry/workshop associated with a small cobble concentration. Its size is estimated at 30 m in diameter. When recorded it contained 4 quartzite cores, and it is of unknown age. The site is located roughly 350 m E of the paved two-lane National Cement Road along the southern toe slope of an E-W trending ridge-line that is 300 m N of Highway 138. The site is in good condition.

CA-LAN-3235 (CT-40): This is a rock cairn containing mixed igneous clasts ranging from fist to boulder size, and measuring 2 by 3 m in overall area. The site is located approximately 300 m N of Highway 138 on the western end of the long E-W trending ridge-line that contains site CA-LAN-3237. It is in good condition but is of unknown age and function. That is, it may prove to be historical/Euro-American in age and affiliation rather than aboriginal/Native American, but the rocks had a heavy covering of lichen, suggesting considerable age.

CA-LAN-3236 (CT-41): This site is a low-density cobble quarry/workshop associated with a small cobble concentration. Its size is estimated at about 30 m E-W by 100 m N-S. We observed 5 quartzite cores at this location and its age is unknown. It is located approximately 60 m SE of CA-LAN-3237 and 360 m N of Highway 138 on the same E-W trending ridge-line that contains sites CA-LAN-3237 and -3235. The site is in good condition.

CA-LAN-3237 (CT-42): This is a small (measuring about 60 m in diameter), low-density cobble quarry/workshop associated with small cobble concentration. We observed 3 quartzite cores and 1 quartzite flake at this location. The site is located approximately 60 m NW of CA-LAN-3236 and 480 m N of Highway 138, on the same E-W trending ridge-line that contains sites CA-LAN-3235 and -3236. The age of this site is unknown but it is in good condition.

CA-LAN-3238 (CT-43): This is a medium density cobble quarry/workshop consisting of a lithic scatter and associated cobble concentration. It measures approximately 20 m E-W by 40 m N-S. We observed about 30 archaeological specimens at this location, consisting of quartzite angular shatter, cores, cobble tools, 1 quartzite flake and 4 jasper flakes. The site is located
approximately 450 m N of Highway 138 and 250 m N of CA-LAN-3235 along the southern edge of a long E-W trending saddle. It is in good condition but is of unknown age.

CA-LAN-3239 (CT-44): This site is a medium density cobble quarry/workshop consisting of discontinuous lithic scatters and associated cobble concentrations. Its size is estimated at 60 m E-W by 300 m N-S. We noted about 30 archaeological specimens on the site, including quartzite angular shatter, cores, cobble tools and 3 flakes. It is located about 600 m N of Highway 138 and 900 m NE of CA-LAN-3238, along the top of a large E-W trending ridge-line. It is in good condition but is of unknown age.

CA-LAN-3216H (CT-45H): This site dates from 1949 and it represents a jet aircraft crash located at the western boundary of the Centennial study area. The recorded locality measures about 75 m E-W by 175 m N-S, but it appears to be part of a larger debris field that extends westward outside of the study area. Crash debris observed within the study area consists of 5 jet engine turbine blades from two or more compressor stages, a fuel line connector with attached safety wire, and 16 assorted aluminum airframe structural fragments.

According to records we have obtained of this crash (Army Air Forces 1949), it occurred at 7:55 am on 10 June 1949 and involved two F-86 Sabre jet fighters. These were piloted by Capts. William A. Higgins and Richard E. Barr, both with the 94th Fighter Squadron, 1st Fighter Wing, at March Air Force Base. The pilots flew a two-wing formation on a B-50 bomber intercept-training mission. About two miles E of Gorman they made a high-rear intercept pass and, due to pilot error, suffered a mid-air collision during their break-away, with the right wing of Higgins' jet hitting the fuselage of Barr's plane and demolishing its jet power unit. Higgins was killed on impact; Barr ejected from his plane and parachuted to the ground, suffering various major injuries. According to a Highway Patrol officer's witness account, the collision and resulting explosion occurred at high altitude about three miles E of where the planes crashed, with plane parts and parachute drifting NW to the ground. A sketch map made at the time of the accident investigation suggests that the recorded site area represents the SE extreme of the spread of plane parts resulting from the crash.

The F-86 Sabre, made by North American Aviation, was the second generation U.S. Air Force jet fighter and both it and its predecessor (the F-80, made by Lockheed) were developed immediately after World War II; the F-86 was the first swept-wing fighter. According to Lt. Col. E.D. Whitley, USAF, Ret. (personal communication, 2002), who was a Command Pilot during this period, March AFB had the first F-80 Wing and one of the first F-86 Wings in the country. By 1949 the F-86 was in operational status, but had only been so for a short period. This site, thus, represents an early incident in the use of this aircraft and likewise in the development and use of jet fighter technology.

CA-LAN-3240 (CT-46): This is a low-density lithic scatter measuring about 90 m E-W by 350 m N-S. We observed 12 jasper flakes and a granitic metate on the site. Note that these lithic materials are distinct from the majority of other sites in the study area. Combined with the fact that the site sits on a well-oxidized sandy loam, this suggests that this location may also differ in age from the other sites, potentially being older. The site is located at bench mark Wood-3163
on a N-S trending bluff that is situated on the southern edge of the Oso Creek wash. This places it near the northern limit of the study area. The site is in good condition.

**CA-LAN-3241 (CT-47):** This is a plant processing locale associated with a small cobble concentration. It covers an area about 125 m in diameter. We recorded 2 bifacial igneous manos, 3 quartzite cobble cores, 1 hammerstone, 1 granitic metate, 1 jasper uniface flake tool and 1 piece of jasper angular shatter on the site. As at nearby CT-46, soils here consist of well-oxidized sandy loam, suggesting that the site may be the same (potentially early) age as this previous locality. This site is located 200 m E of CA-LAN-3240, on the northern end of a broad NE - SW trending bluff that is situated on the southern edge of the Oso Creek wash. The site is in good condition.

**CA-LAN-3242 (CT-48):** This site is a low-density cobble quarry/workshop associated with a small cobble concentration. It measures about 90 m E-W by 150 m N-S. Artifacts noted at the time of recording included 1 rhyolite uniface cobble tool, 1 quartzite hammerstone fragment, 1 jasper core and 1 jasper flake. The site is located approximately 30 m NE of benchmark Pipe-3062, along the northeastern toeslope of the same NE - SW trending ridge line that contains sites CT-49 and -50 (below). This places it immediately overlooking the open flats of the western Antelope Valley, to the east. The site is in good condition but of unknown age.

**CA-LAN-3243 (CT-49):** This is a medium density cobble quarry/workshop associated with a large continuous cobble concentration. It covers an area measuring 60 m E-W by 180 m N-S. It contains about 35 archaeological specimens, including quartzite cobble cores, hammerstones, flakes and 1 jasper flake. It is located about 180 m SW of benchmark Pipe-3062, along the top of the same NE - SW trending ridge line that contains site CA-LAN-3244. The site is in good condition but of unknown age.

**CA-LAN-3244 (CT-50):** This is a low-density cobble quarry/workshop associated with a large discontinuous cobble concentration. It measures approximately 60 m N-S by 700 m E-W, and we observed about 50 specimens on it, including quartzite cobble cores, hammerstones, flakes and 2 jasper cores. It is located about 450 m SW of benchmark Pipe-3062, on the same NE - SW trending ridge line that contains site CA-LAN-3243. Site CA-LAN-3244 is of unknown age and is in good condition.

**CA-LAN-3245 (CT-51):** This site is a medium-density cobble quarry/workshop associated with a large continuous cobble concentration. It measures about 60 m N-S by 200 m E-W. We observed about 35 archaeological specimens including quartzite cobble cores, hammerstones and flakes. The site is located about 800 m SW of benchmark Pipe-3062 and 200 m S of site CA-LAN-3244. Though its age is unknown, it is in good condition.

**CA-LAN-3246 (CT-52):** This is another low-density cobble quarry/workshop associated with a small cobble concentration. It covers an area about 30 m in diameter. Two quartzite hammerstones and 2 quartzite flakes were observed on the site, which is located approximately
150 m NE of Quail Lake along the southwestern edge of a large broad bluff that is immediately W of the paved two-lane National Cement access road. The site is in good condition and is of unknown age.

**CA-LAN-3247 (CT-53):** This site is a low-density cobble quarry/workshop associated with a small cobble concentration. It measures about 30 m N-S by 60 m E-W. We observed 2 cores, 1 uniface cobble tool and 1 piece of angular shatter, all made of quartzite, at this site. This site is located in a saddle at the top of a large knoll (map elevation 3154 ft.) approximately 350 m S of site CT-51, and thus towards the eastern side of the study area. The site is in good condition. Its age is unknown.

**CA-LAN-3248 (CT-54):** This is a medium-density cobble quarry/workshop associated with a large continuous cobble concentration. It covers an area roughly 60 m E-W by 200 m N-S. About two-dozen archaeological specimens were noted on this site, including quartzite cobble cores, tools and angular shatter. The site is located about 200 m W of the California Aqueduct canal and 90 m SE of a large knoll (map elevation 3445 ft. It is in good condition but its age is unknown.

**CA-LAN-3249 (CT-55):** This is the second rock cairn discovered during the Phase I survey. It measures 1 x 2 m in size and contains mixed igneous clasts ranging from fist to boulder size. The cairn is located about 450 m E of the California Aqueduct canal and 350 m N of site CA-LAN-3250. Its rocks are covered by lichen and hence it may be old. It is in good condition.

**CA-LAN-3250 (CT-56):** This is a low-density cobble quarry/workshop associated with a small cobble concentration. It covers an area estimated at 30 m in diameter. We recorded 1 core, 1 hammerstone and 1 uniface cobble tool, all made of quartzite, on the site. It is located approximately 425 m E of the California Aqueduct canal and 350 m S of site CA-LAN-3249 and it is in good condition, although of unknown age.

**CA-LAN-3251 (CT-57):** This is yet another low-density cobble quarry/workshop associated with a large discontinuous cobble concentration. It measures about 150 m N-S by 350 m E-W and contains a total of about 30 specimens, including quartzite cobble cores, cobble tools and angular shatter. It is located 75 m S of site CA-LAN-3252 on a large flat ridge that is immediately E of the California Aqueduct canal. Its age is unknown and it is in good condition.

**CA-LAN-3252 (CT-58):** This is a low-density cobble quarry/workshop associated with a large discontinuous cobble concentration. It measures about 90 m N-S by 450 m E-W. We observed about two-dozen archaeological specimens on the site including quartzite cobble cores, cobble tools and angular shatter. It is located 75 m N of site CA-LAN-3251 on a long narrow ridge that is immediately E of the California Aqueduct canal. It is in good condition. Its age is unknown.

**CA-LAN-3253 (CT-59):** This site is a low-density cobble quarry/workshop associated with small cobble concentration. It is estimated to be about 60 m N-S by 90 m E-W in size. We
noted 1 basalt flake, 1 basalt uniface cobble tool and 1 quartzite uniface cobble tool on the site. It is located on a long narrow E-W trending ridgeline that is approximately 600 m N of the intersection of Highway 138 and the National Cement paved two-lane access road. The site's age is unknown. It is in good condition.

**CA-LAN-3217 (CT-63):** The final site recorded within the project area is located on a low, gravel-covered N-S trending ridge a short distance W of Quail Lake. It is a low-density quarry/workshop containing quartzite debitage, angular shatter and core/cobble complex tools. It measures approximately 125 m in diameter and is in good condition, although of unknown age.

**5.3 Additional Recorded Sites – Outside of Project Area**

In addition to the intensive surveying of the project area, purposive surveying occurred in certain surrounding areas; specifically along the northern edge of Quail Lake and in the hilly upland area immediately north of Tentrock Canyon, which is open-space. Six additional sites were recorded in and around these areas.

**CA-LAN-3221 (CT-22):** This is another low-density cobble quarry/workshop associated with a small cobble concentration. It is about 30 m in diameter. We recorded 2 quartzite hammerstones and 2 quartzite flakes. The site is located approximately 300 m N of Quail Lake along the southern end of north/south trending ridge line that is due E of CA-LAN-3220, essentially at the project area boundary. It is in good condition and is of unknown age.

**CA-LAN-3222 (CT-23):** This is a low-density cobble quarry/workshop associated with a small cobble concentration. As with the previous site, it is about 30 m in diameter. One quartzite cobble core, 1 quartzite flake, 1 piece of quartzite angular shatter, 1 basalt flake, and 1 fresh water clam shell were observed. This site is located about 100 m N of Quail Lake along the southern portion of NE-SW trending low ridge line that is southeast of CA-LAN-3221. CA-LAN-3222 is of unknown age. It is in good condition.

**CA-LAN-3228 (CT-33):** This is a sandstone boulder (1 x 3 m in size) with five BRMs and seven possible cupules. Mortar depths range from about 3 to 10 cm. The boulder is located 10 m W of a N-S trending ephemeral channel that flows S approximately 150 meters to Quail Lake. The site is in good condition but is of unknown age.

**CA-LAN-3254 (CT-60/H):** This is La Liebre Adobe, built by Beale circa 1855, and the historic Tataviam village of *hwi’itahovea*. Note that this site strictly falls outside of the project area as well as the open-space Southern Area but, because of its proximity to the open-space, it warranted recording.

The size of the site is estimated at roughly 175 m E-W by 1000 m N-S but it is irregularly shaped and, in one case, discontinuous. It consists of at least three components.
The first is the primary midden deposit. This starts at least 50 m N of the standing adobe and extends upstream (S) approximately one-half mile, on both sides of Tentrock Canyon Creek. Note however that two factors impeded our estimate of the size of this midden during the survey. First, D-G has been spread over the ground surface around the adobe and hence visibility was limited in this area (although enough slope margins were present to positively determine that the midden was present). Some grading has also occurred north of the adobe and this has changed the original ground surface configuration. Second, the midden extended southwards up Tentrock Canyon well-beyond our area of examination and hence our evaluation of its southern extent was cursory rather than definitive. In the area around the adobe the midden it appeared to be at least 50 cm thick, however, and it contained fire-cracked rock, calcined animal bone and lithic debitage of various kinds.

A second site component is a discrete midden patch located in a small saddle area of a ridge immediately south of the adobe. This is a Y-shaped deposit measuring a maximum of about 25 m in diameter but, within it, we observed large brownware pottery sherds, an obsidian knife fragment, fused shale debitage, calcined animal bone and a Middle Period atlatl point tip made of Monterey chert.

It seems likely, given its location, that this is the Tataviam-named village of kwitsa’o referenced in Mission records, although it is in fact much too small to have held the almost two dozen initiates said to come from this spot. Instead good argument can be made that it and the Kitanemuk-named hwi’tahovea, at the adobe, are different names (in different languages) for the same village. This evidence consists of the clear indications, even from a Phase I survey, that the midden deposit at the adobe represents much more than a historic post-mission occupation; as the size and apparent depth of this midden make quite obvious, this site was occupied for a lengthy period extending back into the prehistoric past.

The adobe, the third site component, is currently in use as the headquarters/office of a hunting club. In general terms it is in very good condition, consisting of a single-story, L-shaped structure that is approximately 23 m long (E-W); by about 6 m wide (N-S) in the longer "arm" of the L, which is one-room deep; with the "base" of the L, at the W end of the building, about 15 m wide by about 8 m long. This is two or more rooms deep. (Note that we did not enter the structure and hence all our measurements are approximate). It currently has a sheet metal roof and a gallery/porch around all sides, except for the back of the L base. This has been enclosed as a small wood-frame addition storage room.

From what we could observe through the windows, the interior of the adobe appears to be finished with Victorian-era woodwork, including white painted ~4 feet high wood-slat wainscoting, door frames and some built-ins. The front door also is vernacular Victorian in style, with side and transom lights. The structure was apparently renovated in the last decade, however. Insofar as we can tell, this appears to have primarily involved new plaster and paint,
and perhaps plumbing and wiring. The only obvious architectural change are new double-frame, double-hung metal windows, with 2x4 sills and 1x4 frames.

That is, while this building has experienced various phases of renovation, repair and remodeling, this appears to have been minimal from the perspective of its architectural integrity. It retains its period architectural fabric, despite the fact that it was the first house built in the Antelope Valley. This site is clearly very significant, and is almost certainly eligible for the National Register of Historic Places. It is important to emphasize, however, that it falls outside of the project area, and in fact is separated from the project area by the open-space Southern Area.

**CA-LAN-3255 (CT-61H):** This is a historic trash dump located about 300 m E/NE of the Beale Adobe (discussed above), on the south side of a small tributary canyon entering Tentrock Canyon from the west. It consists of 5 discrete dumps, each of which is individually fairly small, but covering an overall area of about 50 m N-S by 100 m E-W. All of the dumps contain materials dating to the early twentieth century, and appear to essentially be individual trash loads. Noted artifacts included primarily hole-in-top cans with some sanitary seal cans, broken glass (some of which was purple), broken whiteware (much of which was crazed) and other ceramics (including a large red-glazed earthenware crock, whiteware teapot and Chinese porcelain), wire, barbed wire, tire rubber, seat springs, barrel hoops, chrome car grill, and buggy wheels.

One of the whiteware ceramic sherds (probably a dinner plate fragment) had the following maker's mark: RADIE SON over GEORGE over 641. We have not been able to identify or date this mark but the sherd was heavily crazed, suggested a roughly pre-1920 age. A large clear glass bottle bottom had the following mark: ERR GLASS MANUFACTURING COMPANY over SAND SPRINGS, OK over PAT. AUG. 31, 1915, thus indicating a post-1915 age. We also identified a metal, stirrup-shaped auto security device with the following inscription: SECURITY AUTO THEFT SYSTEM over PATENT AUG. 25, 1914 over SECURITY MANUFACTURING COMPANY, SUCCESSORS TO MILLER-CHAPMAN. How this was supposed to prevent car theft is entirely unclear. It was however, obviously deposited sometime after 1914.

This site is most likely related to the early twentieth century occupation of the Beale adobe. The trash deposited at the site is a lightly unusual mix of household debris (broken ceramics and tin cans), with some ranch-related items (barrel hoops and wire) and auto parts. Notably missing were liquor/alcohol bottles, which are normally found in contexts such as these. The site is intact.

**CA-LAN-3256 (CT-62):** This is a small prehistoric site located on the S side of the juncture of the small W-trending tributary canyon where it conjoins Tentrock Canyon. This places it on a small low ridge above the Tentrock Canyon Creek to the E. We observed faint midden soil, chert and fused shale flakes, a chert burin, unshaped pestle and a large atlatl point fragment. Calcined animal bone was also present, some of which was coated with calcium carbonate. The
site covers an area roughly 50 m in diameter and is in good condition. It appears to be Middle Period in age and is probably a small camp.
6.0 SUMMARY AND RECOMMENDATIONS

6.1 Summary

An archival records search, background studies, and an intensive, on-foot surface investigation of the Centennial study area, Los Angeles County, California, were conducted as part of a Phase I archaeological survey. The record search indicated that the study area had never been systematically surveyed by archaeologists, and no sites had been previously recorded within it. Background studies, however, indicated the presence of at least one site near to but outside of the limits of the study area: the historical Tataviam village of hwi’tahovea and the Beale adobe, at La Liebre headquarters. Note that the study area extended beyond the limits of the proposed project area, incorporating a hilly upland open-space zone along the southern limits of the proposed project.

Survey resulted in the discovery, recording and preliminary evaluation of 63 archaeological sites within the study area. Six of the total are historical (Euro-American) in age and attribution; 54 are prehistoric (i.e., Native American); one site (the La Liebre headquarters) has both Native and Euro-American components; and the origins of two of the sites are as yet not known. Fifty-seven of the sites fall within the project area. Three sites are outside of the project area, lying between its limits and northern edge of Quail Lake. Two sites are in the upland open-space area. The sixth site, La Liebre headquarters (including the Beale adobe and its associated village), is located immediately south of this open-space area and strictly thus falls outside of both the project area and the slightly larger study area.

For the prehistoric localities, site types include middens/habitations (villages and camps; 9 total), bedrock mortar (BRM) stations (8), plant processing locales (1), rockshelters with rock art (1), sparse lithic scatters (2) and, especially, quarry/workshops (34). Habitations are restricted to the northern and southern margins of the study area, along the foothills and in valleys/drainages. Rockshelters in fact are quite rare, due to the unfavorable nature of the bedrock exposures within the study area; only one was found and the rock art at this location was restricted to cupules (ground cups). No other rockshelters with cultural remains of any kind were identified. BRM sites are typically small (i.e., with only one or a few mortar holes) and only lightly used (with shallow mortars), but at least one site consists of a large concentration of mortars, and one midden site has numerous deep BRMs associated with it.

Quarry/workshops are the most common site type in the study area, by a large margin. These are almost invariably associated with natural exposures of quartzite cobbles in alluvial lens in the central and eastern portions of the study area. Generally speaking, these sites are low density and appear to represent opportunistic as opposed to systematic lithic procurement and reduction. Given the nature of the lithic remains at these sites, the production of large flakes appears to have been the primary intent and the flakes also appear to have been removed from the sites without further modification.
Two of the prehistoric sites (CA-LAN-3240 and -3241) are notable from the perspectives of location, contents and soils/geomorphic context. The flaked stone at these sites, unlike the other sites in the study area, is almost entirely desert jasper. Both sites contain groundstone indicative of plant processing, and both are located on old stable landforms and soils, immediately overlooking the Oso Creek wash. Although all we can do is speculate at this point, we hypothesize that these two locations may be earlier dating than many of the other sites in the study area.

Historical sites include a Depression era homestead and a dump, a ranch reservoir, an exploratory oil drilling locale dating from 1953 - 1954, a 1949 jet airplane crash site, and an early twentieth century dump. In general terms, however, and with the exception of the adobe at La Liebre headquarters, the study area apparently was some distance removed from the major focus of prehistoric as well as historical occupation and use of what is now Tejon Ranch, which was centered on the San Joaquin Valley far to the north of the Centennial study area.

Finally, two rock cairns were recorded. Both are of unknown cultural affiliation, age and function.

6.2 Recommendations

Site CA-LAN-3254H (CT-60/H) is the historical Tataviam village of *hwi’tahovea – kwitsa'o*, along with the associated Beale adobe, both located at La Liebre Ranch headquarters. The midden deposit comprising the Tataviam village contains a wide diversity of artifacts, ranging from stone tools to subsistence remains. It is likely that it also includes intact subsurface features, such as housepits, hearths and, potentially, human burials. The Beale adobe, similarly, is the first building constructed in the Antelope Valley. It is significant on this count as well as due to its connection with Beale himself, given his historical importance in the settling of the west. Existing evidence therefore demonstrates the clear significance of this site, regardless of whether this is calculated in terms of archaeological research potential or Native American heritage concerns or historical heritage values. Although this site is outside of both the project and study area, we recommend that it be preserved in perpetuity. We also recommend that the two additional identified sites located in the open-space Southern Area, CA-LAN-3255H AND -3256, be preserved in open-space.

Site CA-LAN-3219H (CT-9H) is an exploratory oil drilling locale dating from 1953-1954. Based on this fact it does not meet the 50 years age criteria for historical significance. Any development at or adjacent to this recorded site location therefore does not have the potential to adversely impact significant cultural resources, and we recommend no additional archaeological work or preservation measures at this location.

Site CA-LAN-3218H (CT-8H, similarly, is a historical ranch reservoir dating to sometime during the 20th century. However, it was clearly abandoned due to its destruction during a major flood
event and is now in a very poor state of preservation. Based on this fact, it is not considered a significant cultural resource, and no additional archaeological work or preservation measures are recommended for it.

Sites CA-LAN-3221 (CT-22), -3222 (CT-23), and -3228 (CT-33) are quarry/workshops that fall outside of the proposed project area. We recommend that these sites be preserved in perpetuity.

Following CEQA, we recommend that any potential adverse impacts to the remaining 57 prehistoric and historical sites within the Centennial project area be mitigated by avoidance and site preservation. Alternatively, should avoidance and preservation be unfeasible for any of these sites, we recommend that such sites be further evaluated by Phase II test excavations and determinations of significance, and that final management recommendations for the treatment and disposition of these sites be based on the baseline data obtained in such an investigation.
7.0 CITED REFERENCES

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Coluco, Juan

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1999 Class III Inventory/Limited Archaeological Testing Program for the Ducor Telephone Project, Kennedy Meadows, Tulare County, California. Manuscript on file, CSUB AIC.

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Wedel, W.

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Whitley, D.S. and M.P. Beaudry

Whitley, D.S., G. Gumerman IV, J. Simon and E. Rose

Zimmerman, K.L., C.L. Pruett, and M.Q. Sutton
8.0 FIGURES

Figures 1 – Location of Centennial Study Area, Los Angeles County, California.
Figures 2–5– Archaeological site locations within the study area.

Due to site sensitivity/confidentiality issues, Figures 2-5 have been omitted from the public version of this document.
Figure 1: Project location on Lancaster, CA. 1:100 000 USGS quad.
9.0 APPENDIX A: ARCHIVAL RECORDS SEARCH
July 19, 1999

RE: Records Search Request for the Neenach School, La Liebre, and Lebec Quadrangles

Dear Mr. Simon,

As per your request received on July 15, 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 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.
## RESOURCES AND REPORTS:

<table>
<thead>
<tr>
<th>Quadrangle:</th>
<th>Sites:</th>
<th>Reports:</th>
<th>Built Environment</th>
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<tr>
<td>La Liebre</td>
<td>None</td>
<td>LA1456, LA2987, LA964, LA2416, LA2988</td>
<td>None</td>
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<tr>
<td>Neenach School</td>
<td>None</td>
<td>LA2988, UCAS-018</td>
<td>None</td>
</tr>
</tbody>
</table>

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 inquiries. Requests made after invoicing will result in the preparation of a separate invoice with a $15.00 handling fee.

Sincerely,

[Signature]

Janette Anne Dinishak
Information Center Staff
ITEMID: LA1456                  DATE: 1978                  PAGES: 38
AUTHOR: MCINTYRE, MICHAEL J.
FIRM: USFS
TITLE: Archaeological RECONNAISSANCE REPORT: PACIFIC CREST TRAIL -
ANTELOPE VALLEY A.R.R. (ARR NO. 05-01-53-41
AREA: 45 ac, 15 li mi
SITES: CA-LAN-1137, KER-1616

QUADNAME: LIEBRE MTN
LA LIEBRE RANCH

MEMO:

ITEMID: LA2416                  DATE: 1967                  PAGES: 5
AUTHOR: LEONARD, N. NELSON, III
FIRM: UCLA AS
TITLE: UCLA Archaeological Survey FIELD PROJECT NUMBER UCAS-211,
BETWEEN RT. 4 AND RT. 267.
AREA: 5 li mi
SITES: none

QUADNAME: LA LIEBRE RANCH
LEBEC

MEMO:

ITEMID: LA2987                  DATE: 1987                  PAGES: 200
AUTHOR: Woods, Clyde M., Andrew York, Rebecca Apple, Tirzo Gonzalez, Stephen Van Wormer, Tom Demere, and James H. Cleland
FIRM: Dames & Moore
TITLE: Bicep Transmission Project Magunden to Vincent/Pardee
Alternative Corridor Study Archaeology, Ethnology, History and Paleontology Technical Reports (Draft)
AREA: 70 li mi
SITES: 19-000676, 19-000405, 19-000806, 19-000947, 19-000951, 19-000952, 19-000954, 19-000955, and several
non-trimominal sites

MEMO: Same as VN1285
ITEMID: LA2988  DATE: 1994  PAGES: 9

AUTHOR: Robinson, R.W.
FIRM: Consulting Archaeologist
TITLE: A Cultural Resources Investigation of Approximately Nine Hundred and Forty Acres Located in the Western End of Antelope Valley, Los Angeles County, California
AREA: 940 ac
SITES:

QUADNAME: La Liebre Ranch
Neesnach School

MEMO:

ITEMID: LA964  DATE: 1980  PAGES: 4

AUTHOR: Robinson, R. W.
FIRM:
TITLE: Cultural Resources INVESTIGATION SUBMITTED TO A & T DESIGN, RE CONDITIONAL USE PERMIT NO. 1662 AND TRACT NO. 40106
AREA: 75 ac
SITES: none

QUADNAME: LA LIEBRE RANCH

MEMO:
ITEMID: LA1786  DATE: 1980  PAGES: 115
AUTHOR: Kelly, John, Phil Hines, and Alexa Luberski
FIRM: CALIFORNIA DEPT. OF PARKS AND RECREATION
TITLE: THE Cultural ResourceS of HUNGRY VALLEY
AREA: 20000 ac
SITES: CA-LAN-903, LAN-904, LAN-905, LAN-906, LAN-907,
      LAN-908, LAN-909, LAN-910, LAN-911, LAN-912,
      LAN-914, LAN-946, LAN-965H
      VEN-567, VEN-577, VEN-579, VEN-593, VEN-599H,
      VEN-600H
QUADNAME: BLACK MOUNTAIN
          FRAZIER MOUNTAIN
MEMO:

ITEMID: LA2127  DATE: 1990  PAGES: 20
AUTHOR: Bissell, Ronald M.
FIRM: RMW PALEO Associates, INCORPORATED
TITLE: Cultural ResourceS RECONNAISSANCE of A 64 ACRE PARCEL NEAR
      GORMAN, LOS ANGELES COUNTY, CALIFORNIA
AREA: 64 ac
SITES: none
QUADNAME: LEBEC
MEMO:

ITEMID: LA2239  DATE: 1990  PAGES: 18
AUTHOR: Shinn, Juanita
FIRM: RMW PALEO Associates
TITLE: Cultural Resource RECONNAISSANCE of A 18 ACRE PARCEL NEAR
      GORMAN, LOS ANGELES COUNTY, CALIFORNIA
AREA: none
SITES: none
QUADNAME: LEBEC
MEMO:
ITEMID: LA2260       DATE: 1991       PAGES: 21

AUTHOR: Brown, Joan C.
FIRM: RMW PALEO Associates, INCORPORATED
TITLE: Cultural Resource RECONNAISSANCE of A 69 ACRE and AN 19 ACRE PARCEL NEAR GORMAN, LOS ANGELES COUNTY, CALIFORNIA

AREA: 
SITES: none

QUADNAME: LEBEC
MEMO:

ITEMID: LA2413       DATE: 1973       PAGES: 16

AUTHOR: HANKS, HERRICK E.
FIRM: 
TITLE: Archaeological RECONNAISSANCE of THE HUNGRY VALLEY PIPELINE AND TERMINAL POWERPLANT.

AREA: 6 li mi
SITES: CA-VEN-295, VEN-296, VEN-297, VEN-298, VEN-299, VEN-300

QUADNAME: BLACK MTN.
LEBEC

MEMO:

ITEMID: LA2416       DATE: 1967       PAGES: 5

AUTHOR: LEONARD, N. NELSON, III
FIRM: UCLA AS
TITLE: UCLA Archaeological Survey FIELD PROJECT NUMBER UCAS-211, BETWEEN RT. 4 AND RT. 267.

AREA: 5 li mi
SITES: none

QUADNAME: LA LIEBRE RANCH
LEBEC

MEMO:
ITEMID: LA2951  DATE: 1993  PAGES: 42

AUTHOR: GIBSON, ROBERT O.
FIRM: CA
TITLE: Results of Archaeological Records Review for the Pacific Pipeline Project Emidio Lateral Pipeline Kern and Los Angeles Counties, CA
AREA: 67 li mi


MEMO:

ITEMID: LA2987  DATE: 1987  PAGES: 200

AUTHOR: Woods, Clyde M., Andrew York, Rebecca Apple, Tirzo Gonzalez, Stephen Van Wormer, Tom Demere, and James H. Cleland
FIRM: Dames & Moore
TITLE: Biceps Transmission Project Magunon to Vincent/Pardee
Alternative Corridor Study Archaeology, Ethnology, History and Paleontology Technical Reports (Draft)
AREA: 70 li mi
SITES: 19-000676, 19-000405, 19-000806, 19-000947, 19-000951, 19-000952, 19-000954, 19-000955, and several non-trimonal sites


MEMO: Same as VN1285

ITEMID: LA3289  DATE: 1990  PAGES: 174

AUTHOR: Davis, Gene
FIRM: Dames & Moore
TITLE: Mobil M-70 Pipeline Replacement Project Cultural Resource Survey Report for Mobil Corporation
AREA: 92.05 mi

QUADNAME: Frazier Mountain, Lebec, Black Mountain, Liebre Mountain, Whitaker Peak, Cobblestone Mtn., Warm Sprin

MEMO: Indexed. This report covers more area than the mapped survey areas.
ITEMID: LA2418
DATE: 1991
PAGES: 6

AUTHOR: ROBINSON, R.W.
FIRM: 
TITLE: A Cultural Resource INVESTIGATION of A PORTION of Tentative TRACT NO. 46361, LOS ANGELES COUNTY, CALIFORNIA
AREA: 
SITES: none

QUADNAME: LEBEC
MEMO:

ITEMID: LA2800
DATE: 1993
PAGES: 22

AUTHOR: BROEKER, GALE AND BETH PADON
FIRM: LSA Associates, INC.
TITLE: Cultural Resource MONITORING REPORT MOBIL OIL CORPORATION M-70 PIPELINE PROJECT
AREA: 25 1/4 mi
SITES: CA-LAN-990H, LAN-991H, LAN-992H, LAN-1305, LAN-1834H
LAN-1835, LAN-2116, LAN-2117, LAN-2118, LAN-2119

QUADNAME: BLACK MOUNTAIN
LEBEC

MEMO:

ITEMID: LA2835
DATE: 1993
PAGES: 15

AUTHOR: Singer, Clay A., John E. Atwood and Shelley M. Gomes
FIRM: SINGER AND Associates, INC.
TITLE: Cultural Resource Survey and Impact Assessment FOR A 35'x35' MOBILE RADIO TRANSMITTING and RECEIVING STATION SITE (SMART SMR VORTOG SITE #463), NEAR GORMAN, LOS ANGELES COUNTY, CALIFORNIA
AREA: 
SITES: CA-LAN-903, LAN-925

QUADNAME: LEBEC
MEMO:
ITEMID: LA3491   DATE: 1991   PAGES: 6

AUTHOR: York, Andrew L.
FIRM: Dames & Moore
TITLE: Addendum No.2 BIR Route Variation Supplement to Mobil M-70 Pipeline Replacement Project Cultural Resources Survey Report
AREA: 100 li ft
SITES: 19-000925, 19-000903, 19-000926, 19-001141

QUADNAME: Lebec, Black Mountain, Leibre Mtn.
MEMO:

ITEMID: LA3850   DATE: 1992   PAGES: 26

AUTHOR: Milburn, Douglas H.
FIRM: Angeles National Forest
TITLE: Supplemental Archaeological Reconnaissance: Proposed Mobil Oil M-70 Pipeline Replacement Project, Saugus Ranger District, Angeles National Forest
AREA: 10.5 li mi
SITES: 19-002058, 19-100085

QUADNAME: Lebec, Black Mtn., Liebre Mtn., Whitaker Peak
MEMO:


AUTHOR: McLean, Deborah
FIRM: LSA
TITLE: Archaeological Assessment for Pacific Bell Mobile Services Telecommunications Facility LA 291-11, 49723 Gorman School Road, Gorman, County of Los Angeles, California
AREA: >1 ac
SITES: none

QUADNAME: Lebec
MEMO:
ITEMID: LA4008
DATE: 1996
PAGES: 220

AUTHOR: Unkwon
FIRM: Science Applications International Corporation
TITLE: Cultural Resources Investigation Pacific Pipeline Emidio Route
AREA: 70 li mi
SITES:

QUADNAME: Ritter Ridge, Sleepy Valley, Agua Dulce, Oat Mountain, Rosemond, Lancaster West, Lancaster East, Palmdal
MEMO:

ITEMID: LA4119
DATE: 1997
PAGES: 15

AUTHOR: Parr, Robert, E.
FIRM: Center for Archeological Research Cal State, Bakersfield
TITLE: Letter Report: Archeological Assessment of the Beale Vegetation Management Program (RX-4-017-KRN), Tejon Ranch, Kern and Los Angeles Counties, California
AREA: 3.5 li mi
SITES: none

QUADNAME: Lebec
MEMO:

ITEMID: LA4493
DATE: 1995
PAGES: 5

AUTHOR: Garcia, Juanita D.
FIRM: Los Padres National Forest
TITLE: Hungry Valley Guzzler Project No. 1
AREA: 18.5
SITES: none

QUADNAME: Lebec
MEMO:
10.0 APPENDIX B: SITE RECORDS

Due to site sensitivity/confidentiality issues, the site records have been omitted from the public version of this document.