Table 3.2.8-2
APPROXIMATE ACREAGES OF VEGETATION COMMUNITIES AFFECTED BY THE REDUCED QUANTITY MINING CONCEPT ALTERNATIVE

Project Areas	Vegetation Communities				
	Coastal Sage Scrub	Coastal Sage Scrub/ Semidesert Chaparral	Coastal Sage Scrub/ Mixed Chaparral	Mixed Chaparral	Total
Proposed Action*	4	128	20	35	187
Reduced Quantity	3	116	12	32	163
* Approximately 45 additional acres of previously disturbed land will be used for mining and facilities.					

This alternative would substantially reduce water requirements of the Project and would result in the need to pump less water from the Santa Clara River underflow. The Project water demand under this alternative would be the same as the Proposed Action for Phase 1, but would decrease by approximately 24.5 to 26.2 acre feet per month during Phase 2. This decrease in water extraction reduces the potential impacts on critical habitat of the unarmored threespine stickleback.

Uncontrolled pumping during the dry months of drought years could still result in significant adverse impacts on the essential habitat of the unarmored threespine stickleback as well as other sensitive fish species under this alternative. Consequently, a groundwater pumping plan (mitigation measure B6) still would be required for this alternative.

Mitigation Measures

The mitigation measures for this alternative are the same as for the Proposed Action (measures are B1, B2, B3, B4, B5, and B6 are applicable). Implementation of those measures would reduce potential significant impacts to less than significant levels.

3.2.9 Cultural Resources

3.2.9.1 No Action Alternative

Impacts

Historic and archaeological resources and paleontological resources that have been identified on and near the Project site would not be disturbed by the No Action Alternative as no activities would occur.

Mitigation Measures

No mitigation would be required.

3.2.9.2 Reduced North Fines Storage Area Alternative Analysis

Impacts

The Reduced NFSA Alternative impacts to cultural and paleontological resources are the same as identified for the Proposed Action. All activity would be within the Project boundary. The difference is in the schedule of mining cuts and associated mining operations. Impacts are considered to be potentially significant.

Mitigation Measures

The mitigation measures are the same as those identified for the Proposed Action (measures CR1 and CR2). Any potential impacts will be mitigated to less than significant.

3.2.9.3 Batch Plant Location Alternative Analysis

Impacts

Location of a batch plant near Lang Station has the potential to affect cultural resources. As noted in Section 3.1.9, 15 prehistoric and 2 historic archaeological sites have been documented within 1 mile of the Project boundary. A survey of the batch plant site would be required to determine whether the potential for any impacts to resources. Since a specific site is not known, the impacts are determined to be potentially significant. As is the case for the Proposed Action, the potential in the immediate area for paleontological resources is very low.

Mitigation Measures

Mitigation would be incorporated similar to and consistent with that described for the Proposed Action for any other sites that would be identified through a site survey conducted prior to any work on the site. In addition, the mitigation for the known onsite resource as discussed for the Proposed Action (measures CR1 and CR2) would also be required under this alternative. Incorporation of these measures would reduce impacts to levels of less than significant.

3.2.9.4 Addition of Water/Reclaimed Water Alternative Analysis

Impacts

Under this alternative water/reclaimed water would be brought by pipeline or truck to the Project site. If the water were brought in by pipeline, surveys would need to be conducted for the

alignment to determine the potential for impacts to prehistoric and historic resources, and a determination of the alignment's potential to contain sensitive paleontological resources. Since a specific alignment is not known, the impacts are determined to be potentially significant.

If water would be brought to the site by truck, no additional construction would be involved an no additional impacts over those presented for the Proposed Action would occur.

Mitigation Measures

Mitigation would be incorporated similar to and consistent with that described for the Proposed Action for a pipeline alignment. Potential sites would be identified through a site survey conducted prior to any work on the alignment. In addition, the mitigation for the known onsite resource as discussed for the Proposed Action (measures CR1 and CR2) would also be required under this alternative since there would be no change to the mining operation. If any areas would be determined to be high in potential for paleontological resources, a paleontological monitor would be required to be onsite for pipeline alignment grading. Incorporation of these measures would reduce impacts to levels of less than significant.

3.2.9.5 Product Transportation Alternative Analysis

Impacts

Construction of a rail spur to the site would have the potential to disturb cultural resources. The spur would be adjacent to the existing rail line and located on the north side of that line. Surveys have not been conducted for this area at this time. Since the Project area is known to contain prehistoric and historic resources, the potential to affect resources is considered to be potentially significant. The impacts as described for the Proposed Action also apply to this alternative. Since the rail spur would be proximate to the Project site, and since the potential for impacts on paleontological resources within the Project area is very low, no impacts would be expected.

Mitigation Measures

Mitigation would be incorporated similar to and consistent with that described for the Proposed Action for a rail spur alignment. Potential sites would be identified through a site survey conducted prior to any work on the alignment. In addition, the mitigation for the known onsite resource as discussed for the Proposed Action (measures CR1 and CR2) would also be required under this alternative since there would be no change to the mining operation. Incorporation of these measures would reduce impacts to levels of less than significant.

3.2.9.6 Alternative North Fines Storage Area Analysis

Impacts

The Alternative NFSA impacts to cultural and paleontological would be the same as identified for the Proposed Action with additional potential to affect resources in areas A, B, and C proposed for NFSA activity under this alternative. As noted in Section 3.1.9, 15 prehistoric and 2 historic archaeological sites have been documented within 1 mile of the Project boundary. A survey of these alternative NFSA sites would be required to determine whether the potential for any impacts to resources. The potential for impacts is considered to be potentially significant. As is the case for the Proposed Action, the potential in the immediate area for paleontological resources is very low.

The potential impact to LAN-1847H within the Project boundary also remains under this alternative.

Mitigation Measures

Mitigation would be incorporated similar to and consistent with that described for the Proposed Action for any other sites that would be identified through a site survey conducted prior to any work on those site(s). In addition, the mitigation for the known onsite resource as discussed for the Proposed Action (measures CR1 and CR2) would also be required under this alternative. Incorporation of these measures would reduce impacts to levels of less than significant.

3.2.9.7 Reduced Quantity Mining Concept Alternative Analysis

Impacts

As with the Proposed Action, historic and archaeological resources have been identified on and near the Project site. One historic archaeological site, (LAN-1847H, a trash scatter) exists on the site in an area where no ground disturbance is planned. Because the site has not been evaluated, its potential importance is not known, and any potential disturbance is considered to be potentially significant.

Mitigation Measures

The mitigation measures for this alternative are identical to those presented for the Proposed Action (measures CR1 and CR2). With incorporation of the measures, impacts would be reduced to less than significant.