CULTURAL RESOURCES INVENTORY
OF THE CLAUDIA CLAIMS
AND ARCHAEOLOGICAL RECONNAISSANCE
OF PLUESS-STAUFER HOLDINGS,
SAN BERNARDINO COUNTY, CALIFORNIA

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INTRODUCTION

Purpose:

This report presents the results of an intensive cultural resources inventory of five 20-acre mining claims known as the Claudia Claims and a general reconnaissance of an additional 3200+ acres proposed for mining by Pleuss-Staufer, Inc. The project involves open-pit mining for various mineral deposits, primarily limestone, at a number of locations on the north slope of the San Bernardino Mountains, where Pleuss-Staufer currently operates active mines. This report has been prepared by Michael K. Lerch & Associates at the request of Tim Krantz of Bio-Tech Consultants, on behalf of the project applicant, in order to compile information regarding the potential effect the proposed project might have on cultural resources in the project area.

The purposes of this cultural resources assessment are to locate and evaluate all historic and prehistoric cultural resources within the project site and surrounding study area, to determine whether such non-renewable resources will be subject to any adverse impacts from the proposed project, and to recommend appropriate measures to mitigate any identified potential impacts to a level of non-significance.

Project:

The proposed project is an open-pit strip mining operation to extract various minerals found in the Furnace Formation (Richmond 1960:15-23) for commercial uses.

The area of potential environmental impact (APEI) for the purposes of this study is considered to include all land (100 acres) within the five Claudia Claims, and a corridor approximately 30 meters wide on each side of the centerline of the proposed right-of-way for the haul road from the claim area to the existing improved road designated as P.S. Road 3N16, a distance of about .3 miles (Fig. 1). The Claudia Claims and the associated haul road will hereinafter be called the Project Site, while the overall claimed area in the region northwest of Holcomb Valley will be referred to as the Study Area. Direct impacts at the level of use currently proposed by the applicant will be limited to the Project Site APEI as defined above,
although indirect impacts from the project may occur anywhere within the overall claimed study area. Any additional claims proposed for active mining within the study area will ultimately be subject to direct impacts. Lands within the currently approved operating areas and associated haul roads are presently also being subjected to direct adverse impacts. Cultural resources located within or immediately adjacent to the Claudia Claims project site will be subject to direct impacts from the current proposal, while those located more than 100 meters outside of the project site are not likely to be affected by mining of the Claudia Claims.

Project Site:

The Claudia Claims are located on the north slope of the San Bernardino Mountains northwest of Holcomb Valley. They are situated in the SE 1/4 of Section 26, T3N, R1W, SBBM, as shown on the USGS 7.5' series (topographic) Fawnskin quadrangle, 1981 edition modified for USDA Forest Service use. The Claudia Claims are located in the southern portion of the overall study area claimed by Pluess-Staufer, which extends from Holcomb Valley to the desert floor at the foot of the mountains.

Elevations within the study area range from below 5000 feet at the mouth of Dry Canyon to over 7900 feet above sea level in the center of the study area at the edge of the north slope. The study area topography is characterized by relatively gentle slopes in the southern portion and very steep terrain in the northern half. Water is available in a number of springs in Holcomb Valley at the south edge of the study area, and from at least five other springs or seeps dispersed throughout the area. Most of the southern portion of the study area drains into Holcomb Creek and ultimately into the Mojave River. The northern portion drains into the Mojave Desert via three steep canyons (Dry, Crystal, and Furnace), all of which lead to Lucerne Dry Lake.

Vegetation in the study area is composed primarily of species belonging to the Pinyon-Juniper Woodland plant community. Plants in this community with important uses in aboriginal economy include the staple foods of pinyon nuts (Pinus monophylla), acorns (Quercus kelloggii and Quercus chrysolepis), and manzanita berries (Arctostaphylos glauca and A. patula), as well as seed-producing plants such as the sages (Salvia spp.) and a large number
Figure 1. Project Location Map

Adapted from USGS 7.5' Fawnskin Quadrangle, 1981. Scale: 1"=2000'
buckwheats (*Eriogonum* sp.). Members of the *Yucca* genus provided food in the form of both flowers and stalks, and were a source of fibers, as were the *Apocynum* species, particularly *A. cannabinum*, and nettles (*Urtica holo-sericea*). Basket-making material is present in the form of rushes (*Juncus* spp.) and willow shoots (*Salix* spp.). Medicinal plants are also abundant in the study area, represented by Yerba Santa (*Eriodictyon trichocalyx*) and several *Artemisia* species, among others (Lerch 1981, Krantz 1984).

Available lithic materials include both granitic cobbles suitable for manufacture of groundstone tools and cryptocrystalline materials such as jasper and chalcedony suitable for making flaked stone implements such as knives, scrapers and projectile points, as well as quartz and quartzite.

Previous disturbance in the project area includes roads, logging activities, and off-road vehicle use. Historic mining in the project region has also probably had a negative effect on area archaeological sites.

Scope of Study:

This assessment is based on an archaeological records check for previously recorded cultural resources within or immediately adjacent to the project APEI, a review of relevant literature, and field survey. All portions of the proposed project site received 100% intensive inventory for cultural resources, and an intuitive general reconnaissance was conducted throughout the study area. All prehistoric archaeological resources are considered herein, and historic cultural resources which are believed to be more than fifty years of age are also addressed.

Methods of Data Collection:

Prior to the fieldwork portion of the study, an archaeological records check for previously recorded sites and surveyed areas was conducted at the San Bernardino Information Center of the California Archaeological Inventory maintained by the San Bernardino County Museum Association. Available archaeological, ethnographic and historical literature was reviewed in order that known or expected site types for the region could be anticipated and accurately identified during the field survey. Other sources consulted included the *National Register of Historic Places* (USDI 1979, *et seq.*), *California Inventory of Historic Resources* (DPR 1976), and *California Historical*
Landmarks (DPR 1982), as well as Historical Landmarks of San Bernardino County (Quinn 1980).

The field survey of the 100-acre project site was conducted by the author on 21 and 23 September, 1984. All portions of the project APEI as defined above and areas immediately adjacent extending up to 30 meters from the haul road centerline were surveyed intensively. Parallel transects no more than 30 meters apart were walked generally according to topographic contours. In addition to the intensive inventory of the Claudia Claims, a field day (30 September 1984) was also spent in an effort to inspect areas throughout the study area that were thought to exhibit cultural resource sensitivity, subject to limitations in both time and access. Areas surveyed are illustrated in Figure 2.

Field position was determined with reference to the USGS 7.5' topographic quadrangle for the area. Archaeological loci which were observed within and immediately adjacent to the APEI were plotted on the field map and notes were taken regarding environmental associations, site integrity, and types of artifacts and materials represented. Fieldwork was limited to surface observations only—no subsurface testing was attempted. The fieldwork was conducted under verbal authorization by the United States Forest Service Archaeologist pending issuance of a Special Use Permit.

Fieldnotes, photographs, maps and other project data are on file with the author. Archaeological site records and a copy of this report have been filed with the California Archaeological Inventory, San Bernardino Information Center and with the USDA Forest Service, San Bernardino National Forest.

This study was conducted by Michael K. Lerch, Project Archaeologist, who conducted background research, field survey, and authored this report. He is currently a graduate in Anthropology at the University of California, Riverside, and has six years of archaeological and ethnographic field experience in the southern California study area.
Figure 2. Areas Surveyed and/or Fieldchecked.

//////// Area Surveyed
CURRENT STATUS

Cultural Background:

Archaeological investigations in the Mojave Desert, the southwestern portion of the Great Basin, have recovered evidence of prehistoric cultural development which spans over 12,000 years. The earliest known cultural assemblages are purported to date to the Pleistocene age and are characterized by lithic industries which lack projectile point forms and contain large bifaces and a variety of scraping tools. Some controversy surrounds the early assemblages and sites such as the Calico Early Man site; many archaeologists feel that the presumed ages of these earliest cultural assemblages remain hypothetical (cf. Warren and Crabtree n.d.:4; Meighan 1978:235; Moratto 1984:39-73).

The earliest well accepted prehistoric period in the desert is known as the Lake Mojave period, after the site complex where it was first described (Campbell and Campbell 1937). The Lake Mojave period is dated from 12,000 to 7,000 years ago, and is characterized by leaf-shaped points and knives, crescents, and domed scrapers of several types. The assemblage is believed to represent a well-developed technology for hunting and an apparent adaptation to lakeside environments (Warren and Crabtree n.d.; Moratto 1984:93-97).

The next period is known as the Pinto period, after the type site first described by the Campbells (1935) at Pinto Basin, approximately 75 miles east of the project site in Joshua Tree National Monument. Archaeological assemblages from the Pinto period contain hunting tools such as notched and leaf-shaped projectile points and knives, a variety of scraper types, and the earliest known seed grinding implements such as the mano and metate, thus suggesting a shift in subsistence strategies to a greater reliance on plant seeds for food. Although the Pinto period remains one of the least well understood periods of Mojave Desert prehistory, it is believed to date from 7,000 to 4,000 years ago (Warren and Crabtree n.d.; Warren 1984). Pinto style projectile points have been recovered from several sites on the north slopes of the San Bernardinos, including Cactus Flat just east of the study area and Rock Camp, several miles west of the study area, thus suggesting that prehistoric use of the mountains extends back to Pinto times.
Following the Pinto period is the Gypsum period, dated from 4,000 years ago to A.D. 500. During this period, hunting continues to be important and evidence of ritual behavior related to hunting bighorn sheep is found at sites in the desert and towards the Southwest (Warren and Crabtree n.d.; Davis and Smith 1981). Toward the end of the Gypsum period, the size of projectile points begins to diminish, suggesting a shift from the earlier atlatl and dart to the bow and arrow as hunting weapons. Milling tools continue to be present throughout the period, although not in great numbers.

Between A.D. 500 and A.D. 1200, the Saratoga Springs period, there is evidence of Pueblo influence in the eastern Mojave Desert; however, in the study area there is a continued development from the preceding period. The final period of prehistory in the project region dates from A.D. 1200 to the time of historic contact and is called by Warren and Crabtree (n.d.) the Shoshonean period, although Warren (1984:424) later rejects that term in favor of Protohistoric, a name which has no ethnic or linguistic connotations. During this latest period, the material culture described for the ethnographic inhabitants of the study area was fully elaborated, with some of the more diagnostic items being Cottonwood Triangular and Desert Side-notched projectile points, and brownware pottery. Evidence of trade with coastal areas is present in the form of shell beads and artifacts such as arrowshaft straighteners made of steatite.

The ethnographic inhabitants of the study area were the Serrano Indians, so named by the Spanish because they lived in and around the San Bernardino Mountains. Serrano territory extended from Cucamonga to Yucaipa on the south side of the mountains, and northward through Cajon Pass on the west and through Morongo Valley on the east. In the desert, they ranged out along the Mojave River as far as Soda Lake, and eastward past Twentynine Palms (Kroeber 1925:615).

The Serranos were hunters and gatherers who utilized both large and small game, as well as numerous plant resources for food. Large game such as deer, mountain sheep and pronghorn were hunted with bow and arrows, and smaller animals such as rabbits and various rodents were taken with throwing sticks, nets and snares. Acorns, pinyon nuts, and mesquite beans were among the staple foods, supplemented by seeds such as chia and roots, tubers and greens (Bean and Smith 1978; Lerch n.d., 1981).
The settlement pattern of the Serranos consisted of permanent village sites which were located in proximity to a reliable source of water, and within range of a variety of floral and faunal food resources. The main villages were usually located at the mouth of a canyon near the base of the mountains. In the fall, several village groups would travel together up to the mountain oak groves and pinyon woodlands to collect the acorns and pinyon nuts, which were then stored for use throughout the next year.

The Serrano division that utilized the study area was known as the Kaiwim Tahktam (Harrington n.d.). This group is believed to be the same as the desert Serranos usually referred to as the Vanyume, after the Mojave name for them. Very little specific ethnographic information is available regarding the Kaiwim, although some placename data are recorded in the notes of J. P. Harrington (Harrington n.d., see also Bean and Vane 1981). The Serrano name for Holcomb Valley, for instance, was Pats rawnka, which translates as "blue/green water" (Harrington n.d., Lerch n.d.).

When it was time for the fall pinyon harvest, the three eastern Serrano clans would gather in the Pipes Canyon area and travel together up Pipes Canyon to the Baldwin Lake area where their pinyon camp known as Achava't was located. Other groups from surrounding regions also converged on the pinyon groves during the harvest season. During this time, great feasts and ceremonies were held (Benedict 1924, Kroeber 1925, Harrington n.d., Lerch n.d.).

Historic development in study area began in the 1860s following the discovery of gold in Holcomb Valley by William F. Holcomb. An intense but relatively short-lived goldrush ensued, and for a few years Holcomb Valley was one of the more populous places in the region. In a special election shortly after its founding, Belleville came within two votes of becoming the San Bernardino County seat. Mining in the area has continued intermittently throughout the past century, along with cattle grazing in the Holcomb Valley area. Holcomb Valley is a California Historical Landmark.

The first road that could be traveled by wheeled vehicles was built into the mountains from the desert side by Jed Van Dusen in 1861 and is variously known as Van Dusen Road or Cokey Road. The road is still in use, now designated as 3NO8, and passes through the southern end of the study area (WESTEC 1982). Cokey Road is a County Point of Historical Interest.
Description of Resources:

The archaeological records check conducted prior to the fieldwork portion of this study indicated that no previously recorded archaeological sites were located in the Claudia Claims project site or anywhere else in the study area. However, there was no indication on file at the San Bernardino Information Center that any previous investigation had ever taken place in the study area. Because numerous archaeological sites are known to be present in similar environmental contexts in the general project region, it was anticipated that sites were likely to be present in the study area, but had simply never been recorded.

The results of the fieldwork confirmed that archaeological sites are in fact located within the study area, and a total of six sites and two isolated artifacts were recorded as a result of this study. Although no archaeological sites were located on the current Claudia Claims project site, the occurrence of two isolated, very lightly utilized metates along the ridge top provides evidence that the area was used for collecting and processing pinyon nuts. Both metates were found in disturbed contexts along the recently constructed access road at the north edge of the project site. One of them has such slight evidence of modification through use that it is somewhat questionable whether it is truly artifactual. For this reason, and because of the disturbed context and lack of any other artifacts, the ridge area at the north edge of the Claudia Claims has not been formally recorded as an archaeological site.

The six sites that were recorded were found during the general intu-itive reconnaissance of the balance of the study area. Efforts were made to inspect level spots near water sources and topographic features such as saddles, contexts known to be archaeologically sensitive in other nearby areas of similar vegetation and elevation. It must be noted that other sites may very likely be present, and that the six recorded only reflect the results of a short overview of the area, limited by both time and access to areas in proximity to existing roads. A thorough pedestrian survey of the entire study area would undoubtedly result in the location of additional archaeological sites.

The sites recorded are discussed as follows, with reference to locations shown in Figure 3:
This site is a sparse scatter of lithic waste flakes located on a small bench overlooking a spring. No temporally or functionally diagnostic artifacts were noted here, but the site is believed to be part of a complex of sites in the vicinity of the spring. These sites collectively appear to be temporary camps used during hunting and collecting activities in the surrounding area.

This site is the largest of the three located in the Cloudy Claims in the southern portion of the study area. Artifacts noted at the site include a metate fragment, a non-diagnostic biface edge fragment, and a large but sparse lithic scatter. Among the lithic materials present is obsidian, the closest source of which is in the Coso region, some 150 miles north. The presence of obsidian, an exotic material in the San Bernardino Mountains, makes this site potentially significant for understanding regional prehistoric procurement and exchange networks. Obsidian can be positively identified as to source, and can also provide age data through the use of obsidian hydration measurements.

This site is similar to the two discussed above, and is considered part of the same complex. It also contains obsidian among other materials in a sparse lithic scatter. No metates or other tools or implements were noted here. All three of the above sites are in an area undergoing deposition and the possibility for subsurface deposits should be considered if this area is ever proposed for mining. No obvious midden areas were noted during the reconnaissance of these three sites.

This site consists of an area of very dark soil and a sparse flake scatter located at the junction of four roads. It is believed to be a pinyon roasting area, based on the scarcity of artifacts in combination with the very dark soil. The site is highly disturbed by roads, but appears to still contain intact subsurface deposits. Its location near the edge
of the rim overlooking the desert suggests that the site might also have been at the head of a trail from the desert floor to the pinyon area.

SBr-5348

This site is also believed to be a pinyon roasting area, based on the same criteria noted above. The site has also been disturbed by a road and by wood-cutting in the area, and appears to be located in an area that will some be mined. A currently active mine pit is located just east of the site, although the limits and current status of that claim are unknown to the author.

SBr-5349

This site is located adjacent to the main haul road between the Flues-Staufer mines and the processing plant, but is outside of the claim area and outside of the National Forest. The site is a camp on a bench adjacent to a spring feed stream. Artifacts noted included a leaf-shaped projectile point of basalt, two metates, and a sparse flake scatter. It is likely that cultural materials extend to the opposite side of the creek where a more protected possible site area is located, although this was not verified during the fieldcheck for this project.

Based on the preliminary findings of the brief archaeological reconnaissance of the study area reported above, it is clear that the area functioned as a pinyon collecting and hunting area. Temporary campsites are present on the south edge of the study area in proximity to reliable water sources in Holcomb Valley, and on the north edge of the study area at the mouths of canyons. Within the main portion of the study area, the predominant site type appears to be the pinyon roasting area, where green cones were roasted to make them open up so the nuts could be extracted. In addition to the two such sites located, others may have been present in similar areas that have already been developed as mines.

The study area was known to have been used by the ethnographic inhabitants of the region, the Serrano Indians, and most or all of the sites located appear consistent with ethnographically described patterns, although earlier usage cannot be ruled out until more data are obtained. Some or
all of the sites could predate Serrano usage of the area, and it is noted that no temporally diagnostic late period artifacts such as pottery or Desert Side-notched projectile points were observed. Some inferences regarding the prehistoric periods when the study area was utilized could be made if further studies are conducted which obtain obsidian hydration data or radiocarbon dates, both of which should be possible to obtain with materials present in sites of the study area.

No historic cultural resources were observed in the Claudia Claims project site, and historic accounts reviewed during the literature search and summarized by WESTEC (1982) do not mention any known settlements or historic developments within the boundaries of the study area. A gravesite marked with a six-foot steel cross and mapped on the Fawnskin 7.5' USGS topographic quadrangle is located near the western edge of the study area. The cross is welded of channel steel and has the initials "MRA" brazed on the front. No information regarding the age or significance of this gravesite was found during the literature search, although it is possible that with further research more could be learned.

ASSESSMENT OF POTENTIAL IMPACTS

Development of the Claudia Claims for mining is not expected to have any significant direct adverse impacts to cultural resources. The two isolated metates will be displaced by the haul road, but this is not considered to be a significant impact. No archaeological sites were found to be located within or immediately adjacent to the Claudia Claims or the proposed haul road to 3N16.

The Cloudy Claims at the southern edge of the study area were found to be archaeologically sensitive during the reconnaissance. The three sites now recorded and others that may be present but yet unrecorded will be subject to direct adverse impacts if the Cloudy Claims are ever developed for mining.

The two pinyon roasting sites, SBr-5347 and SBr-5348, are presently subject to ongoing impacts, primarily from vehicular traffic. These impacts can be expected to increase as time goes on. Site SBr-5358 appears to be subject to imminent adverse impact as current mining in that area proceeds westward.
It is possible that some sites in the study area have already been destroyed by current mining areas that were apparently approved for operation without prior archaeological survey. Finally, on the basis of the number and distribution of sites now known to be present in the study area, it appears likely that others are also present but yet unrecorded. Any unrecorded sites that may be located within the study area are presently subject to indirect impacts, and will be potentially subject to direct impacts if they are located in areas proposed for mining.

Due to the fact that it is located at the very edge of the study area and away from any major roads, the historic gravesite does not appear to be subject to any potential adverse impacts at this time.

MITIGATION OF POTENTIAL IMPACTS

Potential impacts to the two isolated metates at the north edge of the Claudia Claims have been mitigated to the extent possible by recording their locations and other pertinent data and filing that information with the California Archaeological Inventory. No further archaeological investigation is recommended for the Claudia Claims.

Prior to development or expansion of any other claims within the study area, it is recommended that intensive archaeological surveys and any necessary subsurface testing be accomplished. Potential impacts and appropriate mitigation measures should be developed as specific claim areas are proposed for mining. To the extent that long-range planning will allow, it is likely to be more cost efficient to conduct additional survey and testing of all claimed areas projected for future development, in order that any mitigation measures that might be necessary can be accomplished without project delays. This approach is also preferable from a research point-of-view, rather than a piecemeal approach which attempts to deal with small claim blocks individually.

The archaeological resources of the northern slopes of the San Bernardino mountains remain poorly documented because of a lack of previous investigation. However, initial indications suggest that important cultural resources are present in the region, and that these resources warrant further study before the regional significance of individual sites can be adequately characterized.
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