



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

El Centro Field Office
1661 So. 4th Street
El Centro, CA 92243

May 13, 2010

Dear Friend of the BLM El Centro Field Office Area:

An Environmental Assessment (EA) has been prepared to analyze proposed mining activities, specifically, the drilling of up to 83 exploratory holes upon land administered by the Bureau of Land Management (BLM) El Centro Field Office. The EA can be reviewed on the BLM El Centro website: <http://www.blm.gov/ca/st/en/fo/elcentro.html>.

The proposed project is located in eastern Imperial County, California, approximately 47 miles northeast of El Centro, California and 20 miles northwest of Yuma, Arizona on unpatented lode claims owned by Southwest Resource Development, Inc. a wholly owned subsidiary of USCorp.

The 30-day public comment period will end on Tuesday, June 12, 2010. All written comments should be postmarked by June 12, 2010 in order to be given consideration.

Useful comments are:

- Within the geographic scope of the proposed Picacho Exploration Drilling Project.
- Not opinions, assertions, or unsubstantiated claims.
- Written to alert BLM to missing data sources, flaws in analysis, or additional alternatives not considered.
- Written and delivered by hand, e-mail, U.S. mail, or fax.

Written comments should be addressed to Mr. Efe Erukanure, BLM Geologist, 1661 S. 4th Street, El Centro, CA 92243. Comments delivered by e-mail should be addressed to Efe_Erukanure@blm.gov. Please be sure to include "Picacho Drilling Project" in the subject line of the e-mail. Faxed comments should be sent to (760) 337-4490, Attn: Efe Erukanure.

Should you have any questions, please contact Efe Erukanure at (760) 337-4412.

Sincerely,

/s/ Daniel Steward

Daniel Steward
Acting Field Manager

Environmental Assessment:
Picacho Study Area Exploration Drilling Project

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Appendices

Appendix A: USCorp Plan of Operations, Under separate cover

**CONFIDENTIAL Appendix B: Cultural Resource Survey Report
(Pigniolo and Dittmer 2009) Under separate cover**

Chapter 1: Introduction

In April 2008 USCorp submitted a Mine Plan of Operations under the 43 CFR 38.09 Mining regulations to conduct exploration activities, specifically to drill up to 83 exploratory holes upon land administered by the Bureau of Land Management (BLM) with the stated purpose of sampling and mapping the underlying strata for mineral potential. This drilling would be confined to already disturbed areas and to roads and pads left on the property by previous operators in the late 1980s and 1990s.

Purpose and Need

This EA will assist the BLM in evaluating and considering whether the Proposed Action can be completed in an environmentally sound manner and whether the Proposed Action is consistent with BLM policies and other laws and regulations. According to the National Environmental Policy Act, this EA has been prepared to provide sufficient evidence and analysis for: 1) determining whether to prepare a more detailed environmental impact statement or 2) making a finding of no significant impact.

The purpose of the proposed 83 drill holes is to verify the results of past reported drilling and backhole testing operations. This verification is intended to confirm, supplement and complement the past exploration work by at least three previous companies (Newmont Mining Corp., Homestake Minerals, Santa Fe Minerals and others) and to provide industry standard mineral resource data that will be used to define a possible gold resources, and used in future decision planning to identify methods to access and develop potential resources.

Different technologies were used in previous drilling, backhoe sampling, assaying and reporting activities by each of the companies making it difficult for USCorp to obtain an accurate and comprehensive understanding of the resource potential from the existing data. The goal of the proposed drilling program will be to correlate previous information into a consolidated database in order to make informed and accurate decisions on the potential for occurrence and development of a valuable mineral resource.

The Project Area lies approximately 20 miles northwest of Yuma, Arizona on unpatented lode claims. The proposed action would utilize approximately 15

linear miles of the existing road and trail network and would not involve the construction of any new roads. The attached regional location map (Figure 1) shows the general area of the proposed action.

Figures 2 and 3 show the proposed drill sites within the USCorp holdings that would be reoccupied for the proposed action on both the east side of the project area and the west side. The total acreage of the area affected by occupation and use under this proposal is approximately 36 acres of public land under the administration of the BLM El Centro Field Office.

Conformance with Land Use Plan.

The BLM El Centro Field Office manages public land within its jurisdiction and under the general guidelines in the California Desert Conservation Area Management Plan (CDCA Plan 1980, as amended). The BLM developed the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) to designate routes of travel and protect the desert tortoise, among other objectives (NECO 2002). The CDCA plan provides a framework for managing and allocating resources on BLM land by setting guidelines for mineral exploration and development to occur while preserving natural and cultural resources. It was written to meet the requirements of the Federal Land Policy and Management Act of 1976 (FLPMA) and the National Environmental Policy Act of 1976 (NEPA) for comprehensive land-use planning for public land.

The minerals section of the CDCA Plan describes management guidelines for minerals on BLM-administered land. The BLM's policy is to make mineral resources available for location and development in accordance with the Mining and Minerals Policy Act of 1970 (MMPA), which requires the Federal government (including the BLM) to facilitate mineral development to meet national, regional, and local needs.

As described in CDCA Plan, it is also the policy and responsibility of the BLM to ensure that mineral development occurs in a manner that minimizes environmental damage. In order to accomplish this goal, BLM has classified lands within the project area as being open to mineral development.

The CDCA Plan identifies public lands within and adjacent to the project area as an area of past and present mineral exploration activity. The CDCA Plan designated these lands as Multiple Use Class (MUC) Limited (L), and provided

for the continued use of classified areas for mineral development among other goals. Chapter 2 of the CDCA plan, as amended, states that MUC-L "... protects sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as Class L are managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished". All alternatives would be consistent with the CDCA Plan and MUC designation.

BLM has reviewed the applicant's Plan of Operation and found it to be in compliance with the guidelines and policies of the CDCA Plan and the regulations at Title 43, Code of Federal Regulations Subpart 3809 as stated: "Surface Management." The road/trail network is located in an area open to mineral entry and has been extensively used for past mineral exploration and localized lode and placer mining operations.

Relationship to Statutes, Regulations, or other Plans.

The proposed action is to provide access to USCorp for the purposes of drilling up to 83 exploration holes. Proposed activities are conducted on public land under the authority of the General Mining Law of 1872 (30 USC 22, et seq) and are to be in conformance with the requirements of the Federal Land Policy and Management Act of 1976 to prevent "unnecessary or undue degradation to public lands and resources", and specific to the California Desert Conservation Area, to "...protect the scenic, scientific, and environmental values of the public lands of the California Desert Conservation Area against undue impairment, and to assure against pollution of the streams and waters within the California Desert Conservation Area". (FLPMA; 43 USC 1701,1732,1781). Regulations implemented pursuant to the FLPMA incorporate these requirements at 43 CFR 3809, and define unnecessary or undue degradation and undue impairment to mean conditions, activities, or practices that:

- (1) Fail to comply with one or more of the following: the performance standards in Sec. 3809.420, the terms and conditions of an approved plan of operations, operations described in a complete notice, and other Federal and state laws related to environmental protection and protection of cultural resources;
- (2) Are not "reasonably incident" to prospecting, mining, or processing operations as defined in Sec. 3715. 0-5 of this chapter; or

(3) Fail to attain a stated level of protection or reclamation required by specific laws in areas such as the California Desert Conservation Area, Wild and Scenic Rivers, BLM-administered portions of the National Wilderness System, and BLM-administered National Monuments and National Conservation Areas.

All actions and alternatives must be consistent with these stated requirements.

This action will require consultation with various parties. It also requires government to government consultation between BLM and interested Native American Tribes.

The proposed project area lies within federally threatened desert tortoise habitat. BLM has consulted with the US Fish and Wildlife on small mining and exploration projects and received a Programmatic Biological Opinion that will apply to this project (Biological Opinion, 1-8-94-F-28R, June 9, 1994).

Chapter 2: Proposed Action and Alternatives

2.1 Alternative A: Proposed Action.

The proposed action involves drilling holes on areas previously disturbed by exploration trenching and drilling activities conducted in the 1970s to 1990s, by a variety of mining companies and individuals. Activity is expected to occur 5 days per week over a 6 week period. The use of the existing road and trail network will be for general exploration and drilling of up to 83 drill holes to verify the results of previous drilling and backhoe testing and sampling operations. Drilling will be done using a 4 to 6 inch reverse circulation rotary drill. Soil samples will then be collected along 5 foot intervals, split weighed, and bagged. The collected samples will be sealed in 50 pound rice bags, and removed daily for transport to assay labs.

The drilling operations will utilize a “buggy” (trailer) type reverse circulation drill rig utilizing low impact tires and a narrow footprint so as to allow the unit to be transported on the existing road network. The project will also use a water\pipe truck, 1 to 2 pickup trucks for personnel transport to the site, and the temporary use of a travel trailer for personnel at the proposed drill sites. Drilling will be done during daylight hours and on weekdays, and the drill rig and service truck will be left on-site during periods of non-operation. A watchman will occupy the trailer at the drill sites. No additives are added to the water for use in drilling or dust control within and on access sites.

The individual holes drilled will vary in depth according to the necessity to verify the results of past exploration drilling but most are expected to be at least 100 feet deep but some could be up to 500 feet. Dust control, traffic control and signage, revegetation of the drill sites and other measures designed to protect both the environment and the general public are outlined in the PO. A maximum work area of 10 by 40 ft for each proposed drill site oriented along existing routes is required to conduct operations within the operating and safety parameters of the drilling and ancillary equipment. All drilling operations will be located within 6 feet of the centerline of the existing road bed. Also included within this area is a 40 foot long buffer corridor within which the drill rig may move in the case that a particular area cannot be drilled. This 40 foot area will also contain pits necessary to collect and contain fine slurry from drilling operations.

2.1.1 General Description

It is anticipated that some minor repairs to the existing road and trail network will be necessary to allow for transit of drilling and ancillary equipment, and occupation of the drill sites. The nature of these repairs may include: grading rough areas, reconstruction of washed out areas and reconstruction of dry wash crossings. Every effort will be made to provide access within the existing road and trail network. Improvements to the existing road and trail network will be kept to a minimum so as to limit impacts to resources, and will be confined to areas surveyed for biological and cultural resources. It is anticipated that approximately 10 small shrubs will be cleared from existing drill sites (within the 10 by 40 ft area). Test holes will be backfilled with the excavated material and drill holes will be closed in compliance with state and federal requirements, typically backfilled with bentonite and clean fill materials after drilling operations are completed in accordance with the provisions of the PO.

2.1.2 Prior Exploration Operations

Extensive, past lode and placer exploration and small-scale mining operations by a variety of major mining companies has created an extensive network of roads and trails that are still very visible and characterize the landscape. This existing road and trail network is generally intact and can now be traversed by four wheel drive or all terrain vehicles. This is the situation within the USCorp holdings and in an extensive area surrounding their holdings. Most of the holdings of other mineral claimants within the area have similar surface disturbance related to past mineral exploration and development activity.

2.1.3 Access Roads

Access to the project area will utilize BLM designated NECO open routes of travel. The main BLM road leading into the project area from the south is BLM Road 670-686. Project personnel will also use an existing undesignated road network which was created by previous mineral exploration in the area. Any use of trails not designated open in the NECO plan will be restored of vehicle tracks to discourage future off highway vehicle (OHV) use.

Figure 5 depicts both the BLM designated NECO routes of travel and undesignated routes in relation to the project area.

No new road construction is proposed. Drill holes will be located within center of existing roads to minimize new surface disturbance. Equipment, including trucks, trailers, and an RV, will be parked adjacent to these areas in designated off-route parking areas. These areas will be consistent with the NECO plan, and must also be cleared and flagged by appropriate cultural and biological monitors. USCorp would not be granted exclusive use of this area and the public would continue to have access along BLM routes.

Any road maintenance needed during the course of the proposed action will be cleared by the BLM on a case by case basis, so that potential for biological and cultural impacts can be reviewed. If fill material is needed, USCorp will obtain an appropriate permit to bring material in from an approved off site materials borrow site.

2.1.4 Reclamation and Monitoring

All areas disturbed by drilling, site access and ancillary occupation will be reclaimed to natural conditions to minimize incompatible surface expressions, or where required, assure the integrity of road surface compatible with the NECO designation criteria for use. Roads designated by the BLM as open will be restored to safe, useable condition. Roads utilized that are not designated or designated as closed will be restored to a natural condition. No reseedling is proposed as natural revegetation will provide sufficient density and plant diversity. Vertical mulch will be utilized where appropriate.

2.2 Alternative B: Reduced Number of Drill Points Alternative

Alternative B would be similar to the proposed action except that it would reduce the number of drill locations from a maximum of 83 to a maximum of 61 sites. These drill sites have been identified by USCorp as the highest priority drill holes that would provide the company with the most information. The drill sites would still be accessed from existing roads and trails with limited improvements. All equipment and staff on site would remain the same. The major difference would be that the duration of work would be reduced because there would not be as many drill sites.

2.3 Alternative C: No Action Alternative

Under the No Action alternative, drilling would not be authorized. USCorp would rely on existing information obtained from past studies.

2.4 Alternatives Considered but Eliminated from Detailed Analysis

2.4.1 Testing only along NECO Routes of Travel

An alternative of drilling only along the BLM designated NECO routes of travel was considered but eliminated from further analysis because a statistically significant number of the sites would not be accessible, and could not provide verification or infill information of previous data. Access to only the currently designated BLM road network would not allow for economic evaluation or verification of existing information supporting the mining claims obtained by USCorp.

Chapter 3: Affected Environment

3.1 General Setting

The proposed action is located in eastern Imperial County, California, approximately 47 miles northeast of El Centro, California and 20 miles northwest of Yuma, Arizona (Figure 1) and on unpatented lode claims owned by Southwest Resource Development, Inc. a wholly owned subsidiary of USCorp, located at 4535 W. Sahara, Suite 200, Las Vegas, Nevada 89102. The proposed action is located in portions of Sections 31 and 32, Township 13S, Range 22 East and Sections 31 and 32, Township 13 and ½ South, Range 22 East, San Bernardino Baseline & Meridian (SBB&M), entirely on public lands administered by the BLM as shown on Figure 4.

Access to the project area is from Ogilby Road via Interstate 8 from the south, or from State Route 78 from the north. The general area of the proposed action is approximately 8.5 miles from the intersection of Ogilby Road and Hyduke Mine Road. The proposed action will utilize a network of BLM designated routes of travel that extend from Hyduke Mine Road. The area of potential effect (APE) is approximately 120 acres. Surface disturbance under the proposed action will affect approximately 37 surface acres, including an existing road system. The approximate width of all roads in the proposed action ranges from 13 feet to 20 feet.

The project area involves a broad, south-facing alluvial plain immediately north of the southern portion of the Chocolate Mountains. Some of the dry washes that make up the project area are south to north and southwest to northeast trending drainages through the Chocolate Mountains. Picacho Peak is approximately 2.5 miles east of the area of the proposed action.

The elevation within the project area varies from 300 to 450 feet above mean sea level. The proposed action lies near the center of the Mesquite Mining District, formed by the inactive Picacho and American Girl Mines and the currently active Mesquite Mine.

The project site is approximately one mile to Picacho Peak Wilderness to the northwest and 3.8 to Little Picacho Peak Wilderness to the east and 2.7 miles northwest to the Indian Pass Wilderness.

3.2 Affected Environment

3.2.1 Lands and Access.

The proposed action would involve use of an established network of roads and trails. Lands in the general vicinity of the proposed action include lands managed by the BLM, the State of California, US Fish and Wildlife Service, the Department of Defense and the Fort Yuma Quechan Tribe. The area of the proposed action will be accessed via a BLM designated route of travel system. Figure 5 shows the BLM route designation for the access roads to and within the project area. Members of the public using these designated routes will still be able to use them by traveling around the equipment. There will be no impact to the recreation resource therefore; this element will not be discussed further.

3.2.2 Geology and Minerals.

The predominant geology of the area of proposed action consists of a basement of metamorphic schist and gneiss of Precambrian age overlain by Tertiary gravels and volcanic deposits. The nearby Bear Creek conglomerate actually is dated earlier than the Tertiary units and overlies the Precambrian units. Mineralization occurs in several different manifestations within the area of the proposed action.

The first type of mineralization is structurally controlled and is characterized by a large, east-west trending gossan zone that outcrops through the area. In addition, there are numerous examples of mineralized block faults observed within the project area. These structures have anomalous to near ore grade gold mineralization and were the focus of early prospecting and mining efforts. In areas where the Precambrian schist is exposed gold occurrences are noted in contact relationships with areas of fracturing and brecciation.

The overlying gravels of the region are almost always auriferous. As is consistent with all placers, pockets of coarse gold nuggets are prone to occur and these pockets are what past mining operations concentrated their efforts.

Gold-bearing gravel deposits range in thickness from 20 feet to over 100 feet and in one location a thickness of over 500 feet was observed.

Lode gold mineralization in the bedrock units appears to be controlled by fault and fracture systems, with gold-bearing zones extending into adjacent, hydrothermally altered lithologies.

Gold in the bedrock deposits is generally associated with limonite and hematite, and oxidation has been shown to exist in other areas of the gold mining district, extending to 1,500 feet below the current ground surface.

Numerous faults have been mapped in the project area; however there are no recorded earthquake events noted in the record (US Geological Survey, 2010).

3.2.3 Soils

Soils within the general area of the proposed action are described in Bamberg and Hanne (1995) and the Final Environmental Impact Statement and Review for the Imperial Project (BLM 2000: 3-9).

As noted by Bamberg and Hanne (1995) most of the general area of the proposed action is covered by desert pavement and washes. The dominant soil units are generally representative of relic paleosoils which formed under cool, moist conditions and not the hot, arid conditions of the current climate (BLM 2000:3-9).

Specifically, the soils found within the general area of the proposed action principally consists of exposed weathered gneiss and sandy-skeletal, mixed, lithic Haplocalcids that occur on low ridges that are dissected; sandy-skeletal, mixed hyperthermic, Torriopsamments that occur in Recent alluvial fans and washes; Sandy-skeletal, mixed hyperthermic Torriopsamments that occur in shallow washes along drainages; and Sandy-skeletal, mixed, hyperthermic Petrocalcids that occur on old alluvial upland flats and slopes.

3.2.4 Water Resources

The surface waters of the general area of the proposed action are described in BLM 2000:3-10 & 3-11. The general area of the proposed action is located within the Colorado River drainage. All surface water within the APE flows to the Colorado River.

There are no free-standing surface waters present within the general area of the proposed action. There are no springs, seeps, or streams with the general area of the proposed action. The region's low precipitation rate, coupled with

the high evaporation rate and the presence of highly permeable soils in the washes, preclude the formation of perennial or intermittent streams. California Department of Fish and Game maintain a number of water catchments for wildlife near the project area. The perennial water source located closest to the general area of the proposed action is the Colorado River, approximately six (6) miles north and east of the general area of the proposed action at its closest point. This is outside of the Salton Sea Drainage Basin on the other side of the Chocolate Mountains. Surface water drainages within the general area of the proposed action consist of a series of subparallel ephemeral washes which are fed by precipitation from infrequent winter storms and summer thunderstorms. Two primary washes flow through the general area of the proposed action. Each of these washes continues beyond the general area of the proposed action and flows north and east to the Colorado River.

No direct data regarding the quality of the surface waters, which occasionally flow through the general area of the proposed action, are available. Because water flows in these washes only during infrequent storm events, and because there is no significant surface disturbance or unusual natural sources of contaminants located upstream, the quality of the water flows is assumed to be typical of similar desert washes with a very high content of suspended solids and variable in dissolved solids.

Ground waters within the general area of the proposed action are mapped within the Picacho ground water basin (Environmental Solutions, Inc. 1993; WESTEC, Inc. 1996; and BLM 2000: 3-15). The alluvial sediments which make up the water-bearing aquifer range in thickness from zero (0) feet on eastern boundary at the Chocolate Mountains to as much as 10,000 feet at the western boundary in the Imperial Valley (BLM 2000: 3-15). There is currently no production of ground water within the general area of the proposed action. Depth to groundwater, based on operations at the Picacho mine 3 miles southwest from the APE, is approximately between 300 and 600 feet below surface. Drilling operations may encounter groundwater below 300 feet from the surface.

3.2.5 Air Quality

Because the area is largely undeveloped and uninhabited, the major air quality issues are particulate matter (PM), nitrous oxides (NO_x), and ozone. PM

standards pertain to the size of the particulates and are generally evaluated by their size (in microns) (e.g., PM₁₀ are particles 10 microns in size).

The project area is located in a part of the Imperial Valley that is designated as an “unclassifiable attainment area” (any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant) for PM by the U. S. Environmental Protection Agency (EPA). The California Air Resources Board has indicated that the entire Imperial County is a state nonattainment area for PM₁₀ and unclassified for PM_{2.5} under the California Health and Safety Code Section 39608.

The EPA found that Imperial County failed to attain the 8-hour ozone national ambient air quality standard that was required to be reached in June 2007, and has proposed that Imperial County be reclassified as a moderate 8-hour ozone nonattainment area.

3.2.6 Noise

Noise affects solitude and comfort for humans and animals near or distant from a source. Noise is measured at the source as well as from an observation point. Noise effects to solitude can occur from a number of attributes such as intermittence, beat frequency or shrillness, and intensity and duration. Most noise emanating from exploration and mine sites occurs as low frequency vibrations. The unit of measure is the decibel¹.

Decibel units are measured in a logarithmic scale; however, most standards recognize the “doubling effect” based on a 3 decibel increment. This means that an increase of 3 decibels means that the sound pressure doubled.

Threshold of Hearing.....	0 dBA
Quiet Room.....	45 dBA
Conversation.....	55 dBA = 45 dBA x 10

¹ The decibel is a measure of how "loud" a sound is. Decibels are used to measure sound pressure level (SPL) as compared to a reference pressure, typically referred to as overpressure.

Car (50 mph at 50 ft).....	65 dBA = 45 dBA x 100
End Loader (In Good Cab).....	75 dBA = 45 dBA x 1,000
Haul Truck (In Good Cab).....	85 dBA = 45 dBA x 10,000
Crusher.....	95 dBA = 45 dBA x 100,000
Old Dozer (No Cab).....	105 dBA = 45 dBA x 1,000,000
Air Track Drill (No Controls).....	115 dBA = 45 dBA x 10,000,000

The human ear measures the pressure of a sound wave; however, it does not respond equally to all frequencies. For example, the human ear is much more sensitive to sounds in the frequency range about 1 kHz to 4 kHz (1000 to 4000 vibrations per second) than to very low or high frequency sounds.

The following table shows the point source decibel (dBl) from common construction equipment that can be expected at the project site. Most of these sources are within a frequency range of 100 to 3,000 cycles per second (hertz):

Equipment	Decibel Rating
Abrasive blasting	105 - 110 dBA
Backhoe	- 93 dBA
Bulldozer	93 - 96 dBA
Crane	90 - 96 dBA
Demolition	up to 117 dBA
Earth tamper	.90 - 96 dBA
Front-end loader	86 - 94 dBA
Gradeall	87 - 94 dBA

Hammer	87 - 95 dBA
Heavy equipment operation	95 - 110 dBA
Jack hammer	102 - 111 dBA
Pneumatic chip hammer	103 - 113 dBA
Rock Drilling	up to 115 dBA
Skilsaw	88 - 102 dBA

Decibel ratings from multiple sources affect the noise frequency more than the amplitude or “loudness” of the noise. For example, one bulldozer has a decibel Rating of 96 would be nearly the same in amplitude whether two or more dozers operate in the same area. However, the frequency range affecting the sensitivity of the noise to the human or biologic observer would be increased.

Many planning ordinance limit exposure to those as shown in the following example table:

Frequency (Cycles per Second)	Maximum Sound Level above Zero Decibels Permitted (Reference: .0002 dynes/cm)
0 to 74	74
75 to 149	59
150 to 299	52
300 to 599	46

600 to 1199	42
1200 to 2399	39
2400 to 4799	36
4800 and above	33

Noise attenuation² typically decreases 6 decibels as the distance from measuring points doubles. For example, from the above table a bulldozer with a 95 decibel rating 50 feet from the source would be 6 decibels less 100 feet from the source, and 12 decibels less 200 feet from the source. Typical nighttime comfort range is 40 decibels in a quiet town. Examining the drilling activity (80-95 dB) activity in relation to any distance, the following table illustrates the change in noise intensity:

Distance from Source		Change in Decibel Rating	Decibel Rating at Source
(feet)	(meters)		
50	15		95
100	30	-6	89
200	61	-12	83
400	122	-18	77
800	244	-24	71
1600	488	-30	65

² Reduction of noise strength during transmission through air, and is the opposite of amplification.

3200	975	-36	59
6400	1,951	-42	53
12800	3,901	-48	47
25600	7,803	-54	41

There is currently no regulated threshold for noise in the vicinity of the proposed drilling and sampling project. The proposed project would not use blasting in operations, and there is no 24-hour per day activity proposed.

Seismic noise consists of energy waves propagated through the earth. These include compressional, shear, and longitudinal waves. Typical earthmoving equipment and rolling stock induce vibrations into the earth; Noise levels within the study area do not exceed levels outlined within local jurisdiction plans or ordinances.

3.2.7 Vegetation

The project site is located in a Sonoran Desert scrub, Lower Colorado River Subdivision (Brown, 1982). Most of the proposed project area is open land. Common woody plants in the area include Creosote (*Larrea tridentata*), Hedgehog (*Echinocereus sp.*), White Bursage (*Ambrosia dumosa*), Ocotillo (*Fouquieria splendens*), Shadscale (*Atriplex sp.*), Brittle Bush (*Encellia farinosa*), Burro Brush (*Hymenoclea salsola*), Ratany (*Krameria sp.*), Barrel cactus (*Ferocactus acanthodes*), Beavertail Cactus (*Opuntia basilaris*), Teddy Bear Cholla (*Opuntia bigelovii*), Broom (*Baccharis sp.*), and Desert Lavender (*Hyptis emoryi*).

Species occurring only in the arroyos and washes are Foothills Palo Verde (*Cercidium microphyllum*) and Desert Ironwood (*Olneya tesota*).

3.2.8 Wildlife

Wildlife within the general area of the proposed action consists of birds, raptors, mammals, and reptiles. The following common species inhabit or occasionally visit the area of the proposed action:

- Reptiles: Zebra-tailed lizard, side-blotched lizard, western whiptail, and desert iguana
- Birds: Mourning doves, Gambel's quail, Say's phoebes, black-tailed gnatcatcher, black-throated sparrow, loggerhead shrike, cactus wren, and verdin.
- Raptors: Multiple raptor species would be expected to periodically forage or migrate through the area, including red-tailed hawk, sharp-shinned hawk, great-horned owl, prairie falcon, and American kestrel
- Mammals: Antelope ground squirrel, Merriam kangaroo rat, desert woodrat, black-tailed jackrabbit, mule deer, kit fox coyote, American badger, sheep and wild burrow.

Field surveys were conducted by Biozone INC. on June 10 and 11, 2008. Very few animal species were observed during the survey. Occasionally, lizards, insects, and a few doves were observed, but no mammals were seen. There were signs of burros and sheep observed only in the washes.

3.2.9 Special Status Species

Sensitive wildlife species are those which, based on a combination of distribution, habitat, threats, and the best information on population trends, warrant special conservation status, ranging from federal and state endangered / threatened listing to preliminary concern designations by local or regional offices of land management agencies (e.g., Bureau of Land Management).

No federal or state listed species were definitively found on the June 10 and 11, 2008 field assessment. However Special Status Species including reptiles, amphibians, birds and mammals within the general area of the proposed action may exist within the specific area of the proposed action

Table 1 List of Special Status Species.

Common Name	Scientific Name	Class	CEQA Status	Federal Status	Habitat Requirement	Presence in the Project Area
Couch's Spadefoot	<i>Scaphiopus couchi</i>	Amphibian		BLMS	Riparian	No riparian habitat within the project area
San Sebastian Leopard Frog	<i>Rana yavapaiensis</i>	Amphibian		BLMS	Riparian	No riparian habitat within the project area
Gray Vireo	<i>Vireo vicinior</i>	Bird	CE	BLMS	Chaparral	Habitat not present within the project area
Le Conte's Thrasher	<i>Toxostoma lecontei</i>	Bird		BLMS	Open desert scrub & washes	Possible occurrence. Not detected within the project area during surveys.
California Black Rail	<i>Laterallus jamaicensis ssp. cotumiculus</i>	Bird	CT	BLMS	Saltwater & freshwater wetlands	Habitat not present within the project area
Burrowing Owl	<i>Athene cunicularia</i>	Bird	special concern #2	BLMS	Open, dry grassland	Habitat not present within the project area
Yuma Clapper Rail	<i>Rallus longirostris ssp. yumanensis</i>	Bird	CT	FT	Freshwater & brackish emergent wetlands	Habitat not present within the project area
Gila Woodpecker	<i>Melanerpes uropygialis</i>	Bird	CE		Riparian/Microphyll woodlands	Microphyll woodland on the project site is not likely developed enough for Gila Woodpecker to utilize.
Desert Pupfish	<i>Cyprinodon macularius</i>	Fish		FE	Perennial streams	Habitat not present within the project area
Nelson's Bighorn Sheep	<i>Ovis canadensis nelsoni</i>	Mammal		BLMS	Desert scrub & riparian	Signs present in nearby washes but not drill sites.
Townsend's Western Big-eared Bat	<i>Corynorhinus townsendii</i>	Mammal		BLMS	Caves, mines, or structures near water	There are abandoned underground mine workings in the vicinity of the project, but not near the drill sites.

California Leaf-nosed Bat	<i>Macrotus californicus</i>	Mammal		BLMS	Caves/Mines	There are abandoned underground mine workings in the vicinity of the project, but not near the drill sites.
Flat-tailed Horned Lizard	<i>Phrynosoma mcallii</i>	Reptile		BLMS	Fine sand washes & desert flats	Habitat not present within the project area
Colorado Desert Fringe-toed Lizard	<i>Uma notata</i> ssp. <i>notata</i>	Reptile		BLMS	Fine, loose sand dunes	Habitat not present within the project area
Desert Tortoise	<i>Gopherus agassizi</i>	Reptile	CE	FT	Desert scrub & washes	There is Tortoise habitat within the project area. No tortoise were detected within the project area.
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	Bird	SE	FT	Riparian	No riparian habitat within the project area
Least Bell's Vireo	<i>Vireo bellii</i>	Bird		FT	Riparian	No riparian habitat within the area
Slender-spined All-thorn	<i>Koeberlinia spinosa</i> ssp. <i>tenuispina</i>	None	CNPS List 2.2		Dry, rocky slopes and mesas	None detected in project area
Pink Fairy Duster	<i>Calliandra eriophylla</i>	None	CNPS List 2.3		Sandy washes and canyons	None detected in project area
Las Animas Colubrina	<i>Colubrina californica</i>	None	CNPS List 2.3		Washes, benches, and slopes	None detected in project area

3.2.10 Cultural and Paleontological Resources and Native American Religious Concerns

The area of the proposed project has a number of known cultural resources. The Colorado River corridor has been important to Native Americans for hundreds, perhaps thousands, of years. Much of the mythology of Native Americans currently living in the southwest includes references to the area, and it maintains a place of spiritual importance. A network of prehistoric trails runs from near Yuma, Arizona, south of the project area, north along the river corridor all the way to present day Las Vegas and Spirit Mountain, which is

believed to be the place of creation for some southwestern tribes. Malcolm Rogers recorded a network of prehistoric trails and associated sites in the project vicinity in the 1930s, and other work in archaeology and ethnography conducted since has reinforced the importance of this area for physical and spiritual migration. Many examples of geoglyphs made by Native Americans are located north of the project area, along the Colorado River in the vicinity of Blythe. The importance of the area to prehistoric Native Americans has led to a high density of archaeological sites along this corridor in southern California, Arizona, and Nevada (Pigniolo et al. 2010).

Native American Religious Concerns

This region is also of spiritual importance to modern Native Americans who consider it a part of their traditional use area. The Indian Pass – Running Man Area of Traditional Cultural Concern (ATCC) and the Trail of Dreams ATCC are located about four miles northwest of the project area. Both of these places are Traditional Cultural Places (TCPs) recognized by the Fort Yuma Quechan Tribe for their importance for both prehistoric trail use and dream travel. Picacho Peak itself has also been identified as a TCP. The Advisory Council on Historic Preservation (ACHP) has previously treated these areas as eligible for nomination to the NRHP during consultation on the Imperial mining project. The Laguna Mountain Environmental report also recommends that the prehistoric trail system be considered as a potential new Outer Picacho Trail ATCC (Pigniolo et al. 2010; Pigniolo et al. 1997).

Archaeological Resources

The cultural resources of the area of potential effect (APE) for the proposed action are described in the Laguna Mountain Environmental, Inc. cultural resource survey report (Pigniolo et al. 2010) included as Confidential Appendix B (under separate cover). An APE of 232 acres was subjected to a BLM Class III pedestrian survey. The APE included the drill hole locations, as well as access roads and staging areas, and was surveyed by Laguna Mountain Environmental, with Andrew Pigniolo, PI, archaeologist, Frank Dittmer, archaeologist, and Henry Koteen, Native American monitor for the Fort Yuma Quechan Tribe. The cultural resource inventory report was prepared by Mr. Pigniolo, Mr. Dittmer, and by Natalie Brodie, all of Laguna Mountain Environmental.

The BLM Class III survey resulted in the discovery and documentation of 12 prehistoric trails and 22 archaeological sites, including 21 prehistoric sites and one historic site. The historic site consists of a historic trash scatter and appears to be the remains of a temporary camp. The prehistoric sites are generally associated with trails, and include lithic scatters and ceramic scatters/pot drops. Five isolated lithic artifacts were also located. The prehistoric trails were all rerecorded, but at least one was also demonstrated by Andrew Pigniolo to be one of the trails mapped earlier by Malcolm Rogers.

Table 2 below lists the prehistoric trails documented within the APE and the sites found in association with them. Table 3 below lists all sites found. Maps and more detailed information on the cultural resources in the project area can be found in the cultural resources inventory report.

Table 2 Summary of Trails

Trail Number	Associated Resources	Dimensions
PDS-T-1	PDS-S-1, PDS-S-2, PDS-S-5, PDS-S-6, PDS-S-7, PDS-S-8, PDS-S-10, PDS-S-13, PDS-S-14, PDS-S-16, PDS-S-17, PDS-S-19, PDS-S-20, PDS-S-21, and PDS-S-22	662 x 0.4 m
PDS-T-2	PDS-S-4	140 x 0.4 m
PDS-T-3	PDS-S-9	487 x 0.4 m
PDS-T-4	PDS-S-11	330 x 0.4 m
PDS-T-5	PDS-S-12	154 x 0.4 m
PDS-T-6	PDS-S-12	216 x 0.4 m
PDS-T-7	PDS-S-12	114 x 0.4 m
PDS-T-8	None	32 x 0.4 m
PDS-T-9	PDS-I-1	217 x 0.4 m
PDS-T-10	PDS-S-18	61 x 0.4 m
PDS-T-11	PDS-S-21	40 x 0.4 m
PDS-T-12	PDS-S-13	57 x 0.4 m

Table 3 Summary of Sites

Site Number	Site Type	Features	Artifacts	Dimensions
PDS-S-1	Pot Drop	2 Pot Drops	25+Tumco Buff 40+Colorado Beige	10 x 7 m
PDS-S-2	Pot Drop/ Flaking Station	4 Pot Drops 2 Flaking Stations	54 Black Messa Buff, 33 Tumco Buff, 17 Colorado Buff, 800+ Milky Quartz Angular Waste, 2 Cores, 1 Hammerstone.	80 x 25 m
PDS-S-3	Flaking station/Core	2 Flaking Stations	2 Cores & 5 Flakes	2 x 2 m
PDS-S-4	Lithic Scatter	-	1 Jasper Flake, 2 Milky Quartz Flakes, 3 Milky Quartz Angular Waste	4 x 4 m
PDS-S-5	Pot Drop	-	13+ Black Mesa buff	3 x 4 m
PDS-S-6	Pot Drop	3 Pot Drops	40+Black Mesa Buff/ 160+ Tumco Buff	20 x 10 m
PDS-S-7	Flaking Station	-	1 Rhyolite Core/ Hammer-Stone, 5 Flakes, 4 Angular Waste	0.5 x 0.5 m
PDS-S-8	Pot Drop/Flaking Station	2 Pot Drops, 3 Flaking Stations	175+ Black Mesa Buff, 87 Milky Quartz Flakes, 3 Tumco Buff	40 x 30 m
PDS-S-9	Pot Drop/Flaking Station	1 Pot Drop, 1 Flaking Station	13+ Tumco Buff Sherds, 10+ Milky Quartz Flake	15 x 10 m
PDS-S-10	Pot Drop	-	6+ Colorado Beige Sherds	3 x 3 m
PDS-S-11	Pot Drop/Flaking Station	1 Flaking Station, 1 Pot Drop	2 Colorado Buff sherd, 2 Milky Quartz Flake, 1 Core	20 x 5 m
PDS-S-12	Flaking Station	-	2 Milky quartz Flake, 1 Angular Waste	5 x 5 m
PDS-S-13	Pot Drop	-	30+ Colorado Buff sherds	4 x 4 m
PDS-S-14	Pot Drop	3 Pot Drops-	76+ Tumco Buff Sherds	4 x 4 m
PDS-S-15	Historic Mining Camp	-	120+ Cans, 10+ Bottle Glass Fragments, Stove Pipe, 2 Tires	55 x 10 m
PDS-S-16	Pot Drop	-	6 Tumco Buff	0.5 x 0.5 m
PDS-S-17	Pot Drop	3 Pot Drops	35+ Tumco Buff 3 Colorado Beige	15 x 55 m
PDS-S-18	Pot Drop	-	3 Colorado Beige sherds	0.1 x 0.1 m

PDS-S-19	Pot Drop/Flaking Station	-	25+ Colorado Beige 1 Tumco Buff Sherd 1 Core, 1 Jasper Flake	10 x 10 m
PDS-S-20	Pot Drop	-	6+ Colorado Beige Sherds	1 x 1 m
PDS-S-21	Pot Drop/Flaking Station	4 Pot Drops, 1 Flaking Station, 1 Historic Section-Marker, 1 Shell/Flake	200+ Black Mesa Buff Sherds, 20+ Colorado Beige, 30+ Tumco Buff, 1 <i>Tegula</i> Shell, 1 Chert Flake, 1 Section Marker	35 x 20 m
PDS-S-22	Pot Drop	-	20+ Black Mesa Buff Sherds	3 x 3 m

3.2.11 Visual Resources

BLM manages the scenic and visual resources of the area in accordance with MUC designated by the CDCA Plan. Acknowledging that management activities may involve alteration of the natural character of the landscape to some degree, BLM identifies appropriate levels of management, protection, and rehabilitation on all public lands in the CDCA, commensurate with visual resource management objectives in the multiple-use class guidelines.

The MUC that applies to the study area is Class L, which “protects sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as Class L are managed to provide for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished” (BLM 1980).

BLM determines VRM Classes based on scenic quality, sensitivity levels, and distance zones, using the BLM matrix shown in Table 4 below (1984).

Table 4 Visual Resource Class Designations

		Visual Sensitivity Levels						
		High			Medium			Low
Special Areas		I	I	I	I	I	I	I
Scenic Quality	A	II	II	II	II	II	II	II
	B	II	III	III*	III	IV	IV	IV
				IV*				
	C	III	IV	IV	IV	IV	IV	IV
		f/m	b	s/s	f/m	b	s/s	s/s
		Distance Zones						

* If adjacent areas is Class III or lower assign Class III, if higher assign Class IV

Management objectives for these VRM Classes are described as follows:

Class I Objective: To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention.

Class II Objective: To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.

Class III Objective: To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.

Class IV Objective: To provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

Interim visual management classes are established where a project is proposed and there are no VRM Classes assigned by the RMP for the area. Based on

scenic quality, visual sensitivity, viewer distance zones, Classes I, II, and IV were assigned and mapped as the Interim VRM Classes for the study area. Class I was assigned to lands within the Coyote Mountains Wilderness, Class II was assigned to non-wilderness portions of the Coyote Mountains and foothills, and Class IV was assigned to the existing mine disturbance area and to the adjacent creosote flats.

BLM considers landscape distance zones based on relative visibility from Key Observation Points (KOPs). KOPs typically include scenic overlooks, important trails, significant viewpoints in Wilderness, nearby residential or sensitive use areas, and major recreational travel routes. For this project, they could include the areas of higher elevation in the Indian Pass Wilderness, culturally sensitive Picacho Peak and associated religious and other culturally important trails.

Since this project is temporary in nature and all areas of surface disturbance will be reclaimed, there will be no impacts to visual resources therefore this element will not be discussed further.

3.2.12 Socioeconomics

The general area of the proposed action is currently undeveloped except for seasonal and weekend prospecting, hiking, hunting, rock hounding and off-road recreational vehicle activity.

Chapter 4: Environmental Impacts

4.1 Environmental Impacts

Table 5 Elements of the Environment

Resource	Not Present	Not Affected	Potentially Affected
Lands, Access and Recreation		X	
Geology and Minerals			X
Soils		X	
Water Resources		X	
Air Quality		X	
Noise			
Vegetation			X
Wildlife			X
Special Status Species			X
Cultural and Native American Religious Concerns			X
Visual		X	
Socioeconomics		X	

4.1.1 Lands and Access

Alternative A

As the proposed action (Alternative A) involves the temporary use of the existing road and trail systems, there would be some impact to lands and access. In order to avoid sensitive cultural resources, USCorp would be drilling in undesignated routes in the project area, which have already been disturbed. USCorp would not have exclusive use of any routes, and would not be eliminating public access along designated routes of travel. There would be personnel on site that could answer questions from the public using the road, and signing would direct the public safely around the test drilling.

Alternative B

Alternative B would involve the same use of BLM roads and trails except the duration of work would be shorter. There would still be no impact to public access.

Alternative C

The No Action Alternative would not have any impact.

4.1.2 Geology and Minerals

Alternative A

The proposed action (alternative A) will not impact the existing landscape and use the existing road and trail system, there would not be any impact to the geology and minerals. A minimal amount of material will be removed for testing. Each sample taken is approximately 500 pounds of material per hole. The proposed action will result in a better understanding of the geology and minerals of the general area.

Alternative B

Alternative B would reduce the amount of samples taken. This could impact the quality of the information being gathered on the mineral resource.

Alternative C

The No Action Alternative would have no impact on geology and minerals.

4.1.3 Soils

Alternative A

As the proposed action will not impact the existing landscape and use the existing road and trail system. There would not be any impact to the soils of the general area. Disturbance from vehicle traffic and equipment staging will result in small scale, controlled degradation of soils within the existing road system and in small adjacent areas. These effects are expected to be temporary.

Alternative B

Impacts under Alternative B would be similar to those of the proposed alternative except that there would be fewer drill sites.

Alternative C

The No Action Alternative would have no impact on soils.

4.1.4 Water Resources

Since water for drilling will be trucked in from nearby commercial wells, there will be no affect to water resources from the alternatives.

4.1.5 Air

Alternative A

Under the proposed action, Air Quality around the drilling sites would be temporarily affected to a minor degree during the times of actual drilling activities associated with the proposed action. Some dust would also be produced as the result of increased traffic driving to and from the project area, and from potential road repairs. Dust emissions from these sources are expected to be insignificant over the short, six week time period in which project activities are expected to occur.

Alternative B

Under Alternative B impacts to air quality would be similar to those under the proposed alternative.

Alternative C

The No Action Alternative would have no impact on air quality.

4.1.6 Noise

Alternative A

Under the proposed action, intermittent noise associated with the road repair and drilling activities associated with the proposed action would occur.

However, there are no residences, or significant or sensitive receptors that would be impacted by noise, sonic or seismic, emanating from project operations. The project area is largely uninhabited and undeveloped, so natural noise sources are generally limited to wind, rain, thunder, insects, birds, and other wildlife. .

Drilling activity would produce noise from heavy equipment activity and drill operations. These impacts would be mitigated through installation of MSHA-approved mufflers on necessary equipment to dampen noise if applicable as well as regular maintenance of all equipment. Due to the remote location of the proposed mining operation, there may be little impact to, people recreating in the desert, or to the town of Gold Valley, 12 miles southwest from the project area, from noise generating sources at the project site as it would blend with ambient noise levels typically experienced. The attenuation of the amplitude of energy waves diminishes significantly away from the source, and is not expected to be a significant source of concern to humans.

Wildlife in the immediate vicinity of heavy equipment could be affected by seismic noise when equipment is operating; however seismic noise dissipates very rapidly as distance increases, and generally is localized within the immediate area of equipment operation. In addition, operations are temporary, limited to a 6 week period. The area affected by seismic noise would likely be the areas experiencing surface disturbance due to transportation of equipment. As such, noise impacts would not be a threat to wildlife because surface disturbance would have already displaced those individuals.

Alternative B

Under Alternative B, there would be a similar noise impact to that of the proposed action. The only difference would be a reduced duration since there are less drill sites under this alternative.

Alternative C

The No Action Alternative would have no impact on noise levels.

4.1.7 Vegetation

Alternative A

Since the proposed action would not impact the existing landscape and would utilize the existing road system and previously bladed trail system, there would be minimum impact to the vegetation of the general area. A minor amount of degradation of vegetation could occur during road improvements and drilling operations in areas off the BLM designated routes of travel. Though the area contains existing routes from previous exploration activities, the area has partially revegetated naturally over the years since the prior exploration. Road improvements and vehicle traffic could result in some loss of vegetation but these effects are temporary. The maximum number of small (<4 feet) shrubs to be removed is estimated to be 10. The operator will drive over vegetation if needed.

Alternative B

Alternative B will have slightly less impact to vegetation than Alternative A, since there are less drill sites and therefore less ground disturbance.

Alternative C

The No Action Alternative would have no impact on vegetation. No drilling would occur and therefore no vehicle activity would occur off of BLM routes of travel.

4.1.8 Wildlife

Alternative A

Since the proposed action will have minimal impacts on the existing landscape and will utilize the existing road and trail system, there would be minimal impact to the wildlife of the general area. Localized road repair, drilling and

associated human activities associated with the proposed action may lead to localized, temporary effects on wildlife. These effects could involve wildlife avoidance of areas of drilling activity, retreat from established road systems due to an increase in vehicular traffic and noise, and nocturnal visits to water resources so as to avoid human contact.

Alternative B

Alternative B will have slightly less impact to wildlife since there are less drill sites and therefore a shorter duration of human presence and activity in the area.

Alternative C

Under the No Action Alternative, the test drilling would not be performed, and therefore would have no impacts on wildlife.

4.1.9 Special Status Species

Desert Tortoise and Nelson's Bighorn Sheep have the potential to occur on the project site. Bighorn Sheep signs were found in nearby washes, and while Desert Tortoise were not found during surveys, there is still habitat on site and potential for tortoise to occupy the site.

Nelson's Bighorn Sheep

Alternative A

Under the proposed action, site access and drilling would not impact Bighorn Sheep habitat, but it could cause sheep to temporarily avoid the project area. Since sheep are large mobile animals, it is likely that if a sheep is flushed, they would return to the area once humans vacate the area.

Alternative B

Alternative B would reduce the duration of human activity in the area and therefore reduce length of temporary impacts.

Alternative C

The No Action Alternative would have no impacts on Bighorn Sheep.

Desert Tortoise

Alternative A

The proposed action and alternatives are not located within Desert Tortoise Critical Habitat. Under the NECO plan, the proposed project is located outside the Chuckwalla Bench DWMA and is therefore in Category 3 habitat. Under the proposed action site access and drilling would not affect tortoise habitat, but human disturbance in the area could temporarily have indirect effects on desert tortoise behaviors such as foraging, and movement. BLM conducted programmatic formal section 7 consultation with the FWS in 1992 for small mining and exploration projects. In June of 1992 the FWS issued the Biological Opinion for Small Mining and Exploration Operations in the California Desert. BLM would apply the mitigation measures identified in this BO (See Mitigation Measures). By applying these measures any impacts to desert tortoise would be minimal.

Alternative B

Alternative B would reduce the duration and the total disturbance area of temporary impacts to desert tortoise. The same mitigation measures would apply.

Alternative C

The No Action Alternative would have no impacts on Desert Tortoise.

4.1.10 Cultural and Paleontological Resources and Native American Religious Concerns

Cultural Resources

Of the 34 newly recorded sites for this project, 33 of them are recommended eligible for nomination to the NRHP for their association with prehistoric trails. This includes all 12 of the trails recorded during the survey for this project, for their association with Native American spiritual values and dream travel, and for their regional importance for prehistoric archaeology along the Colorado River corridor, as well as 21 of 22 other newly recorded sites, many of which are associated with trails. Recommendations were made by Laguna Mountain Environmental archaeologist Andrew Pigniolo. Picacho Peak itself has already

been determined eligible as a visual resource and a Traditional Cultural Property (Pigniolo and Dittmer 2009; Pigniolo et al. 2010).

Alternative A

Impacts to cultural resources from the proposed alternative include impacts from the placement of proposed drill holes, increased use of access roads, vehicle and equipment staging, and road maintenance.

There are several prehistoric trails within the APE that are crossed by roads, both BLM legal routes of travel and illegally created roads, and as traffic on these roads increases for the proposed action, impacts to these trails will increase as well. While no new roads are proposed as part of this project, use of existing roads will increase. Monitoring by archaeologists can ensure that impacts remain within the existing road beds. Any future projects that propose maintenance of roads, such as periodic filling of washes and other spot work, must consider impacts to cultural resources, and will be approved by BLM on a case by case basis with separate NEPA documents to ensure that cultural resources are avoided. For equipment staging and parking off route in adjacent areas, archaeological monitors will flag appropriate areas around each proposed drill location to be used as designated parking areas for all equipment.

For the impacts to cultural resources possibly resulting from proposed drill holes, these include impacts from the drill holes themselves, which will each create a direct footprint of approximately 12 x 40 feet, or 480 square feet, which includes staging of the drill rig, drilling, and minimal spillover of soil. Other impacts may include vibrations from operation of the drill rig and impacts from parking the drill rig and other vehicles and equipment in adjacent staging areas. Avoidance will be the most effective mitigation for this project action. Most drill holes are already located in areas which avoid trails and other sites. Three drill holes were eliminated from Alternatives A and B in order to avoid impacts to PDS-T-1 and sites PDS-S-1 and PDS-S-2. The potential for indirect impacts on sites caused by vibrations from the drill rig are unknown, but attention to that aspect of the project will be paid by archaeological monitors. The Cocopah have indicated that monitoring by Laguna Mountain Environmental archaeologists during drilling activities would be sufficient to address their concerns.

USCorp is required to ensure that all crew members in the field receive training on cultural resource sensitivity, including cultural resource laws and policies, awareness of monitors and their role, and awareness of flagging and other restrictions they must conform to during project activities.

Alternative B

Under Alternative B, 61 drill holes would be proposed, rather than the 83 proposed under Alternative A. This would result in less vehicle activity both on and off BLM designated routes of travel, and therefore fewer impacts to cultural resources. The monitoring and flagging discussed under Alternative A would be continued under Alternative B, and would be sufficient to mitigate any impacts to cultural resources.

Alternative C

Under the No Action Alternative, the project would not be approved and there would be no impacts to cultural resources.

Native American Religious Concerns

Alternatives A and B

Indirect visual impacts to Picacho Peak are minimal in this project, which is solely for test drilling for assay purposes, and so should not significantly alter the overall landscape or the view of Picacho Peak from surrounding areas.

To address other concerns expressed by Native Americans during Tribal consultation conducted by the Bureau of Land Management, El Centro Field Office, it is also recommended that USCorp or Laguna Mountain Environmental hire a Native American monitor to be present during drilling activities.

Nine Native American Tribes were invited into government to government consultation by letter in January 2009. These include the Campo Kumeyaay Nation, the Cocopah Indian Tribe, the Colorado River Indian Tribes, the Ewiiapaayp Band of Kumeyaay Indians, the Fort Yuma Quechan Tribe, the Kwaaymii Laguna Band of Indians, the La Posta Band of Kumeyaay Indians, the Manzanita Band of Kumeyaay Indians, and the Torres-Martinez Desert Cahuilla Indians. As a part of the consultation process, representatives of the

Cocopah Indian Tribe and the Fort Yuma Quechan Tribe visited the site along with the BLM El Centro Field Office Archaeologist and the Laguna Mountain archaeologist. A meeting was also held between the BLM, El Centro Field Office and the Fort Yuma Quechan Tribe Cultural Committee and THPO. Members of the Quechan Cultural Committee expressed concern over the impacts the proposed action would have on the cultural and spiritual landscape in eastern Imperial County. Members of the Quechan Cultural Committee also expressed that the sites in this area belong to Native Americans and it is important that they remain where they are, and that artifacts are not collected and stored somewhere away from the land. The Quechan Indian Tribe President, Mike Jackson, Sr., sent a letter to the BLM El Centro Field Office on February 1, 2010, outlining his Tribe's official objection to the proposed project.

Alternative C

Under the No Action Alternative, the proposed test drilling would not occur, and there would not be any impacts to Traditional Cultural Properties and no Native American Religious Concerns.

4.1.11 Visual Resources

Alternatives A and B

Because of the short time period of the proposed drilling and sampling project, significant visual impacts associated with KOPs such as the areas of higher elevation in the Indian Pass Wilderness, culturally sensitive Picacho Peak and associated religious and other culturally important trails will not occur. Long term effects of surface disturbances associated with drilling will be minimized as a result of proposed reclamation.

Alternative C

The No Action Alternative would have no impacts on visual resources.

4.2 Cumulative Impacts

The proposed action may lead to further mineral exploration within the general area if the results of past exploration efforts are confirmed by the proposed action and current economic conditions are maintained. The proposed activity is being conducted in the same locations as historic activity.

If USCorp determines they want to develop a gold mine on their claims in this area, BLM would conduct subsequent analysis under NEPA and other applicable laws and regulations.

The No Action Alternative would not have any cumulative impacts on any resources.

4.2.1 Lands and Access

Alternatives A and B

The improvement of the existing road and trail network may have a temporary impact of increasing visitation to the general area. If the proposed action is completed, winter rains could degrade the repairs to the existing road and trail system. The road/trail system would then presumably return to conditions existing prior to the proposed action.

Alternative C

The No Action Alternative would not have any impact on Lands and Access.

4.2.2 Geology and Minerals

Alternatives A and B

The proposed action may lead to further mineral exploration within the general area if the results of past mineral exploration efforts are confirmed by the proposed action. However, this project would add a very small amount of activity to the overall minerals activities in the area.

Alternative C

The No Action Alternative would have a negative impact on any efforts to explore for and develop mineral deposits within the general area, a permitted and authorized activity under current mining laws and regulations.

4.2.3 Soils

Alternatives A and B

Soils in the immediate areas of the repairs to the existing road\trail system and the various drill sites may be disturbed until the winter rains and winter visitor\vehicle visitation would, again, compact and consolidate them.

Alternative C

Under the No Action Alternative, there would be no cumulative impacts to soils.

4.2.4 Noise

Alternative A

Test drilling would have very little noise impact. Man-made noise in the area, when present, would be created by periodic vehicle travel along open routes of travel, and other unauthorized travel on closed routes, and is related mainly to off-highway recreation vehicles that frequent the area in the winter months. Occasional light aircraft, homeland security and military aircraft, such as fighter jets and helicopters, also produce temporary noise

Alternative B

Cumulative impacts to noise for this alternative would be similar to Alternative A, except there would be less noise due to the lower number of drill holes proposed.

Alternative C

Under the No Action Alternative, the project would not be approved and there would therefore be no cumulative increase in noise in the area.

4.2.5 Vegetation

Alternative A

Due to the low number of shrubs to be removed and the previous disturbance associated with the project area, test drilling will have an undetectable incremental impact on vegetation.

Alternative B

Cumulative impacts to Vegetation for this alternative would be similar to Alternative A, except there would be less surface disturbance due to the lower number of drill holes proposed.

Alternative C

Under the No Action Alternative, there would be no cumulative impacts to vegetation.

4.2.6 Wildlife

Alternative A

The cumulative impacts to wildlife will be incremental but undetectable. The drill sites will disturb less than an acre. The impacts will be temporary.

Alternative B

Cumulative impacts to Wildlife for this alternative would be similar to Alternative A, except there would be less area impacted due to the lower number of drill holes proposed. The project duration would be less than alternative A.

Alternative C

Under the No Action Alternative, there would be no cumulative impacts to wildlife.

4.2.7 Special Status Species

Alternative A

Test drilling will have insignificant cumulative effects on special status species. The short duration of the project and small area of disturbance will result in undetectable cumulative impacts.

Alternative B

Cumulative impacts to Special Status Species for this alternative would be similar to Alternative A, except there would be less area impacted due to the lower number of drill holes proposed. The project duration would be less than alternative A.

Alternative C

Under the No Action Alternative, there would be no cumulative impacts to special status species.

4.2.8 Cultural and Paleontological Resources

Alternatives A and B

As a small project, the purpose of which is test drilling, the proposed action has a small overall footprint and will minimally add to the cumulative impacts from mining in this area. However, as a first step in the potential development of a new mine in this area, this project could have an impact on the cumulative development of the area. Interested Native American tribes have expressed concern over the cumulative impacts of this project on the cultural and spiritual landscape.

Alternative C

The No Action Alternative would not have any cumulative impacts on cultural resources.

4.2.9 Socioeconomics

Alternatives A and B

This project could lead to increased visitation in the general area during the fall and winter of 2010-2011 with the possibility of recreational placer mining and hiking within the general area by winter visitors.

Alternative C

The No Action Alternative would not have any impact on Socioeconomics.

4.3 Mitigation Measures

4.3.1 Monitoring

Archaeological monitoring of drill sites as well as of potential repairs to the existing road network will occur as outlined above in section 4.1.10. This will address potential impacts as outlined in the Cultural Resource Evaluation Report (Pignuolo et al. 2010), and will also address some concerns expressed

during Native American consultation. Such monitoring will be performed by qualified archaeologists who have been permitted by the BLM. If Native American monitors are specifically requested by Tribes, the BLM recommends that they be present during activities in sensitive areas.

A biological monitor will be on the project site at all times.

In addition the following procedures and stipulations must be followed to insure protection of any desert tortoise that would be affected by the proposed action.

- a. USCorp shall designate a field contact representative (FCR) who will be responsible for overseeing compliance with protective stipulations for the desert tortoise and for authority to halt all mining activities that are in violation of the stipulations. The FCR shall have a copy of all stipulations when work is being conducted on the site.
- b. An employee education program must be received, reviewed, and approved by the Bureau at least fifteen days prior to the presentation of the program. The program may consist of a class or video presented by a qualified biologist or a video. Wallet-sized cards with important information for workers to carry are recommended. All USCorp and contractor employees shall participate in the desert tortoise education program prior to initiation of mining activities. The operator is responsible for ensuring that the education program is developed and presented prior to conducting activities. New employees shall receive formal, approved training prior to working onsite. The program shall cover the following topics at a minimum:
 - 1) Distribution of the desert tortoise,
 - 2) General behavior and ecology of the desert tortoise,
 - 3) Sensitivity to human activities,
 - 4) Legal protection,
 - 5) Penalties for violations of State or Federal laws,
 - 6) Reporting requirements, and
 - 7) Project protective migration measures.

c. The area of disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. Work area boundaries shall be delimited with flagging or other marking to minimize surface disturbance associated with vehicle straying. Special habitat features, such as burrows, identified by the qualified biologist shall be avoided to the extent possible. To the extent possible, previously disturbed areas within the mining site shall be utilized for the stockpiling of excavated material, storage of equipment, digging of slurry pits, location of office trailers, and parking of vehicles. The qualified biologist, in consultation with the project proponent, shall ensure compliance with this measure.

d. To prevent desert tortoises from falling in test holes, holes will be monitored all times.

e. Upon locating a dead or injured desert tortoise, the operator is to notify the Bureau. The Bureau must then notify the appropriate field office (Carlsbad or Ventura) of the Service by telephone within three days of the finding. Written notification must be made within fifteen days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass, a photograph, cause of death, if known, and other pertinent information.

f. Except on county-maintained roads, vehicle speeds shall not exceed 20 miles per hour through desert tortoise habitat.

g. If it is necessary for a worker to park temporarily outside of the cleared area, the worker shall inspect for desert tortoises under the vehicle prior to moving it. If a desert tortoise is present, the worker shall wait for the desert tortoise to move out from under the vehicle.

h. No dogs are allowed on the project site.

i. All trash and food items shall be promptly contained within closed, raven-proof containers. These shall be regularly removed from the project site to reduce the attractiveness of the area to ravens and other desert tortoise predators.

j. Structures that may function as raven nesting or perching sites are not authorized except as specifically stated in the plan of the

operation or notice. The project proponent shall describe anticipated structures to the Bureau during initial project review.

Chapter 5: Consultation and Coordination

5.1 Public Involvement

This environmental assessment will be posted on the BLM website for public review for 30 days.

5.2 List of Preparers and Reviewers

USCorp, Inc:

Robert Cameron, Consulting Geologist

Wondjina Research Institute:

Claudia Brackett, Consulting Archaeochemist, California State University-Stanislaus

Ross Grunwald, Consulting Geologist & Principal, GeoResourceManagement, Inc.

Richard J. Lundin, Director

BIOZONE, Inc:

Andrew Christensen, Consulting Archaeologist

Archie M. Dickey, Consulting Biologist, Principal

Laguna Mountain Environmental:

Natalie J. Brodie, Archaeologist

Frank R. Dittmer, Archaeologist

Andrew R. Pigniolo, Archaeologist, Principal Investigator.

Bureau of Land Management:

Jenny H. Blanchard, Archaeologist, El Centro Field Office

Erin Dreyfuss, NEPA Coordinator, California State Office

Efe Erukanure, Geologist, El Centro Field Office

Jesse Irwin, Wildlife Biologist, El Centro Field Office

John Johnson, Wilderness Coordinator, VRM Specialist, El Centro Field Office

Dallas Meeks, Recreation Planner, El Centro Field Office

Linda Hughes, Acting Resource Branch Chief, El Centro Field Office

Daniel Steward, Resource Branch Chief, El Centro Field Office

Robert Waiwood, Geologist, California Desert District Office

Jennifer Whyte, Realty Specialist, El Centro Field Office

Carrie L. Simmons, Archaeologist, El Centro Field Office

Chapter 6: References Cited

Bamberg, S.A. and I.E. Hanne

1995 *Soil Resource Evaluation for the Imperial Project. Report to the Chemgold, Inc., Imperial Project, Bamberg Associates, August 1995.*

BIOZONE, Inc.

2008 *Final Biological Assessment, USCorp Chocolate Mountains Project, (PICACHO DRILL SITES), Township 13.5S, Range 22E, Section 31, San Bernardino Baseline & Meridian, Chocolate Mountains, Imperial County, California.* Copy on file with the El Centro Field Office of the Bureau of Land Management, El Centro, California.

Environmental Solutions, Inc.

1993 *Hydrological Assessment Report, Mesquite Regional Landfill, December 1993*

Pigniolo, Andrew R. and Frank R. Dittmer

2009 *Walk Around the Bend: Prehistoric Transportation Corridors Near Picacho Peak.* Paper presented at the 2009 Society for California Archaeology Annual Meeting: Modesto, California.

Pigniolo, Andrew, Frank Dittmer, and Natalie Brodie

2010 *Cultural Resource Survey of the Picacho Drill Sites and Access Roads, Eastern Imperial County, California.* Prepared for USCorp, copy on file with the El Centro Office of the Bureau of Land Management, El Centro, California

U.S. Bureau of Land Management

2000 *Final EIS for the Imperial Project, Imperial County, California.*

2002 *Northern and Eastern Colorado Desert Coordinated Management Plan, December 2002.*

U.S. Fish and Wildlife Service

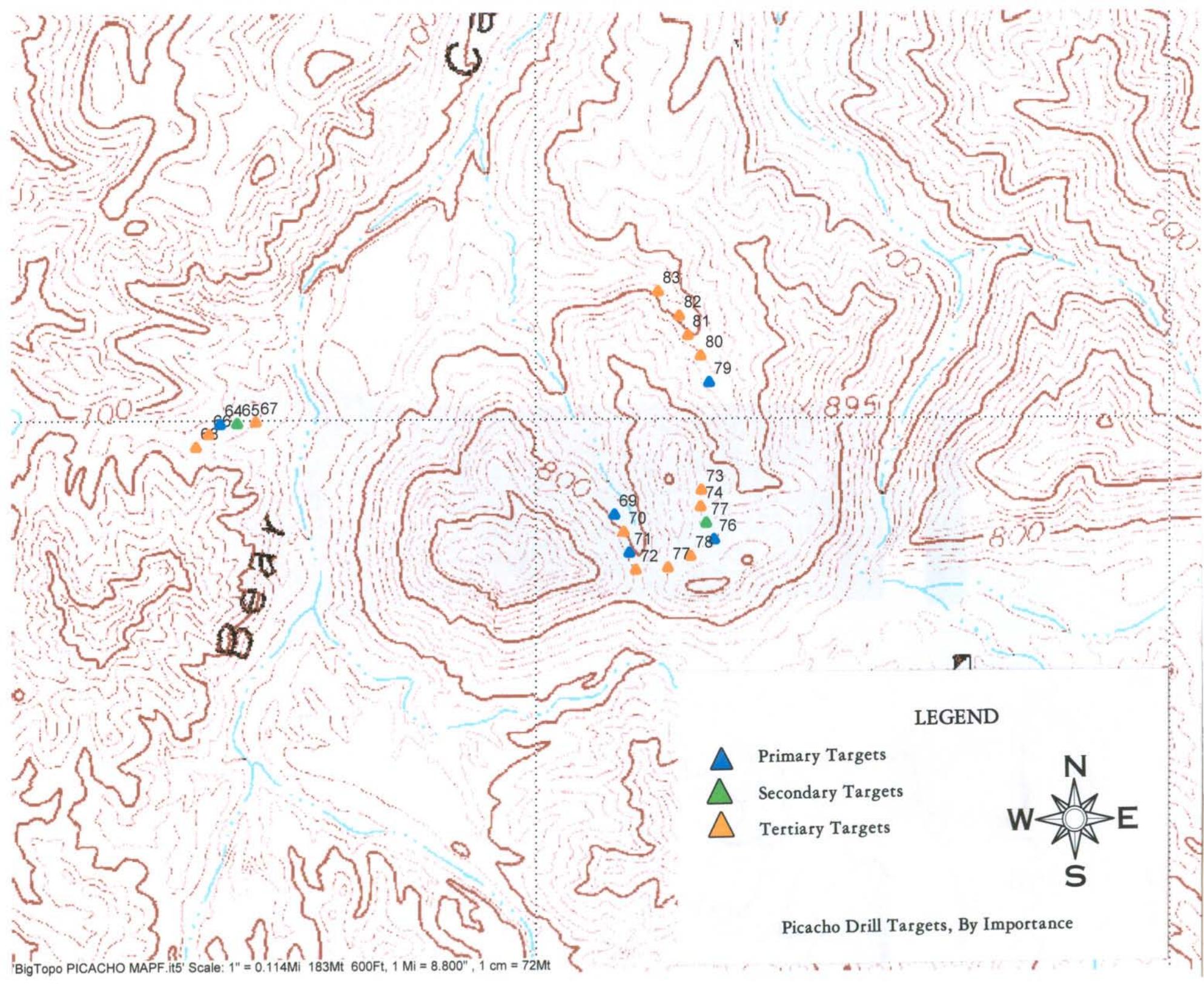
1994 *Reinitiation of Formal Consultation for Small Mining and Exploration Operations in the California Desert, June 1994.*

U.S. Department of Interior

1980 *The California Desert Conservation Area Plan Alternatives and Environmental Impact Statement, Bureau of Land Management, February 1980.*

WESTEC Inc.

1996 *Baseline Report for the Imperial Project, February 1996.*

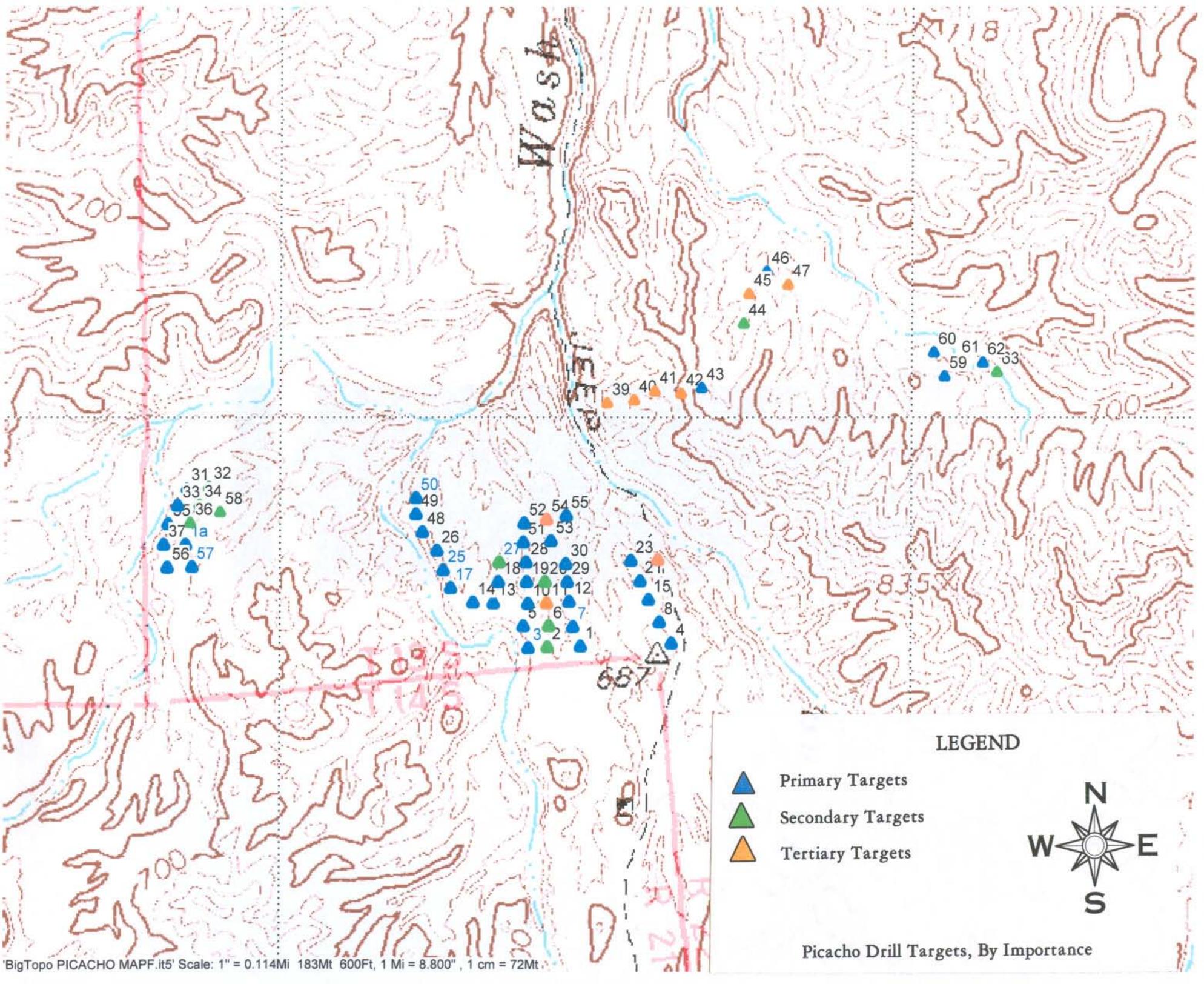


LEGEND

- ▲ Primary Targets
- ▲ Secondary Targets
- ▲ Tertiary Targets



Picacho Drill Targets, By Importance



Wash

Picacho

LEGEND

- ▲ Primary Targets
- ▲ Secondary Targets
- ▲ Tertiary Targets



Picacho Drill Targets, By Importance

Picacho Exploration Drilling Program

BLM
El Centro Field Office
EA # CA-670-2009-19

ARIZONA



Legend

- Project boundary
- Limited Route of Travel
- Open Route of Travel
- Land Status**
- AGENCY**
- Bureau of Land Management
- US Forest Service
- National Park Service
- Bureau of Reclamation
- US Fish and Wildlife Service
- Military
- Other Federal
- State
- County/State/Regional
- Private/Other
- BLM Wilderness
- Area of Critical Environmental Concern
- Reservations and Rancherias
- Perennial Water Bodies
- BLM Field Office Boundary

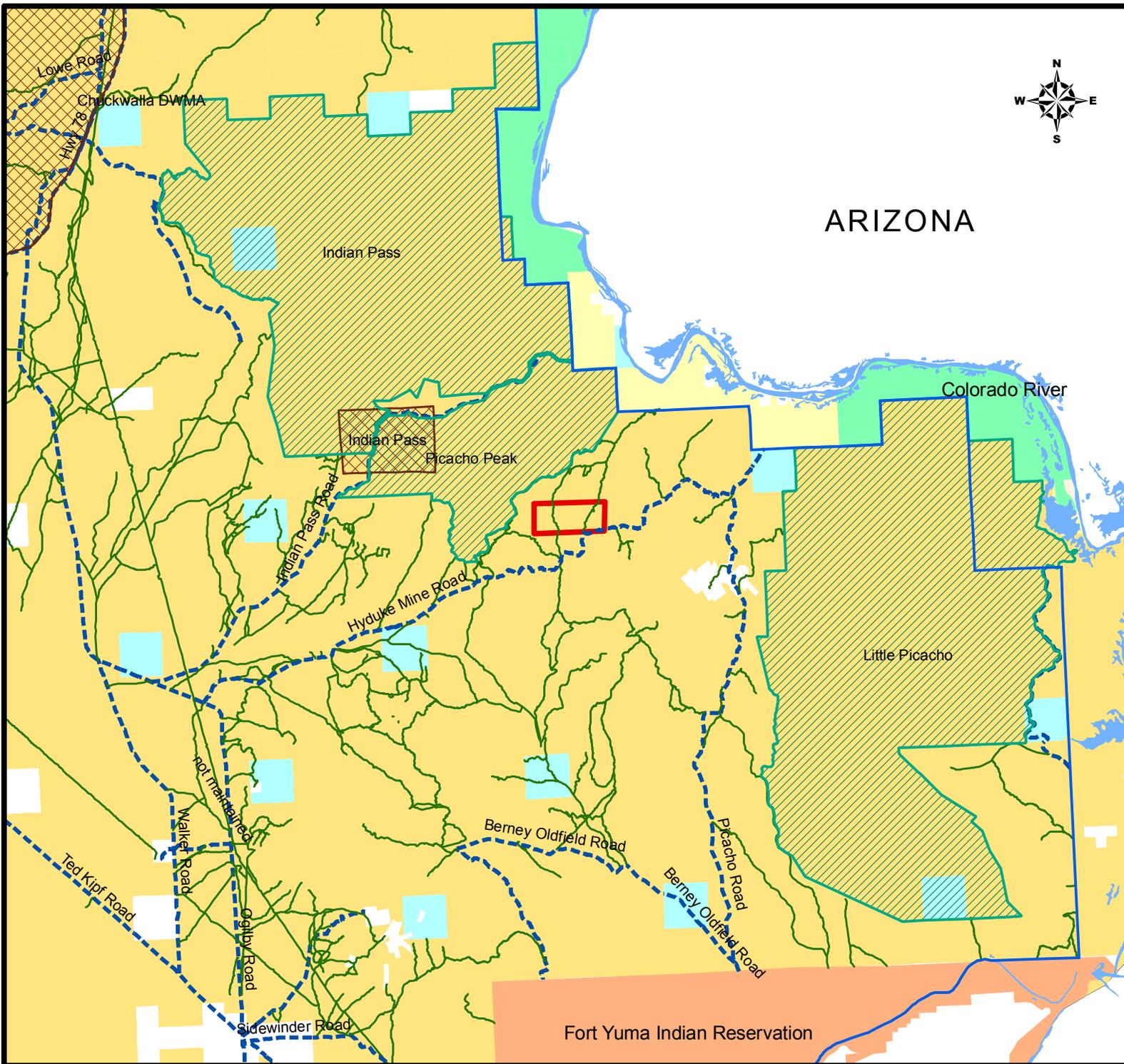


Figure 4:
Land Status of
Project Area

0 1.25 2.5 5 7.5 10 Miles

Picacho Exploration Drilling Project

BLM
El Centro Field Office
EA # CA-670-2009-19

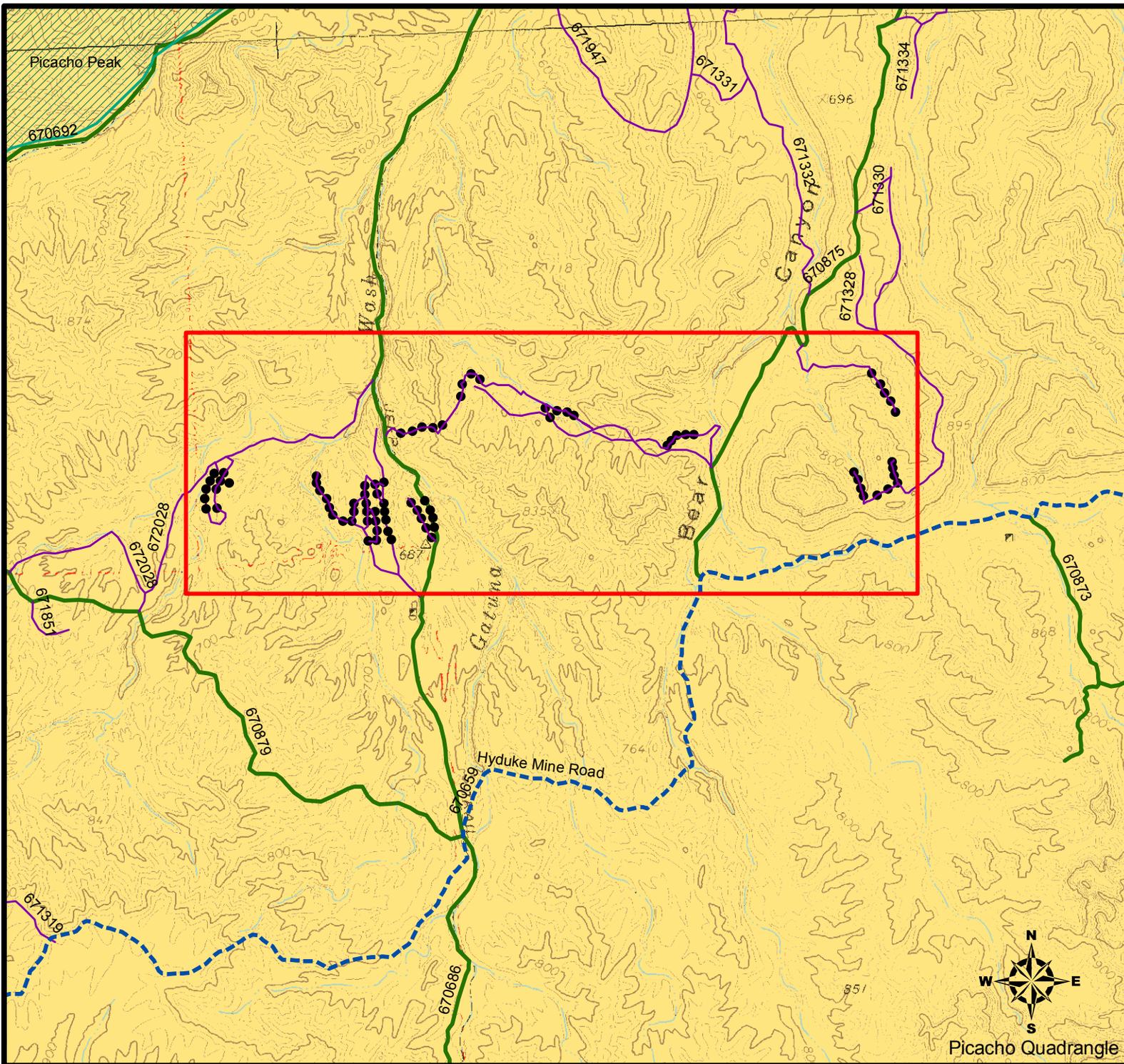
Legend

- Proposed Drill Locations
- ▭ Project boundary
- Undesignated Route
- - - Limited Route of Travel
- Open Route of Travel

Land Status

AGENCY

- Bureau of Land Management
- US Forest Service
- National Park Service
- Bureau of Reclamation
- US Fish and Wildlife Service
- Military
- Other Federal
- State
- County/State/Regional
- Private/Other
- ▨ BLM Wilderness



Picacho Quadrangle

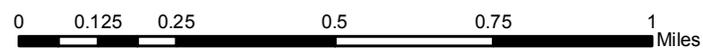


Figure 5:
Project Area and
Routes of Travel