U.S. Department of the Interior
Bureau of Land Management

ENVIRONMENTAL ASSESSMENT

DOI-BLM-AZ-C030-2013-0049-EA

AZA 35854

Misery Loves Company
Mine Plan of Operations & Occupancy

Applicant: Mary and Vernon Voss

Mohave County, Arizona

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CHAPTER 1 - INTRODUCTION

1.1 Identifying Information

CASEFILE: AZA 35854

PROJECT TITLE: Misery Loves Company Mine Plan of Operations & Occupancy Request

LEGAL DESCRIPTION: T. 14 N., R. 18 W., section 6, lot 3, SE¼NW¼, and E½SW¼, Gila and Salt River Meridian.

APPLICANT: Mary and Vernon Voss

1.2 Introduction and Project Background

The Lake Havasu Field Office (LHFO) of the Bureau of Land Management (BLM) received the Misery Loves Company Mine Plan of Operations (Project) in December 2012. The proposed Project provides for the exploration of placer gold deposits in a wash on the northeast side of Crossman Peak in Mohave County, Arizona and a request for occupancy to store their equipment at the site during the operating season. The components of the Plan of Operations are collectively referred to as the Proposed Action in this document.

The Project is located north of Scotts Well on the northeastern side of Crossman Peak, in Mohave County, Arizona (Appendix B, Figure 1 – Overview Map). The Project encompasses approximately 2.5 acres of public lands administered by the BLM LHFO, and is located within Township 14 North, Range 18 West (T14N, R18W), Section 6, Gila and Salt River Meridian, approximately 6 miles northeast of Lake Havasu City, Arizona.

The proponents originally proposed a notice to begin mining activities in December 2011; however, due to the Project being located within the Crossman Peak ACEC (Area of Critical Environmental Concern), a Plan of Operations was required per 43 CFR 3809.11(c)(3). The Project was reviewed and found complete in November 2013. Mining-related activities would create approximately 2.5 acres of disturbance, through overland travel of 5,280 linear feet along existing OHV routes (HN330, total disturbance of 1.20 acres), exploratory pits (0.10 acres), one staging area and two processing areas (1.20 acres combined).

1.3 Purpose and Need for the Proposed Action

The purpose of the action is to process the complete Mine Plan of Operations (MPO) and occupancy request that was submitted for the Project to explore for placer gold deposits along approximately 5,280 feet of wash.

The need for the Proposed Action is to comply with the Mining Law of 1872, as amended, which gives a claimant the right to explore, discover, and develop a mineral deposit in a prudent manner. The Federal Land Policy and Management Act of 1976 (FLPMA), often referred to as the BLM's "organic act", establishes the agency's multiple-use mandate and guidelines for

administration. Permitting of mineral operations is mandated by section 302(b) of FLPMA (43 CFR 1732[b] and 603[c]) and regulated by 43 CFR 3809 – the Surface Management regulations.

1.4 Decision to be Made

The decision the BLM would make is whether to approve the Project and authorize exploration activities and occupancy concurrence as proposed, approve the Project with stipulations, or to not approve the Project per 43 CFR 3809.411 and 43 CFR 3715.3-3. The decision may include additional mitigation measures that are identified as a result of the analysis presented in this EA in order to prevent unnecessary or undue degradation of public lands, protect sensitive resource values, and provide for reclamation of disturbed areas. The BLM may deny approval of the Project and not authorize the mining activities if it is found that the proposal does not comply with 3809 and 3715 regulations and the FLPMA mandate to prevent unnecessary or undue degradation.

1.5 Conformance with Land Use Plan

The Proposed Action complies with the *Lake Havasu Field Office Resource Management Plan* (RMP) approved on May 10, 2007, even though it is not specifically provided for. It is consistent with the following RMP objectives, terms and conditions:

- Page 42, Locatable Minerals: "Locatable minerals are those minerals that are appropriated under the General Mining Law of 1872, as amended. Locatable minerals include, but are not limited to, metals such as gold, silver, zinc, manganese, copper, and uncommon varieties of stone."
- Page 42, Locatable Minerals: "The Reasonable Foreseeable Development (RFD) for locatable minerals will be… 5 to 10 new small locatable mineral operations developed over the life of the plan, which will disturb approximately 20 acres at each operation." The project is 2.5 acres in size, and is located in an area open to mineral entry and development.

1.6 Relationship to Statutes, Regulations, or Other Plans

The following section outlines statutes, regulations, and other requirements that apply to the Proposed Action.

National Environmental Policy Act (NEPA)

Any action conducted on federally-administered lands or an action that utilizes federal dollars must be evaluated to determine if significant economic, social, or environmental effects may occur as a result of the Proposed Action. The assessment of the Proposed Action must also identify a reasonable range of Action Alternatives and the associated environmental effects of the Actions.

Federal Land Policy and Management Act (FLPMA)

The BLM is mandated by the Federal Land Policy Management Act of 1976 to manage for multiple uses on BLM-administered lands. Land use planning is based on multiple use and sustained yield principles. This includes grazing, mining, recreation, travel management, land sales, acquisitions, and exchanges.

Mining Law
The 1872 Mining Law [30 United States Code (U.S.C.) 22 et seq.] states that a person has a statutory right consistent with other laws and Departmental regulations to go upon the open (unappropriated and unreserved) public land for the purpose of mineral prospecting, exploration, development, and extraction.

The Federal Land Policy and Management Act (FLPMA) of 1976 (Public Law 94-579) requires that the Secretary of the Interior regulate mining operations to prevent undue or unnecessary degradation of the public lands.

Clean Water Act
Section 313 of the Clean Water Act of 1972 requires federal agencies be in compliance with all federal, state, interstate, and local requirements. In Arizona, the Arizona Department of Environmental Quality (ADEQ) implements the Clean Water Act.

Migratory Birds
Executive Order 13186 expressly requires that Federal agencies evaluate the effects of proposed actions on migratory birds pursuant to the NEPA "or other established environmental review process;" restore and enhance the habitat of migratory birds, as practicable; identify where unintentional take reasonably attributable to agency actions is having, or is likely to have, a measurable negative effect on migratory bird populations; and, with respect to those actions so identified, the agency shall develop and use principles, standards, and practices that would lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the United States Fish and Wildlife Service (USFWS).

Cultural Resource Laws and Executive Orders
BLM is required to consult with Native American tribes to "help assure (1) that federally recognized tribal governments and Native American individuals, whose traditional uses of public land might be affected by a proposed action, will have sufficient opportunity to contribute to the decision, and (2) that the decision maker will give tribal concerns proper consideration" (U.S. Department of the Interior, BLM Manual Handbook H-8120-1). Tribal coordination and consultation responsibilities are implemented under laws and executive orders that are specific to cultural resources which are referred to as "cultural resource authorities," and under regulations that are not specific which are termed "general authorities." Cultural resource authorities include: the National Historic Preservation Act of 1966, as amended (NHPA); the Archaeological Resources Protection Act of 1979 (ARPA); and the Native American Graves Protection and Repatriation Act of 1990, as amended (NAGPRA). General authorities include: the American Indian Religious Freedom Act of 1979 (AIRFA); the National Environmental Policy Act of 1969 (NEPA); the Federal Land Policy and Management Act of 1976 (FLPMA); and Executive Order 13007-Indian Sacred Sites. The proposed action is in compliance with the aforementioned authorities.

1.7 Scoping, Public Involvement and Issues

SCOPING: The principal goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis.

EXTERNAL SCOPING: The BLM Lake Havasu Field Office sent formal consultation letters on June 18, 2013, to the following tribes and tribal councils informing them of the proposed project and EA and inviting comments and concerns:

- Chemehuevi Indian Tribe, Havasu Lake, California
- Cocopah Indian Tribe, Somerton, Arizona
- Colorado River Indian Tribe, Parker, Arizona
- Fort Mohave Indian Tribe, Needles, California
- Hualapai Indian Tribe, Peach Springs, Arizona

Fort Mojave Indian Tribe (FMIT) requested additional information on the project; a new 30 day window of opportunity was provided to the FMIT for submitting their comments with a due date set at September 1, 2013. That deadline passed and BLM received no further response from the FMIT. No responses were received from any of the other four tribes consulted, as well.

INTERNAL SCOPING: The table in Section 3.1.1 (Interdisciplinary Team Review) summarizes the resources scoped by the interdisciplinary team on June 25, 2013, for the Proposed Action.

CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

The Misery Loves Company claims are located north of Scotts Well on the northeastern flank of Crossman Peak, within the historic Chemehuevi mining district, also referred to as the Mohave or Gold Wing district (Appendix B, Figure 1 – Overview Map). The principle commodities mined or prospected in the Crossman Peak area have been placer gold, gold, silver, and tungsten. The first claims date back to the 1860's, and were established by soldiers from Fort Mohave or by prospectors returning from the California gold fields. These early claims were mostly gold placer claims in the dry washes along the north and west sides of the Mohave Mountains. Placer activity reached its peak during the Depression years of 1929-1933, and has been rejuvenated during times of economic recession or when gold prices were high (Light and others, 1982).

The Misery Loves Company Project encompasses approximately 2.5 acres of public lands administered by the BLM Lake Havasu Field Office. The Project is located within Township 14 North, Range 18 West (T14N, R18W), Section 6, Gila and Salt River Meridian approximately 6 miles northeast of Lake Havasu City, in Mohave County, Arizona.

Access to the claim area is via State and County road systems. From Lake Havasu City, travel north along Arizona Highway 95 approximately 23 miles to Interstate 40; take Interstate 40 east approximately two miles to Franconia Road exit. Travel southeast from Franconia Road onto existing OHV trails for approximately 12 miles, until reaching the entrance to the Misery Loves Company claim (Appendix B, Figure 2 – Project Map).

2.2 Alternatives Analyzed in Detail

2.2.1 Proposed Action

General

The Project proposes the exploration for placer gold deposits along approximately 5280 feet of wash, north of Scotts Well (Appendix B, Figures 1 and 2). There would be two designated processing areas, and one staging area at the site. Total disturbance would be approximately 2.5 acres. The project would begin once the MPO and occupancy have been approved, and work is scheduled to occur annually from December through April, until 2018. All mining and processing operations would occur on site. Only one pit would be open at a time. All topsoil would be stripped and stockpiled on site at a designated location. Approximately 1,800 cubic yards of material would be extracted and processed throughout the life of the MPO. Material extraction and processing will be achieved through the following steps:

1) Material will be extracted from the wash using a John Deere backhoe;
2) Extracted material will be loaded by John Deere backhoe into a vibratory grizzly/ feeder and screened to 2 inches;
3) Screened 2 inch material will be loaded into a vibratory hopper, which empties onto a conveyor belt, then feeds into a hydraulic dryer;
4) Dry material will be fed by the conveyor belt system to a hydraulic trommel screen, then onto another conveyor belt, depositing final processed material onto the ground into oversized (1/4 inch to 2 inch) and undersized (1/4 inch minus) waste piles no larger than 15 feet long by 15 feet wide by 5 feet tall.

Traffic at the site would consist of passenger vehicles for the operators, specifically 1-pick-up truck, 1 - 4wheeler, and 1 - club car. Heavy equipment on site would consist of one John Deere backhoe, one grizzly/ feeder, one hydraulic dryer, one conveyor system with a trommel, and one 12,000 watt 250 bobcat generator (Appendix B, Figures 4 and 5 – Processing Equipment Diagrams). The site would also be occupied by the mining equipment during the active mining season as permitted by 43 CFR 3715.

Reclamation

The primary goal of the final reclamation is to return the site to a stable, self-sustaining native vegetative mode, where appropriate, which will support wildlife habitat and recreation use with minimal risk to the health and safety of the public and a minimum of maintenance demand. The BLM will inspect and monitor the earthwork and revegetation process to ensure it is successful.

These long-range objectives will be achieved through the following steps:

1) Area Preparation
    a. Surface grading – Any large rocks will be moved to the side of the wash to allow for the passage of mining equipment and vehicles.
    b. Topsoil stockpiling – Any topsoil will be removed with the bucket of the loader and stockpiled in a designated location, so as to minimize vegetative disturbance and erosion.

2) Exploration Pits
    a. Only one pit site will be open at a time. There will be 3 pits total.
    b. Pits will measure 50 feet long x 30 feet wide x 3 feet deep, 12 feet long x 12 feet wide, by 4 feet deep, and 15 feet long by 15 feet wide x 5 feet deep, respectively.
    c. All tailings will be returned to the pits by the end of the mining season.

3) At the close of the season (April), all open holes will be:
    a. Backfilled with tailings;
    b. Graded and contoured to control storm water flows, erosion potentials, and sediment controls;
    c. All vegetation will be replanted, and all rocks will be put back in their original locations;
    d. All equipment will be removed;
    e. All trash will be removed.

Occupancy

The proponents will be storing their equipment on site through the length of their annual operating seasons (December through April). All equipment must be incidental to mining and be approved by the BLM. Annual inspections conducted at a minimum by the BLM ensure compliance to the 43 CFR 3715 regulations. The proponents will have one John Deere backhoe, one vibratory grizzly/ feeder, one hydraulic dryer, one conveyor system with a trommel, and one 12,000 watt 250 bobcat generator (Appendix B, Figures 4 and 5 – Processing Equipment Diagrams) on site during their annual work season. They will assume the responsibility of the equipment and bond for the removal.

Monitoring

The BLM is required to conduct inspections for all active mining operations at least once per year. Inspectors check for surface compliance by the operators to ensure they are following their mining plan to the letter. Any modifications to their plan require the submittal of a Plan Amendment and approval by the BLM Field Manager. The BLM will monitor the site at least two times per year during operations and for an additional year after final reclamation is complete, in order to ensure adequate natural reclamation.

2.2.2 No Action Alternative

Under the no action alternative, the mine plan and occupancy request would not be approved.

CHAPTER 3 - AFFECTED ENVIRONMENT

3.1 Introduction/ Background

The Mohave Mountains lie near the northwest end of a northwest trending belt of metamorphic core complexes and detachment terrains. In west-central Arizona and southeastern California, this tectonic belt also includes the Rawhide, Buckskin, Whipple, and Chemehuevi Mountains. The Mohave Mountains are described as a Precambrian gneiss complex which includes several gneissic lithologies. The original composition of the gneisses varied from leucogranite to aluminous sediments (Light, 1982). The placer gold deposits in the Mohave Mountains are

associated with epithermal deposits of quartzite that have been eroded away from the parent vein material. The gold ore is trapped in channels within the alluvium on pediment.

The Project Area lies on the northeast side of the Mohave Mountains, at the southern end of the Sacramento Valley Basin. The basin is characterized by broad valleys and mountains along the eastern and western boundaries. Elevations within the Project Area range from 1360 to 1570 feet above mean sea level (AMSL). Vegetation is primarily semi-desert grassland with smaller areas of Arizona Upland and lower Colorado River Sonoran desert scrub, and semi-desert grassland. The drainages are ephemeral and only flow in response to rainfall.

Meteorological data collected from the Yucca NOAA/ NWS Co-op Network station (from 1971 through 2000), which is located approximately 24 miles northeast of the Project Area, indicate that average temperatures were 90.9ºF in July and 49.9ºF in December/ January. Annual precipitation in the Project Area during the same period averaged 8.13 inches (ADWR, Upper Colorado River Planning Area, 2008).

3.1.1 Interdisciplinary Team Review

The following table is provided as a mechanism for resource staff review, to identify those resource values with issues or potential impacts from the proposed action and/or alternatives. Those resources identified in the table as potentially impacted will be brought forward for analysis.

Resource	Date Reviewed	Initials	Resource Status	Rationale for Dismissal from Analysis
Air Quality and Climate* *Project Lead*	09/06/13	AJT	PNI	Appropriate design features are incorporated into the MPO to eliminate impacts.
Areas of Critical Environmental Concern *George W. Shannon, Jr., Ph.D*	09/10/13	GWS	PI	See Section 3.4.1
Cultural, Historic & Paleontological Resources* *George W. Shannon, Jr., Ph.D*	09/10/13	GWS	PNI	See Appendix A, Stipulation Number 12
Environmental Justice *Project Lead*	09/06/13	AJT	NP	No minority or low-income groups would be disproportionately affected by health or environmental effects.
Farmlands (Prime or Unique) *Project Lead*	09/06/13	AJT	NP	By definition, there are no "prime or unique farmlands" on BLM-administered land within LHFO.
Fish Habitat* *Doug Adams*	09/27/2013	CDA	NP	Resource not present within the project area.

Floodplains* *Vacant*	09/23/2013	AJT	NP	Resource not present because all drainages are ephemeral.
Forest Management* *Vacant*	08/22/2013	AJT	NP	No forests or woodlands are present within project area.
Fuels/ Fire Management *Michael Trent*	10/17/2013	MCT	NP	There are no impacts to Fire and Fuels Management
Geology/ Minerals *Amy Titterington*	09/06/13	AJT	PI	See Section 3.2.1
Grazing/ Rangeland *Project Lead*	09/23/2013	AJT	NP	The project area is part of the Crossman Peak Grazing Allotment. The project is in a wash with minimal value for livestock forage. Currently there is no authorized grazing on the Crossman Peak Grazing Allotment.
Invasive & Non-Native Species *Jennifer House*	9/27/13	JLH	PNI	The spread of non-native species is generally limited by ecological conditions and precipitation.
Lands & Realty *Sheri Ahrens*	9/30/13	SAA	NP	Project area is not identified for sale/ disposal. All new disturbances would be within proponent's mining claim. No rights-of-way are required.
Law Enforcement *Jonathon Azar*	09/23/2013	JJA	NP	No law enforcement issues are associated with this action.
Migratory Birds* *Jennifer House*	9/27/13	JLH	PNI	The Project Area is not in a riparian area or area of concern for migratory birds.
Native American Religious Concerns* *George W. Shannon, Jr., Ph.D*	09/10/13	GWS	PNI	No Religious Concerns expressed by any of the five Tribes consulted. See Appendix A, Stipulation Number 12
Noise *Project Lead*	09/24/2013	AJT	PNI	The proposed project is approximately 10 miles from the nearest population center; therefore, ambient noise will have no effect on local residents.
Public Health & Safety *Bill Parry*	9/24/13	WEP	PNI	Resource would not be affected by the proposal. Operations would be conducted under MSHA and OSHA regulations with the implementation of a Health and Safety Plan.
Recreation *Amanda Deeds*	9/26/2013	AJD	PNI	Neither recreation activities, nor access will be impacted by the proposed action
Socioeconomics *Project Lead*	08/22/2013	AJT	NP	Mining of this area will not likely provide any additional revenue for the local economy.
Soils *Vacant*	09/23/2013	AJT	PI	See Section 3.2.2

T & E Species* *Jennifer House*	9/27/13	JLH	PNI	No federally listed species, or their critical habitat, occur within the project area.
Travel Management *Amanda Deeds*	9/26/2013	AJD	PNI	There will be no route closures and access will not be impacted by the proposed action
Vegetation *Jennifer House*	9/27/13	JLH	PI	See Section 3.3.1
Visual Resources *Amanda Deeds*	9/26/2013	AJD	NP	Site is located within a wash and is not visible to the casual observer. Reclamation actions will ensure that this resource is not impacted
Wastes Hazardous or Solid* *Cathy Wolff-White*	09/10/2013	CWW	PNI	Appropriate design features are incorporated into the mine plan of operations to eliminate impacts.
Water Quality Surface and Ground* *Vacant*	09/24/2013	AJT	NP	No adverse impacts to water quality are expected due to the limited size of the operations.
Wetlands and Riparian* *Doug Adams*	09/27/2013	CDA	NP	Resource not present within project area.
Wilderness, WSAs, Wild & Scenic Rivers *Amanda Deeds*	9/26/13	AJD	NP	Resource not present within project area.
Wilderness Characteristics *Amanda Deeds*	9/26/13	AJD	NP	Resource not present within project area.
Wild Horses & Burros *Chad Benson*	09/25/2013	CMB	NP	The project area is within a Horse Management Area; however, no wild burros are known to be present within the project area.
Wildlife Aquatic *Doug Adams*	09/27/2013	CDA	NP	Resource not present within project area.
Wildlife Terrestrial *Jennifer House*	9/27/13	JLH	PI	See Section 3.3.2

*Consideration Required by Law or Executive Order

NP = Not Present PNI = Present, Not Impacted PI = Present and/ or Impacted

The impacted resources brought forward for analysis include:

- Geology/ Minerals
- Soils
- Vegetation
- Wildlife Terrestrial
- Area of Critical Environmental Concern

3.2 PHYSICAL RESOURCES

3.2.1 Geology/ Minerals

Affected Environment: The Chemehuevi Mining District is a mineral rich area containing placer gold, gold, silver, and tungsten. The district has been mined for gold on and off since the 1860's. The gold deposits near Crossman Peak are associated with epithermal deposits of quartzite that have been eroded away from the parent vein material. The gold ore is trapped in channels within the alluvium on pediment.

The parent material is an intrusive complex consisting of metamorphosed Proterozoic-aged spotted leucocratic gneiss (Gneiss). This formation is light to medium gray, medium-grained granitic gneiss with localized pegmatite (USGS, 1991). The area has a moderate potential for locatable mineral development, a low potential for both leasable and saleable mineral development.

Environmental Consequences:
Proposed Action

Direct and Indirect Impacts: Geologic and mineral resources in the Project Area would be directly impacted by the mining operations; however, impacts would be minor due to the limited size of the operations and amount of material removed.

Protective/ Mitigation Measures: None.

No Action Alternative
Direct/ Indirect Impacts: Federal minerals would not be mined.
Protective/ Mitigation Measures: None.

3.2.2 Soils

Affected Environment:
The proposed action would include 2.5 acres of public lands. According to the Soil Survey Report for the Southern Part of Mohave County, Arizona, prepared by the Natural Resources Conservation Service (NRCS, 2013), there is one soil map unit in the Project Area. The Cellar-Rock outcrop complex, is classified as 20 to 60 percent slopes, and is found on the back slopes of mountains and hills. This soil type consists of alluvium derived from igneous rock and/or alluvium derived from metamorphic rock and/or colluvium derived from metamorphic rock and/or colluvium derived from igneous rock. A typical soil profile for the Cellar-Rock outcrop complex consists of very gravelly sandy loam (0 to 10 inches), underlain by weathered bedrock (10 to 13 inches), underlain by un-weathered bedrock (13 to 23 inches). Typical depths to lithic bedrock range from 4 to 20 inches, with a very low capacity to transmit water (i.e. low potential for erosion, low K values).

Environmental Consequences:
Proposed Action

Direct and Indirect Impacts: Surface disturbance associated with the Proposed Action would impact up to 1.3 acres of previously undisturbed soils, or approximately one half of the

Project Area. Soils would be salvaged where possible for subsequent use during reclamation. Disturbance would be dispersed throughout the Project Area and would be reclaimed and re-vegetated after the completion of exploration activities. Exploration activities associated with the Proposed Action would increase the wind and water erosion potential of disturbed soil. This increased potential would remain until reclamation is successfully completed and vegetation established. Impacts to soils would also include the mixing of soil horizons. Potential impacts to soils would be reduced by the environmental protection measures incorporated in the Project design as described in Section 2.2.1. Active soil loss resulting from the Proposed Action would be temporary and minimal, although the soil lost to erosion during the ongoing Project activities would be permanent.

Protective/ Mitigation Measures: None, handling of the topsoil is a design feature of this project

No Action Alternative

Direct/ Indirect Impacts: There would be no effects on soils from the No Action Alternative. The site would remain as it currently is.

Protective/ Mitigation Measures: None.

3.3 BIOLOGICAL RESOURCES

3.3.1 Vegetation

Affected Environment:

The project area is within lower Sonoran desert scrub. Desert drainages with mixed riparian scrub interlace these valleys and contain ironwood (*Olneya tesota*), blue palo verde (*Cercidium floridum*), honey mesquite (*Prosopis glandulosa*), catclaw (*Acacia greggii*), brittle-bush (*Encelia farinosa*), cholla cactus (*Opuntia* ssp), Saguaro cactus (*Carnegeia gigantea*), barrel cactus (*Ferocactus acanthodes*), range ratany (*Krameria parvifolia*), ocotillo (*Fouquieria splendens*), as well as other shrubs and grasses.

Environmental Consequences:

Proposed Action

Direct and Indirect Impacts: Some vegetation may be removed at the site of the active pit. Reclamation should ensure only native vegetation is reseeded/planted.

Protective/ Mitigation Measures:

1. Whenever possible, pockets of native vegetation within the general area of disturbance shall be left to hasten the re-establishment of native flora.
2. Upon completion of operations the area shall be re-contoured to approximate surrounding contours and compacted areas will be ripped to hasten natural re-vegetation.
3. State protected plant species (all cactus, ocotillo, and native trees) shall be avoided. If they cannot be avoided they will be salvaged and replanted during reclamation. The operator shall report all State protected species destroyed or damaged to the Lake Havasu Field Office Biologist at (928) 505-1200.

No Action Alternative

Direct/ Indirect Impacts: None. No activity would occur.

Protective/ Mitigation Measures: None

3.3.2 Wildlife Terrestrial

Affected Environment:
The project area is within lower Sonoran desert scrub. The following are some common species which may be found within and around the project area: desert bighorn sheep, mule deer, mountain lion, Gambel's quail (*Callipepla gambelii*), white-winged dove (*Zenaida asiatica*), mourning dove (*Z. macroura*), desert cottontail rabbit (*Sylvilagus auduboni*), bobcat (*Lynx rufus*), ringtail (*Bassariscus astutus*), gray fox (*Urocyon cinereoargenteus*), kit fox (*Vulpes macrotis*), coyote (*Canis latrans*), kangaroo rat (*Dipodomys* spp.), pocket mouse (*Perognathus* spp.), white-throated woodrat (*Neotoma albigula*), black-tailed jackrabbit(*Lepus californicus*), and Harris's antelope ground squirrel (*Ammospermophilus harrisi*).

Common bird species are red-tailed hawk (*Buteo jamaicensis*), black-throated sparrow (*Amphispiza bilineata*), cactus wren (*Campylorhynchus brunneicapillus*), greater roadrunner (*Geococcyx californianus*), Gila woodpecker (*Melanerpes uropygialis*), verdin (*Auriparus flaviceps*), and black-tailed gnatcatcher (*Polioptila melanura*). Common reptiles include: sidewinder rattlesnake (*Crotalus cerastes*), speckled rattlesnake (*Crotalus mitchelli*) western diamondback rattlesnake (*C. atrox*), kingsnake (*Lampropeltis getula*), Sonoran gophersnake (*Pituophis melanoleucus affinis*), rosy boa (*Charina trivirgata),* western whiptail lizard (*Cnemidophorus tigris*), desert iguana (*Dipsosaurus dorsalis*), zebra-tailed lizard (*Callisaurus draconoides*), and side-blotched lizard (*Uta stansburiana*).

The project area is within a movement corridor and dispersed habitat for bighorn sheep. Additionally, this area has been classified as Category II Sonoran Desert Tortoise habitat.

Environmental Consequences:
Proposed Action

Direct and Indirect Impacts: Individual tortoise may be impacted by mining activities in early spring. No evidence of tortoise or a burrow was found within the project area during site visit on May 23, 2013. No mining activity is expected to occur throughout a majority of the active season for tortoise. The project area does not fall within known bighorn sheep lambing grounds, therefore should not impact lambing. Bighorn sheep may be impacted by mining activities when moving through the area, but impact is expected to be minimal due to the project occurring within a wash.

Protective/ Mitigation Measures:

1. Care shall be taken not to disturb or destroy tortoises or their burrows. Handling, collecting, damaging, or destroying desert tortoises are prohibited by Arizona State Law. During all activity, special care should be given to watch for and avoid any desert tortoise that may be present within the project area.

2. If a tortoise is endangered by any activity, that activity shall cease until either the tortoise moves out of harm's way of its own accord, or until the authorized biologist is able to remove the tortoise to safety. Tortoises shall be handled only by a BLM authorized Wildlife Biologist, and shall be moved solely for the purpose of preventing death or injury. The authorized biologist shall be responsible for taking appropriate measures to ensure any desert tortoise relocated from the project site is not exposed to temperature extremes which could be harmful to the animal.
3. Pits and dig sites should allow for escape of trapped animals, including desert tortoise. This may include a sloped side, ramp, or cover when not in use.
4. If a vehicle is left for any occasion the driver shall inspect underneath any parked vehicles immediately prior to moving the vehicles. If a desert tortoise is beneath the vehicle, the authorized biologist shall move the tortoise from harm's way. Alternatively, the vehicle shall not be moved until the tortoise has left of its own accord.
5. All wildlife and migratory birds shall be observed from a distance. Any injured wildlife shall be reported to Arizona Game & Fish Department at (928) 342-0091.
6. Harassment of wildlife or destruction of private and public improvements, such as fences and gates, is prohibited. The taking of any threatened or endangered plant or animal is prohibited.
7. Participants will be prohibited from approaching Bighorn Sheep on foot or by vehicle.

No Action Alternative

Direct/ Indirect Impacts: None. With the no action alternative neither cultural nor natural resources in the Project Area would be directly impacted by mining operations.

Protective/ Mitigation Measures: None.

3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

3.4.1 Area of Critical Environmental Concern

Affected Environment:

Areas of Critical Environmental Concern (ACECs) are areas where special management attention is required to protect and prevent irreparable damage to important cultural, historical, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazard under section 202I(3) of the FLPMA. The Crossman Peak Scenic ACEC encompasses significant places of traditional cultural importance to the Mojave Tribe and other Yuman and Chemehuevi Tribes nearby. Crossman Peak is held as a sacred mountain by these tribes. Crossman Peak is a natural scenic backdrop or mountain preserve for the residents of Lake Havasu City. Crossman Peak serves as a major lambing ground for bighorn sheep.

Environmental Consequences:

Proposed Action

Direct and Indirect Impacts: It is possible that cultural and natural resources in the Project Area would be directly impacted by the mining operations; however, impacts would be minor due to the limited size of the operations and amount of material removed.

Protective/ Mitigation Measures: Implementation of Appendix A, Stipulations 10, 11, 12, 13, 14, 16, and 17.

No Action Alternative

Direct/ Indirect Impacts: None. With the no action alternative neither cultural nor natural resources in the Project Area would be directly impacted by mining operations.

Protective/ Mitigation Measures: None needed.

3.5 CUMULATIVE IMPACTS SUMMARY

3.5.1 Introduction

As required under NEPA and the regulations implementing NEPA, this section analyzes potential cumulative impacts from past, present, and reasonably foreseeable future actions (RFFA's) combined with the proposal within the area analyzed. A cumulative impact is defined as "the impact which results from the incremental impacts of the action, decision, or project when added to other past, present, and reasonably foreseeable future actions, regardless of which agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 Code of Federal Regulations 1508.7).

Potential cumulative impacts are assessed at the resource level. The cumulative effects analysis area (CEAA) for past, present, and RFFA's that may generate cumulative impacts varies depending on the resource under consideration. Past, present, and RFFA's are analyzed to the extent that they are relevant and useful in analyzing whether the reasonably foreseeable effects of the Proposed Action and Alternatives may have an additive and significant relationship to those effects.

The CEAA for this proposal is limited to within a one mile radius of the claim boundary. This buffer zone includes Sections 6 and 7, and the W ½ of Sections 5 and 8 of T. 14 N., R. 18 W., Section 31 and the W1/2 of Section 32 of T. 15 N., R. 18 W., Section 36 of T. 15 N., R. 19 W., and Sections 1 and 12 of T. 14 N., R. 19 W., Gila & Salt River Meridian, on the Misery Loves Company (AMC-402210 and AMC-402211) placer claims (Appendix B – Figure 3 CEAA Buffer Map). The effects would not extend outside the area because the proposed mining activity would be conducted at such a small scale that none of the effects described below extend beyond the immediate area described.

3.5.2 Past Present and Reasonably Foreseeable Future Actions (RFFA's)

3.5.2.1 Past and Present Actions

The Chemehuevi Mining District, the area locally known as Crossman Peak, has been mined for gold on and off since the 1860's. Very little information is available about the production history of the mines in the Crossman Peak area; however, the landscape remains scarred from past mining activities with exposed pits, ore dumps, tailings piles, shafts and adits, and numerous two-track roads winding up and down the slopes.

Cattle grazing, hunting, and dispersed recreational activities may also have occurred in the Crossman Peak area in the past.

The BLM LR2000 database was used to query the past and present mineral exploration or mining activities (active mining claims, authorized Notices, expired Notices, closed Notices) that have been approved in the CEAA. Since 1976, 75 placer claims, 70 lode claims, 10 surface management notices and 1 MPO have been filed in the CEAA. Currently, there are 8 active placer claims, 2 active lode claims, 3 active surface management notices, and 1 pending MPO, totaling 6.5 acres of authorized disturbance. No mining activities are currently occurring at the proposed project site.

Dispersed recreation also occurs near this site. General activities include: rock hounding, hunting, off-highway vehicle (OHV) use, and camping. This area is designated as "limited to designated roads and trails" for travel management, although the BLM permits non-commercial and commercial recreation events through its Special Recreation Permit program. Although most vehicle use occurs on existing two-track trails and dirt roads, OHV use is permitted. Actual number of users per day or per year is not available, but the intensity of recreational use is generally concentrated outside the claim boundaries. Most recreation use occurs during the winter, spring and fall, and is associated with recreational activities.

3.5.2.2 Reasonably Foreseeable Future Actions

Mining has occurred on and off for the past 150 years and it would be reasonable to believe mining will continue for many more generations to come.

Hunting and dispersed recreational activities are likely to continue in the future.

3.5.3 Cumulative Impacts Conclusion

Cumulative Effects of the proposal in combination with the past, present, and RFFA's may involve short-term effects to soils, vegetation cover, and wildlife, through habitat loss. Successful revegetation, as proposed, should offset the short-term displacement to wildlife, and non-listed special status species in the long-term.

The effects of mining gold to the area's mineral resources are negligible. Arizona is ranked ninth in the United States for gold production, and all gold mined in Arizona was recovered as a byproduct from copper mining and processing (USGS, 2011), not from placer mining operations.

CHAPTER 4 – TRIBES, INDIVIDUALS, ORGANIZATIONS OR AGENCIES CONSULTED

4.1 List of Preparers and Participants

Please see Interdisciplinary Team Review list for BLM Participants (Section 3.1.1)

4.2 Tribes, Individuals, Organizations, or Agencies Consulted

The BLM Lake Havasu Field Office sent formal consultation letters on June 18, 2013, to the

following tribes and tribal councils informing them of the proposed project and EA and inviting comments and concerns:

- Chemehuevi Indian Tribe, Havasu Lake, California
- Cocopah Indian Tribe, Somerton, Arizona
- Colorado River Indian Tribe, Parker, Arizona
- Fort Mojave Indian Tribe, Needles, California
- Hualapai Indian Tribe, Peach Springs, Arizona

Fort Mojave Indian Tribe (FMIT) requested additional information on the project; a new 30 day window of opportunity was provided to the FMIT for submitting their comments with a due date set at September 1, 2013. That deadline passed and BLM received no further response from the FMIT. No responses were received from any of the other four tribes consulted, as well.

CHAPTER 5 – REFERENCES, GLOSSARY

5.1 References Cited

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Light, T.D., and McDonnel, J.R., Jr., 1983. Mineral Investigation of a Crossman Peak Wilderness Study Area, Mohave County, Arizona. U.S. Bureau of Mines Mineral Land Assessment, MLA 82-83.

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USGS 2011 Minerals Yearbook – Gold (Advance Release), 2013.
Available: http://minerals.usgs.gov/minerals/pubs/commodity/gold/myb1-2011-gold.pdf.

Western Regional Climate Center. 2013. Arizona Climate Summaries.
Available: <http://www.wrcc.dri.edu/summary/climsmaz.html>

5.2 Glossary of Terms

ACCESS: The ability to legally make use of route or way across public or private lands; without barriers to use by the public or a specified user.
AUTHORIZED: Invested with legal authority through a written agreement, permit, or other legal document by the BLM.
BIOLOGICAL EVALUATION: The gathering and evaluation of information on proposed endangered and threatened species and critical and proposed critical habitat for actions that do not require a biological assessment.
CAMPING, SHORT TERM: Camping for short terms of up to 14 days (in any 28-day period) on BLM-managed primitive or undeveloped public land.
DECISION RECORD: A manager's decision on a categorical exclusion review or an environmental assessment. Comparable to the record of decision for an environmental impact statement, the decision record includes: 1) a finding of no significant impact, 2) a decision to prepare an environmental impact statement, or 3) a decision not to proceed with a proposal. Also see RECORD OF DECISION.
DESIGNATED ROADS AND TRAILS: Legal term used in CFR 8340 — OFF ROAD VEHICLES as a type of limited area designation. The term "roads and trails" includes all types routes use by off highway vehicles.
ENDANGERED SPECIES: An animal or plant species that is in danger of extinction throughout all or a significant portion of its range (as defined in the Endangered Species Act Amendments of 1982). Also see THREATENED SPECIES.
ENVIRONMENTAL ASSESSMENT (EA): A concise public document for which a federal agency is responsible. An EA serves: 1) to briefly provide enough evidence and analysis for determining whether to prepare an environmental impact statement (EIS) or a finding of no significant impact and to aid an agency's compliance with the National Environmental Policy Act when no EIS is needed; and 2) to facilitate preparing an EIS when one is needed. Also see ENVIRONMENTAL IMPACT STATEMENT
EXISTING ROADS AND TRAILS: Legal term used in CFR 8340 — OFF ROAD VEHICLES as a type of limited area designation. The term "roads and trails" includes all types routes use by off-highway vehicles. For the LHFO RMP "existing roads and trails" would be those roads and trails identified on the Route Inventory Maps as of the date of the Record of Decision.
FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA): The act that: 1) set out, for the Bureau of Land Management, standards for managing the public lands including land use planning, sales, withdrawals, acquisitions, and exchanges; 2) authorized the setting up of local advisory councils representing major citizens groups interested in land use planning and management; 3) established criteria for reviewing proposed wilderness areas; and 4) provided guidelines for other aspects of public land management such as grazing.
HABITAT: The natural environment of a plant or animal: 1) Specific parameters of physical conditions used by a single species, a group of species, or a large community. The major

components of habitat are generally considered to be food, water, cover, and living space;
LAND USE PLAN DECISION: Establishes desired outcomes and actions needed to achieve them. Decisions are reached using the BLM planning process. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals.
MANAGEMENT ACTIONS: Land use plans must identify the actions needed to achieve the desired outcomes, including actions to restore or protect land health. These actions include proactive measures (e.g., measures that will be taken to enhance watershed function and condition) as well as measures or criteria that will be applied to guide day-to-day activities occurring on public land.
MINING CLAIM: A mining claim is a selected parcel of Federal Land, valuable for a specific mineral deposit or deposits, for which a right of possession has been asserted under the General Mining Law. This right is restricted to the development and extraction of a mineral deposit. The rights granted by a mining claim protect against a challenge by the United States and other claimants only after the discovery of a valuable mineral deposit. The two types of mining claims are lode and placer. In addition, mill sites and tunnel sites may be located to provide support facilities for lode and placer mining.
MONITORING: The collection of information to determine the effects of resource management and detect changing resource trends, needs, and conditions.
NATIONAL HISTORIC PRESERVATION ACT OF 1966, AS AMENDED (NHPA): A federal statute that established a federal program to further the efforts of private agencies and individuals in preserving the Nation's historic and cultural foundations. NHPA 1) authorized the National Register of Historic Places, 2) established the Advisory Council on Historic Preservation and a National Trust Fund to administer grants for historic preservation, and 3) authorized the development of regulations to require federal agencies to consider the effects of federally assisted activities on properties included on or eligible for the National Register of Historic Places.
OFF-HIGHWAY VEHICLE (OHV): Any vehicle capable of or designed for travel on or immediately over land, water, or other natural terrain, deriving motive power from any source other than muscle. OHVs exclude: 1) any non-amphibious registered motorboat; 2), any fire, emergency, or law enforcement vehicle while being used for official or emergency purposes; 3) any vehicle whose use is expressly authorized by a permit, lease, license, agreement, or contract issued by an authorized officer or otherwise approved; 4) vehicles in official use; and 5) any combat or combat support vehicle when used in times of national defense emergencies.
PALEONTOLOGICAL RESOURCES (FOSSILS): The physical remains of plants and animals preserved in soils and sedimentary rock formations. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.
PUBLIC LANDS: As defined by Public Law 94-579 (Federal Land Policy and Management Act of 1976), lands and interest in land owned by the United States and administered by the Secretary of the Interior, through BLM, regardless of how the United States acquired possession. In common usage, public lands may refer to all federal land, no matter what agency manages it.
PUBLIC USE: A cultural property is eligible for consideration as an interpretive exhibit-in place, a subject of supervised participation in scientific or historical study, a subject of unsupervised collecting under permit or related educational and recreational uses by members of the general public.
RESOURCE MANGEMENT PLAN (RMP): A BLM planning document that is prepared in

accord with Section 202 of FLPMA that presents systematic guidelines for making resource management decisions for a resource area. An RMP is based on an analysis of an area's resources, its existing management, and its capability for alternative uses. RMPs are issue oriented and developed by an interdisciplinary team with public participation.
ROUTE: any motorized, non-motorized, or mechanized transportation corridor. Corridor may either be terrestrial or a waterway. "Roads," "trails," and/or "ways" are considered routes.
SPECIAL RECREATION PERMIT (SRP): An authorization that allows for specific nonexclusive permitted recreational uses of the public lands and related waters. SRPs are issued to control visitor use, protect recreational and natural resources, and provide for the health and safety of visitors, and accommodate commercial recreational uses.
TRAVEL MANAGEMENT NETWORK: A system that addresses access requirements to public lands. This includes, but is not limited to: Title 5 rights-of-way, RS 2477 Roads, OHV routes, county maintained roads, trails (hiking, equestrian, bike, and vehicular), authorized or permitted uses (ranchers, miners, and other agencies), and ADA needs. The network aims to also improve the lack of legal access to public lands over private or state lands.
TREAD LIGHTLY: A not-for-profit organization whose mission is to increase awareness of ways to enjoy the great outdoors while minimizing human impacts
WASH: A channel or miniature valley cut by concentrated runoff but through which water commonly flows only during and immediately after heavy rains, or while snow is melting.
WILDERNESS: Area designated by Congress to protect their wilderness values or characteristics as described under the Wilderness Act of 1964.
WILDLIFE: A broad term that includes birds, reptiles, amphibians, and non-domesticated mammals.

5.3 List of Acronyms Used in this EA

BLM - Bureau of Land Management
CEAA – Cumulative Effects Analysis Area
CFR - Code of Federal Regulations
LHFO- Lake Havasu Field Office
MPO – Mine Plan of Operations
NEPA - National Environmental Policy Act
OHV - Off Highway Vehicle
RFD – Reasonable Foreseeable Development
RMP - Resource Management Plan
SRP - Special Recreation Permit
SHPO - State Historic Preservation Officer
WA – Wilderness Area
WSA - Wilderness Study Area

APPENDICES

Appendix A – Stipulations

Appendix B – Maps and Diagrams

Appendix C – Photos

Appendix D – Mine and Reclamation Plan

APPENDICES

Appendix A – Stipulations

1. The operator shall obtain all necessary federal, state, and local permits prior to commencing with surface disturbing activities.
2. The site shall only be used to excavate and process the sand and gravel mined from this location. Materials not originating from this location shall not be processed nor stored at the site.
3. During periods of operation, the operator shall clearly mark the area (with signs, etc.) to ensure the safety of the public.
4. Non-vehicular access (i.e. hikers, etc.) shall not be restricted.
5. All vehicles shall stay on the existing road to and from the excavation site. No off road vehicular travel is authorized. Vehicles should be inspected underneath for desert tortoise prior to moving.
6. All waste disposals shall comply with federal, state, and county codes.
7. No oil, grease or other hazardous substances shall be disposed of on public lands.
8. "Pack it in Pack it Out!" All trash and debris caused by the activity shall be removed. All litter, trash, and garbage shall be controlled by placing refuse in predator-proof, sealable receptacles and removing the debris regularly from the worksite.
9. Excavated materials shall be stockpiled in such a manner that they do not obstruct the natural flow of water down wash systems.
10. Any trenches around equipment shall be monitored on a daily basis to ensure that wildlife is not trapped.
11. Care shall be taken not to disturb or destroy tortoises or their burrows. Handling, collecting, damaging, or destroying desert tortoises are prohibited by Arizona State Law. During all activity, special care should be given to watch for and avoid any desert tortoise that may be present within the project area.
12. If a tortoise is endangered by any activity that activity shall cease until either the tortoise moves out of harm's way of its own accord, or until the authorized biologist is able to remove the tortoise to safety. Tortoises shall be handled only by a BLM authorized Wildlife Biologist, and shall be moved solely for the purpose of preventing death or injury. The authorized biologist shall be responsible for taking appropriate measures to ensure any desert tortoise relocated from the project site is not exposed to temperature extremes which could be harmful to the animal.
13. Pits and dig sites should allow for escape of trapped animals, including desert tortoise. This may include a sloped side, ramp, or cover when not in use.
14. If a vehicle is left for any occasion the driver shall inspect underneath any parked vehicles immediately prior to moving the vehicles. If a desert tortoise is beneath the vehicle, the authorized biologist shall move the tortoise from harm's way. Alternatively, the vehicle shall not be moved until the tortoise has left of its own accord.
15. All wildlife and migratory birds shall be observed from a distance. Any injured wildlife shall be reported to Arizona Game & Fish Department at (928) 342-0091.
16. Harassment of wildlife or destruction of private and public improvements, such as fences and gates, is prohibited. The taking of any threatened or endangered plant or animal is prohibited.

17. Participants will be prohibited from approaching Bighorn Sheep on foot or by vehicle.

18. Because of potential for subsurface ground disturbance, any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the operator, or any person working on behalf of the operator, on public or Federal land, shall be immediately reported to the authorized officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The operator will be responsible for the cost of the evaluation and any decision as to proper mitigation measures and will be made by the authorized officer after consulting with the operator.
19. Whenever possible, pockets of native vegetation within the general area of disturbance shall be left to hasten the re-establishment of native flora.
20. Upon completion of operations the area shall be re-contoured to approximate surrounding contours and compacted areas will be ripped to hasten natural re-vegetation.
21. Any excavations existing in the area shall have a (3:1) slope.
22. State protected plant species (all cactus, ocotillo, and native trees) shall be avoided. If they cannot be avoided they will be salvaged and replanted during reclamation. The operator shall report all State protected species destroyed or damaged to the Lake Havasu Field Office Biologist at (928) 505-1200.
23. All personnel should report any sightings of desert tortoise, bighorn sheep, and other wildlife species to the LHFO Biologist.
24. Site operations and reclamation shall occur in accordance with the Misery Loves Company MPO dated December 28, 2012.
25. Use or occupancy must be reasonably incident. In all uses and occupancies, you must prevent or avoid "unnecessary or undue degradation" of the public lands and resources.
26. Uses must conform to all applicable federal and state environmental standards and you must have obtained all required permits before beginning, as required under 43 CFR part 3800. This means getting permits and authorizations and meeting standards required by state and federal law, including, but not limited to, the Clean Water Act (33 U.S.C. 1251 et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), and the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as required under 43 CFR part 3800.
27. Occupancies must conform to all applicable federal and state environmental standards and you must have obtained all required permits before beginning, as required under this subpart and 43 CFR 3800. This means getting permits and authorizations and meeting standards required by state and federal law, including, but not limited to, the Clean Water Act (33 U.S.C. 1251 et seq.), Clean Air Act (42 U.S.C. 7401 et seq.), and the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as required under this subpart and 43 CFR part 3800.
28. If prospecting or exploration activities involve only surface activities, you must not place permanent structures on the public lands. Any temporary structures you place on the public lands during prospecting or exploration will be allowed only for the duration of the activities, unless BLM expressly and in writing allows them to remain longer. If your prospecting or exploration activities involve subsurface activities, you may place permanent structures on the public lands, if BLM concurs.
29. All permanent and temporary structures you place on the public lands must conform to the

applicable state or local building, fire, and electrical codes, and occupational safety and health and mine safety standards. If state or local codes require, you must obtain a certificate of occupancy or its equivalent before you begin use or occupancy involving permanent structures. If state or local law requires, you must also acquire appropriate sewerage and sanitation permits before the occupancy or use of a permanent structure placed on the public lands.

Appendix B – Maps and Diagrams

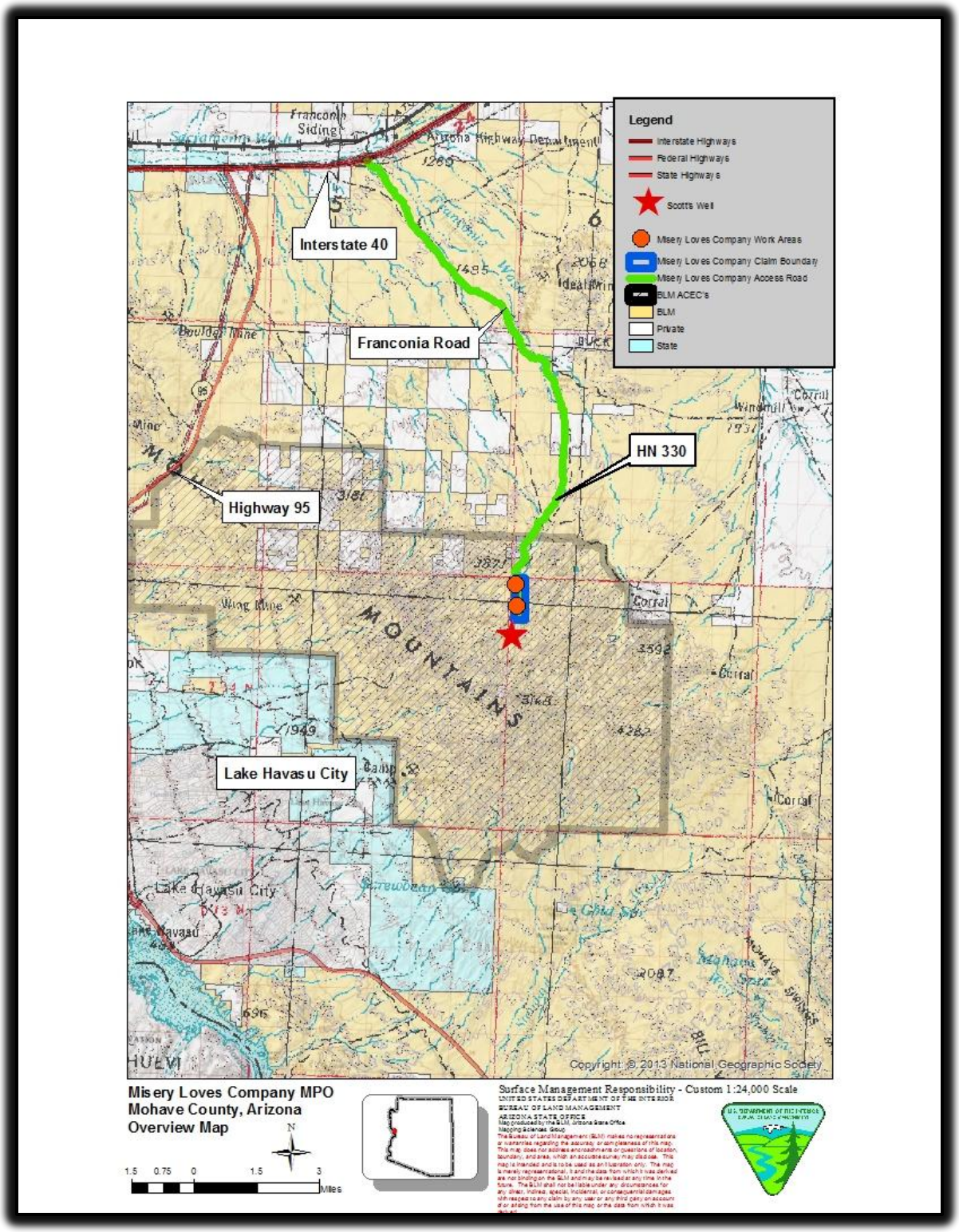
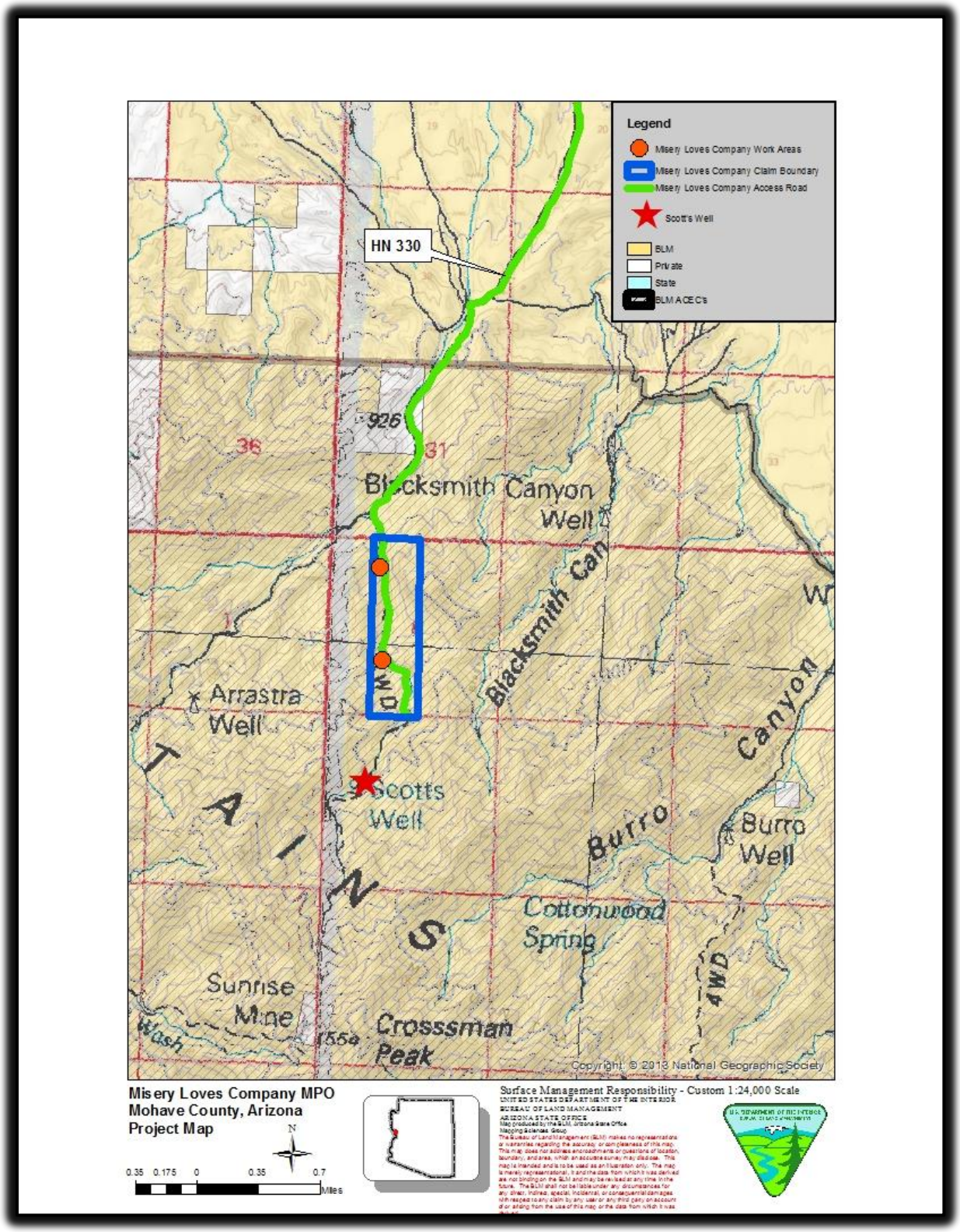


Figure 1


Legend
Misery Loves Company Work Areas
Misery Loves Company Claim Boundary
Misery Loves Company Access Road
Scott's Well
BLM
Private
State
BLM ACEC's
HN 330
926
36
31
Blacksmith Canyon Well
Blacksmith Can
Arrastra Well
Scotts Well
Burro
Burro Well
Canyon
Cottonwood Spring
Sunrise Mine
Wash
Crosssman Peak
4WD
Copyright: © 2013 National Geographic Society
Misery Loves Company MPO
Mohave County, Arizona
Project Map
N
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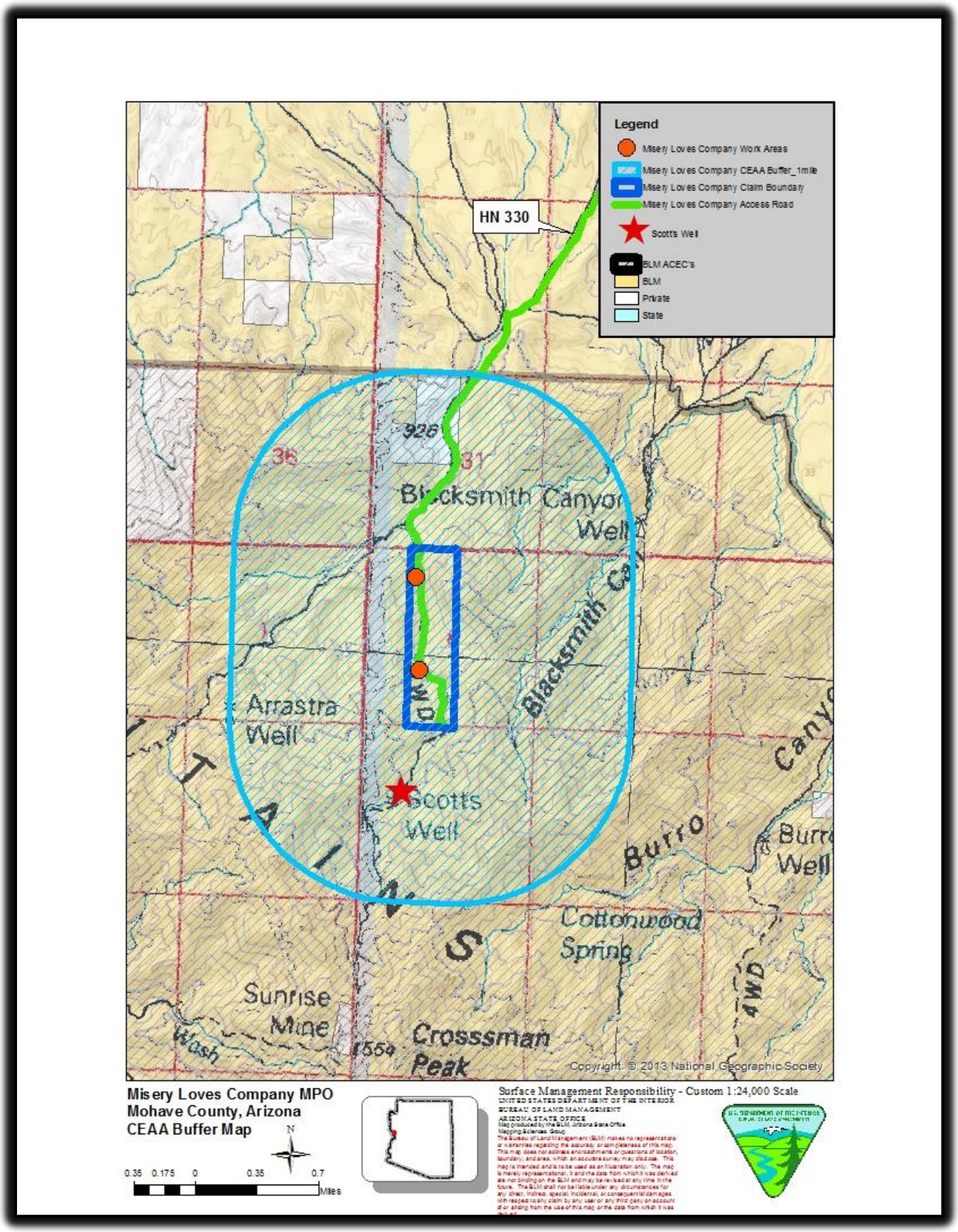
Surface Management Responsibility - Custom 1:24,000 Scale
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ARIZONA STATE OFFICE

Figure 2


Legend
Misery Loves Company Work Areas
Misery Loves Company CEAA Buffer_1mile
Misery Loves Company Claim Boundary
Misery Loves Company Access Road
Scotts Well
BLM ACEC's
BLM
Private
State
HN 330
926
36
31
Blacksmith Canyon Well
Blacksmith Canyon
Arrastra Well
Scotts Well
Burro Well
Cottonwood Spring
Sunrise Mine
Wash
1554
Crosssman Peak
4WD
Copyright: © 2013 National Geographic Society
Misery Loves Company MPO
Mohave County, Arizona
CEAA Buffer Map
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Miles
Surface Management Responsibility - Custom 1:24,000 Scale
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ARIZONA STATE OFFICE
Map produced by the BLM, Arizona State Office
Mapping Sciences Group
The Bureau of Land Management (BLM) makes no representations or warranties regarding the accuracy, or completeness of this map. This map does not address encroachments or questions of location, boundary, and area, which an accurate survey may disclose. This map is intended and is to be used as an illustration only. The map is merely representational, it and the data from which it was derived are not binding on the BLM and may be revised at any time in the future. The BLM shall not be liable under any circumstances for any direct, indirect, special, incidental, or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map or the data from which it was derived.

Figure 3

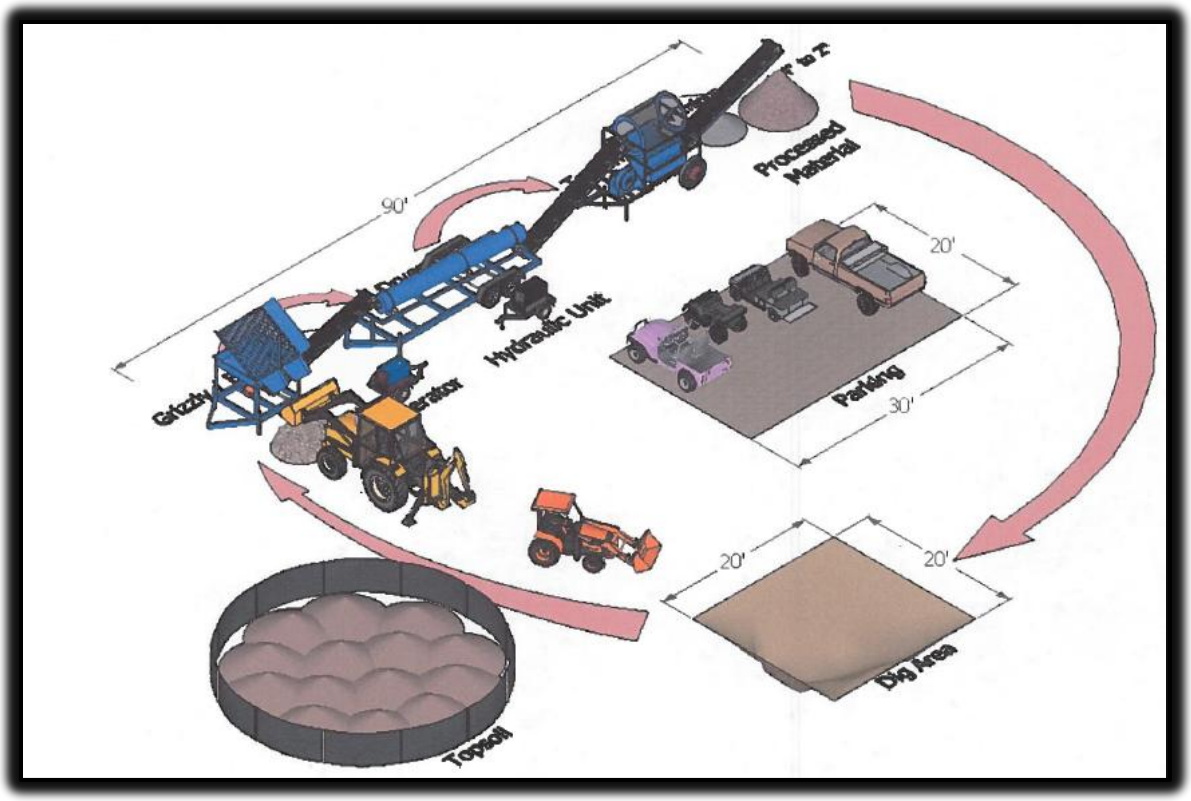

Figure 4 – Diagram of Equipment Set-up within the Processing Area.

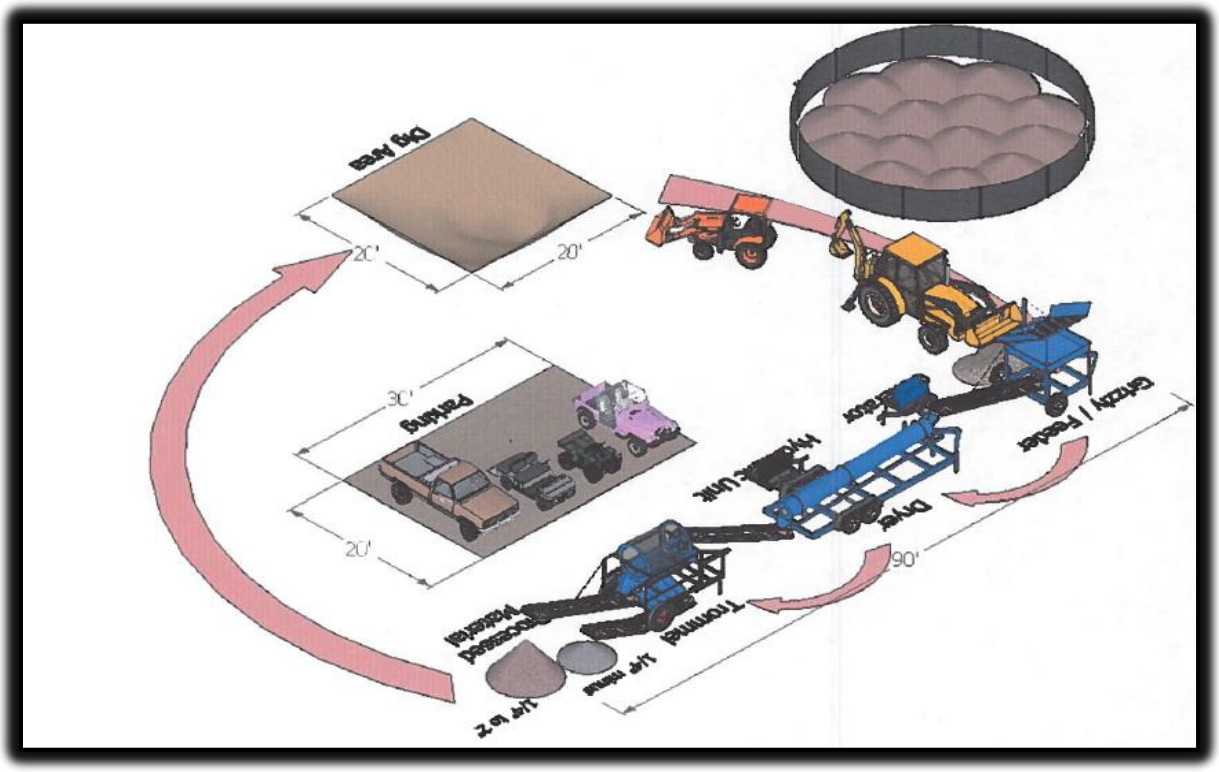

Figure 5 – Alternate view of Equipment Set-up within Processing Area.

Appendix C – Photos

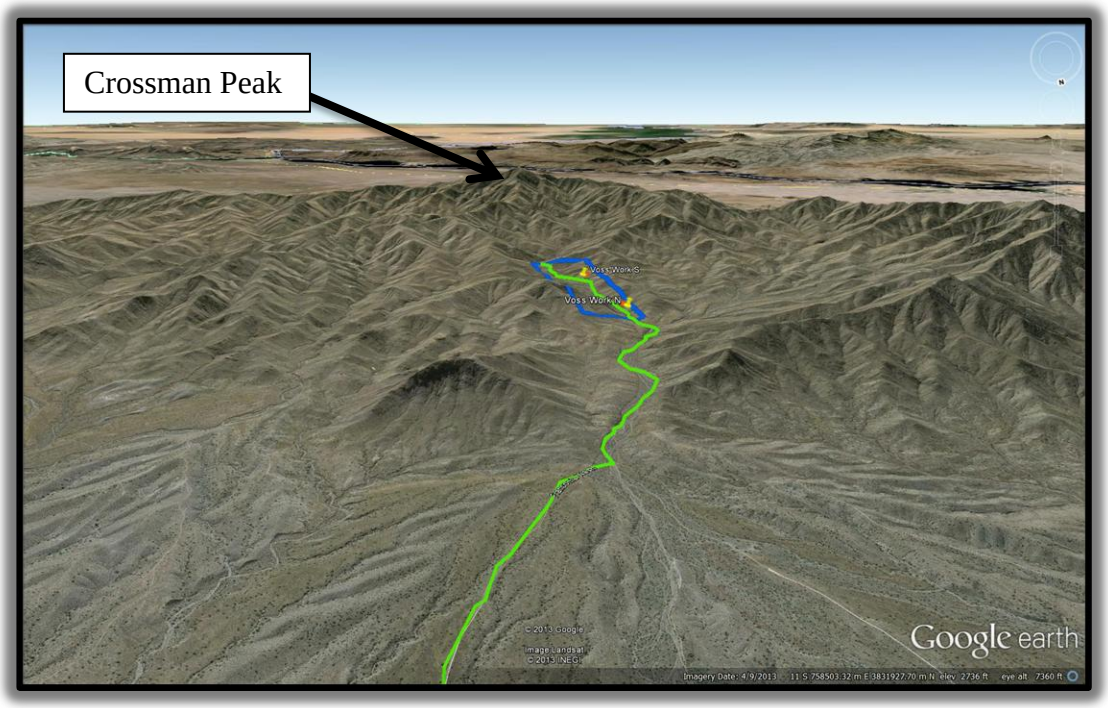

Photo 1 - Looking South from Franconia Road toward the Project Area
(Green line = Voss access road to claim, Blue outlined area = Misery Loves Company claim boundary, Orange dots = proposed Voss work areas)

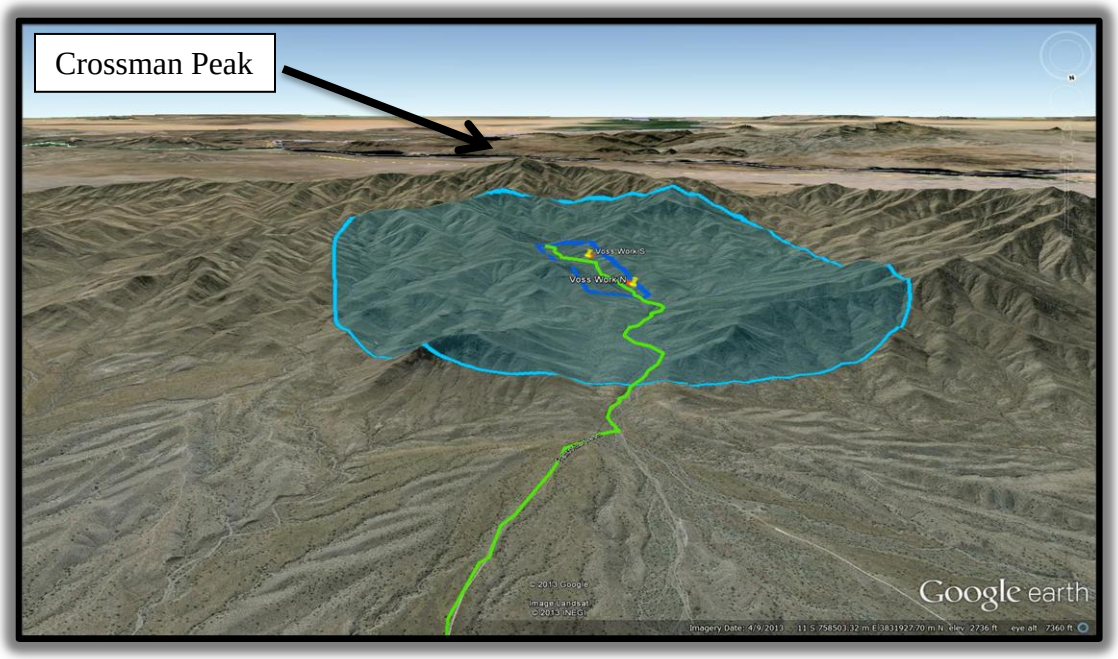

Photo 2 - Looking South from Franconia Road toward the Project Area with CEAA Buffer
(Green line = Voss access road to claim, Dark Blue outlined area = Misery Loves Company claim boundary, Orange dots = proposed Voss work areas, Light Blue outlined area = 1 mile CEAA Buffer)

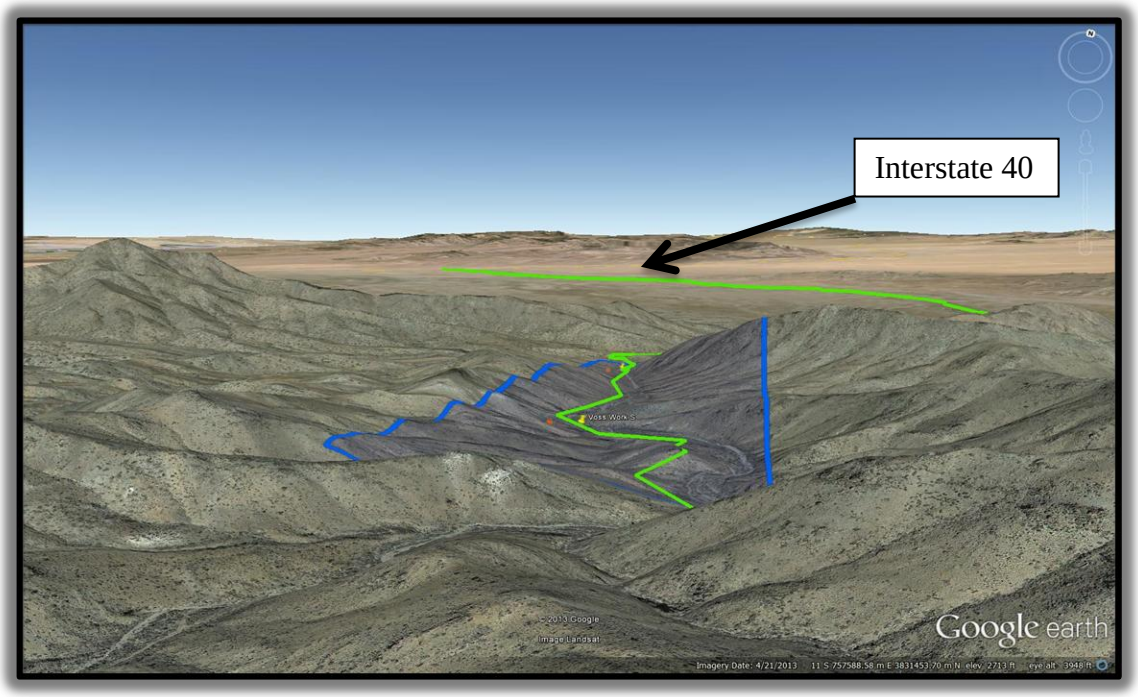

Photo 3 - Looking North from Crossman Peak toward the Project Area
(Green line = Voss access road to claim, Blue outlined area = Misery Loves Company claim boundary, Orange dots = proposed Voss work areas)

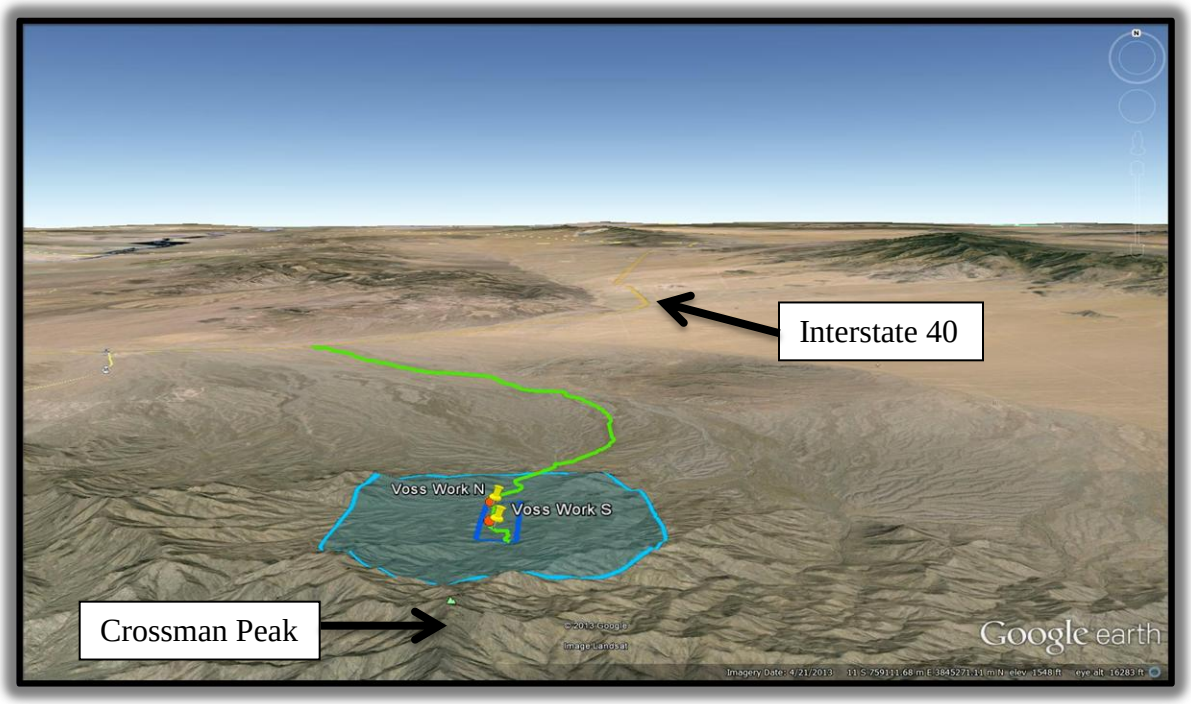

Photo 4 - Looking North from Crossman Peak toward the Project Area, with CEAA Buffer
(Green line = Voss access road to claim, Dark Blue outlined area = Misery Loves Company claim boundary, Orange dots = proposed Voss work areas, Light Blue outlined area = 1 mile CEAA Buffer)

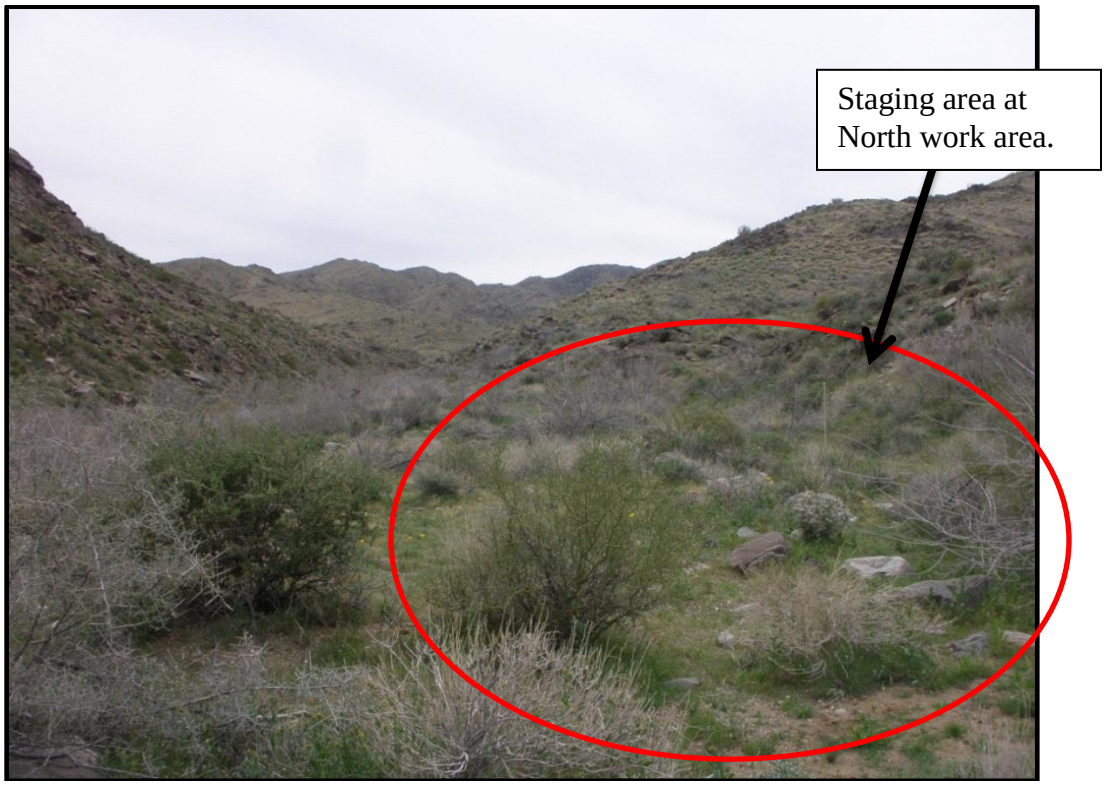

Photo 5 – Looking south, toward Scotts Well from the primary staging area.

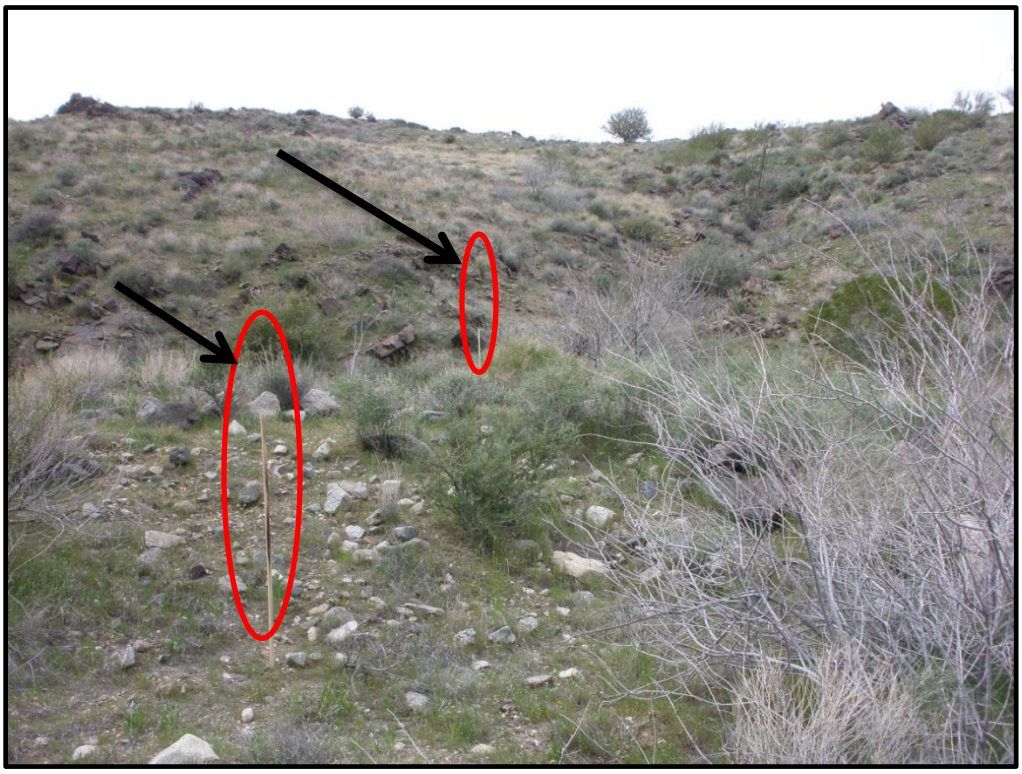

Photo 6 – Looking west at northern boundary of the primary staging area (stakes).

Photo 7 – Looking north down the wash at proposed North work area.

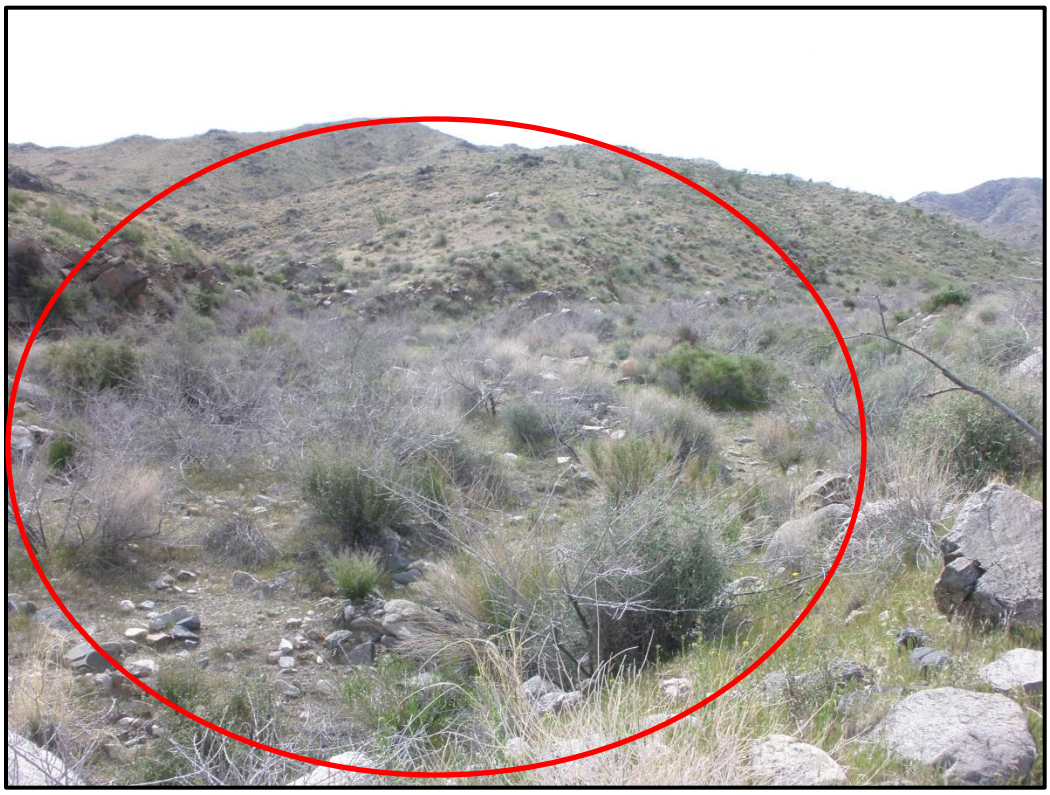

Photo 8 – Looking southeast at proposed South work area.

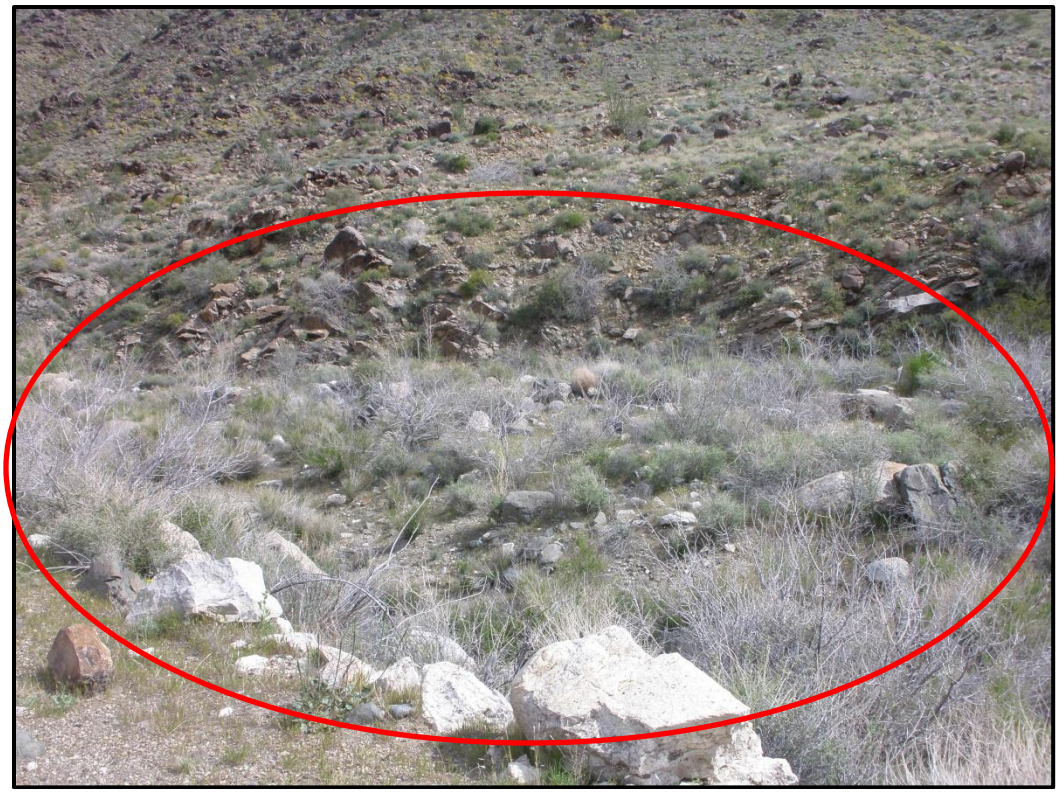

Photo 9 – Looking east at proposed South work area.

Photo 10 – Looking north at proposed South work area.

Photo 11 – Looking south at the access road through the site.

Appendix D – Mine and Reclamation Plan