GENERAL BIOLOGICAL RESOURCES ASSESSMENT AND DESERT TORTOISE SURVEY

HANEY BROWN MINES #1 & #2
APN 424-041-02

SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

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Project: #2020-39

February 17, 2021 (Updated)

TITLE PAGE

Date Report Updated:	**February 17, 2021**
Date Field Work Completed:	**May 26 and 27, 2020**
Report Title:	**General Biological Resources Assessment and Desert Tortoise Survey**
Assessor's Parcel Numbers:	**424-041-02**
Prepared for:	**Anlex Rock and Minerals Inc.**
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1.0 INTRODUCTION AND PROJECT DESCRIPTION

Baseline biological surveys were conducted on the mine property on May 26 and 27, 2020. In addition, a protocol survey was conducted for the desert tortoise to determine if the species was present on the site or in the surrounding area. The total area encompassing Haney Brown Rock #1 Mining Claim and Haney Brown Rock #2 Mining Claim is approximately 130-acres. Mining activities are currently on-going within the boundaries of Haney Brown #1 (14-acres) as shown on the mine plan (Appendix A). No mining activities are currently being conducted in Haney Brown (116-acres).

The mining claims are located immediately south of Interstate 15, 2.3 miles north of Interstate 40, and approximately 4 miles east of the city of Barstow in San Bernardino County, Section 2, Township 9 North, Range 1 West (Appendix A: Figures 1, 2, and 3). As part of the biological assessment process and desert tortoise survey protocol, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed prior to the initiation of field investigations. The proponent is proposing a mining and reclamation revision (expansion). Following completion of a comprehensive data review, surveys were performed on the site during which the biological resources on the property and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property site was evaluated for the presence of native habitats which could potentially support populations of special status wildlife species. Desert tortoises have been documented in the area; therefore, a protocol survey was conducted for the species to determine if tortoises or tortoise sign (burrows, scats, carcasses, etc.) were present on the site. The property was also evaluated for the presence of sensitive habitats including stream channels, wetlands, vernal pools, riparian habitats, and potential jurisdictional areas.

Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDB, 2020) for the Nebo, California quadrangle, there are eight special status wildlife species

and six special status plant species that have been documented within the region (Section 4.0: Tables 4-1 and 4-2). Special status wildlife species include desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), golden eagle (*Aquila chrysaetos*), burrowing owl (*Athene cunicularia*), Townsend's big-eared bat (*Corynorhinus townsendii*), Mohave tui chub (*Siphateles bicolor mohavensis*), Le Conte's thrasher (*Toxostoma lecontei*), and prairie falcon (*Falco mexicanus*). Plant species include Emory's crucifixion-thorn (*Castela emoryi*), Mojave monkeyflower (*Diplacus mohavensis*), Barstow woolly sunflower (*Eriophyllum mohavense*), Mojave menodora (*Mendora spinescens var. mohavensis*), creamy blazing star (*Mentzelia tridentata*), and Beaver dam breadroot (*Pediomelum castoreum*).

Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980). The project proponent is proposing a mining expansion with the property being directly accessible via Meridian Road (dirt), which can be reached by going south on Fort Irwin Road when exiting Interstate 15. As discussed above, there are two mining claims: Haney Brown #1 (14- acres) and Haney Brown #2 (116-acres). Haney Brown #2 consists of relatively undisturbed land where on-going mining activities are occurring within the boundaries of Haney Brown #1. Vacant lands surround Haney Brown #1 and #2 with Interstate 15 located about 0.25-miles north of the property.

2.0 ENVIRONMENTAL SETTING

The mining claims encompass approximately 130-acres in size and is located directly south of Interstate 15, and north of Interstate 40 in San Bernardino County, California (Appendix A: Figures 1 and 2). The undisturbed portions of the mine claims support a variety of native vegetation typical of the Mojave Desert. Plants identified included creosote bush (*Larrea tridentata*), California sagebrush (*Artemisia californica*), Anderson thornbush (*Lycium andersonii*), catclaw acacia (*Senegalia greggii*), beavertail cactus (*Opuntia basilaris*), Nevada ephedra (*Ephedra nevadensis*), desert gold (*Geraea canescens*), and Mojave yucca (*Yucca schidigera*)

The site supports a few wildlife species with jackrabbits (*Lepus californicus*), Antelope ground squirrels (*Ammospermophilus leucurus*) and desert woodrats (*Neotoma lepida*) the only mammals observed during the field investigations. Only one species of reptiles, western whiptail (*Cnemidophorus tigris*), was seen during the observation, although side-botched lizards (*Uta stansburiana*), Mojave green rattlesnakes (*Crotalus scutulatus*), and Mojave patchnose snake (*Salvadora hexalepis mojavensis*) are known to occur in the area and likely inhabit the site. Bird species observed in the area included common raven (*Corvus corax*), black-throated sparrow (*Amphispiza bilineata*), and chukar (*Alectoris chukar*). Le Conte's thrasher (*Toxostoma lecontei*) may also occur on the site; although, the sighting could not be confirmed. Table 2 provides a comprehensive compendium of wildlife which have been observed in the area or which are known to occur in the region based on other field investigations conducted in the area by RCA Associates, Inc. biologists. No sensitive habitats such as vernal pools or riparian habitats were observed; however, several well-defined desert washes bisect the Haney Brown #2 claim. Some of these channels may be considered jurisdictional and "Waters of the State" (WoS) and/or "Waters of the US" (WoUS).

The mining claims are not located within any designated "Critical Areas" for the desert tortoise; however, the Superior-Cronese Critical Habitat Unit is located approximately one mile north of Haney Brown #1 and #2.

3.0 METHODOLOGIES

Baseline biological surveys were conducted on May 26 and 27, 2020 during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the site to collect data on the plant and wildlife communities. Following completion of the initial reconnaissance surveys, comprehensive surveys were performed throughout the site to document the vegetation present on the property and the wildlife species which inhabit the area. In addition to the general biological investigations, a protocol survey was conducted for the desert tortoise to document the presence of the species and/or tortoise sign (i.e., burrows, scats, carcasses, etc.). Applicable methodologies for the various field investigations performed are summarized below.

Surveys were performed on the site and in the surrounding area from approximately 0800 to about 1200 hours on each survey day. Weather conditions during the surveys consisted of winds ranging from 0 to 5 mph, temperatures from the low 70's (F) (AM) to high-90's (AM) (°F) with no cloud coverage. All plants and wildlife detected during the field investigations were recorded and are provided in Tables 1 & 2 along with other species that have been documented in the area (Appendix A).

3.1 General Plant and Animal Surveys: Meandering transects were walked throughout the site at a pace that allowed for careful documentation of the plants and wildlife present on the site. All plants observed were identified in the field and wildlife were identified through visual observations and/or by vocalizations. Tables 1 and 2 (Appendix A) provide a comprehensive compendium of the species observed and those expected to occur in the region.

3.2 Burrowing Owl: The site was also evaluated on May 26 and 27, 2020 for the presence of suitable habitat for the burrowing owl. Owls utilize a variety of natural and modified habitats for nesting and foraging where the vegetation is low-growing. Typical habitats for the species include native and non-native grasslands, interstitial grassland within shrub lands, desert shrubs lands with

low density cover, drainage ditches, earthern berms, pasture lands, and fallow fields (CDFW, 1992). Burrowing owls typically utilize abandoned fossorial burrows which have been excavated by various mammals such as coyotes, foxes, ground squirrels, badgers, and dogs. Owls may also use man-made structures such as electrical vaults, cement culverts, man-made structures, and large debris piles. As part of the habitat assessment and in conjunction with the desert tortoise survey, the Haney Brown #2 area was surveyed for potential (i.e., occupiable) owl burrows, as well as man-made structures, that owls could potentially utilize. As required by CDFW survey protocol, 30-meter, parallel belt transects were walked in an east-west direction until the property was checked for burrows, as well as the presence of any burrowing owls, and/or owl signs (burrows, tracks, whitewash, etc.). All transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Burrowing owls typically utilize burrows which have been excavated by other animals (squirrels, coyotes, foxes, dogs, etc.) since owls cannot dig their own burrows. Field notes were recorded regarding native plant assemblages, wildlife sign, and human affects in order to determine the presence or absence of suitable burrowing owl habitat.

3.3 Desert Tortoise: A habitat assessment was initially conducted for the desert tortoise in conjunction with the general biological surveys. The purpose of the habitat assessment was to evaluate the habitat present on the mining claims and to determine if the site supports suitable habitat for the species. Base on the initial baseline evaluation, it was determined that the site does support habitat for the species. Therefore, a protocol survey was conducted for the species on May 26 and 27, 2020. As per the survey protocol, ten-meter belt transects were walked in a west-east direction in order to provide 100 percent coverage of the site. During the surveys, the site and surrounding area out to about 600 feet were evaluated for the presence of any tortoises, tortoise sign (e.g., scats, tracks, etc.) and tortoise burrows. Data was also collected on plant species observed which are typically associated with the species.

4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDB, 2021) was performed for the USGS Nebo, California quadrangle to determine which special status species have been documented in the region. Based on this review, it was determined that eight special status wildlife species and six special status plants, have been documented within the USGS Nebo quadrangle. The following tables provide data on each special status species.

Table 4-1: Special status plant species documented in the region (Source: CNDDB, 2021)

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ ABSENCE ON PROPERTY
PLANTS			
Within Nebo Quadrangle			
Emory's crucifixion-thorn (*Castela emoryi*)	Federal: None State: None CNPS: 2B.2	Creosote bush scrub	Suitable habitat present on site
Mojave monkeyflower (*Diplacus mohavensis*)	Federal: None State None CNPS: 1B.2	Creosote bush scrub, Joshua tree woodland	Suitable habitat present on site
Barstow wooly sunflower (*Eriophyllum mohavense*)	Federal: None State: None CNPS: 1B.2	Creosote bush scrub, Alkani sink, playas	Suitable habitat present on site
Mojave mendora (*Menodora spinescens var. mohavensis*)	Federal: None State: None CNPS: 1B.2	Mojavean desert scrub, rocky hillside, canyons	Suitable habitat present on site
Creamy blazing star (*Mentzelia tridentata*)	Federal: None State: None CNPS: 1B.3	Rocky, gravelly, Mojave desert scrub	Suitable habitat present on site
Beaver dam breadroot (*Pediomelum castoreum*)	Federal: None State: None CNPS: 1B.2	Mojave desert scrub, sandy washes, Joshua tree woodland	Suitable habitat present on site

CNPS: California Native Plant Society

Table 4-2: Special status wildlife and insects documented in the region (Source: CNDDB, 2021) or likely to occur in the region

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ABSENCE ON PROPERTY
ANIMAL			
Within Nebo Quadrangle			
Desert tortoise (*Gopherus agassizii)*	Federal: T State: T	Desert shrub	Two tortoise burrows and one carcass observed in the surrounding area.
Prairie falcon (*Falco mexicanus*)	Federal: None State: None CDFW: Watch list	Rolling foothills, mountain areas, deserts scrub.	Suitable foraging habitat present on site but no falcons observed.
Burrowing owl (*Athene cunicularia*)	Federal: None State: None CDFW: SSC	Open grassland areas where the owls utilize abandoned mammal burrows.	Marginal habitat present on the site. Low probability of species occurring on site. However, this mobile species occurs throughout Southern California and could potentially occur in the area in the future.
Mohave ground squirrel (*Xerospermophilus mohavensis*)	Federal: None State: T	Desert scrub	Documented observations within 5 miles of the site; however, none observed on site.
Le Conte's thrasher (*Toxostoma lecontei*)	Federal: None State: None	Desert flats with sparse growth of saltbush, open habitats	Suitable habitat and species may occur on site but sighting could not be confirmed.
Golden Eagle (*Aquila chrysaetos*)	Federal: None State: None	Open mountains, foothills, and plains, prairie and desert	Marginal habitat present but no eagles observed during surveys and low probability of species occurring on the site.
Townsend's big-eared bat (*Corynorhinus townsendii)*	Federal: None State: None	Arid desert scrub	Marginal habitat, none observed on site and unlikely to occur in the future
Mohave tui chub (*Siphateles bicolor mohavensis*)	Federal: Endangered State: Endangered	Deep pools and slough-like areas of the Mojave River	No suitable habitat present on site.

T = Threatened
SSC = Species of Special Concern

5.0 RESULTS

5.1 General Biological Resources

The property supports a variety of plant species with a creosote (*Larrea tridentata*) and sagebrush (*Artemisia californica*) vegetation community present throughout most of the site. The creosote bushes range from three to six feet in height and are relatively evenly spaced out, with no ring formations seen. The saltbushes were about one to three feet in height. A large percentage of the ground cover consisted of bare ground with small gravels and rocks present.

Herbaceous plants included brome species (*Bromus spp.*), desert trumpet (*Eriogonum inflatum*), Devil's spineflower (*Chorizanthe rigida*), fiddleneck (*Amsinckia tessellata*), desert pincushion (*Chaenactis stevioides*), and erodium (*Erodium cicutarium*). Other plant species observed included desert wire lettuce, Anderson thornbush (*Lycium andersonii*), catclaw acacia (*Senegalia gregii*), beavertail cactus (*Opuntia basilaris*), harem cactus (*Echinocactus polycephalus*), pencil cholla (*Cylindropuntia ramosissima*), ephedra (*Ephedra nevadensis*), and Mojave yucca (*Yucca schidigera*). Table 1 provides a compendium of all plants identified on the site and in the surrounding region (Appendix A).

The site supports wildlife typical of the Mojave Desert. Mammals observed included antelope ground squirrel (*Ammospermophilus leucurus*), jackrabbit (*Lepus californicus*), and desert woodrat (*Neotoma lepida*). Common ravens (*Corvus corax*), black-throated sparrows (*Amphispiza bilineata*), and chukars (*Alectoris chukar*) were the only birds identified on the site; although, numerous other species have been documented in the area and may occur on the site (See Table 2). A Le Conte's thrasher (*Toxostoma lecontei*) may be present on the site; however, the sighting could not be confirmed. Western whiptails were the only reptile seen during the field investigations; however, other species common in the area include side-botched lizards (*Uta stansburiana*) and zebra-tailed lizard (*Callisaurus draconoides*). Table 2 provides a comprehensive compendium of wildlife which has been observed in the area or which are known

to occur in the region (Appendix A). No sensitive habitats such as vernal pools, wetlands, riparian habitats, etc. were observed during the field investigations; however, there are several well defined desert washes which bisect the Haney Brown #2 which may be considered jurisdictional and may be classified as "Waters of the State" (WoS) and/or "Waters of the US" (WoUS).

5.2 Federal and State Listed Species

The Federal and State listed wildlife species which have been documented in the surrounding region within approximately five miles of the site include the desert tortoise, Mohave tui chub, and Mohave ground squirrel. No signs of the Mohave ground squirrels were observed; however, the species is normally active above ground primarily from about March 15 through April 15. It should be noted that Haney Brown #1 and #2 are approximately five miles outside of the distribution of Mohave ground squirrels. The Mohave tui chub is dependent upon the presence of aquatic areas (ponds, streams, rivers, etc.) and these aquatic habitats are not present on either Haney Brown #1 or #2.

The vegetation within the boundaries of Haney Brown #1 and #2, except for the area of the active mine, support desert vegetation typical of areas which support desert tortoise populations (The species is listed as threatened by the State and federal). The mining claims, especially Haney Brown #2, supports relatively flat areas that are especially suitable for tortoises, as well as steeper slopes.

A desert tortoise carcass was observed approximately 100 feet east of the project boundary (See Figures 4 & 6). In addition to the carcass, a class two burrow (Class 2 burrows exhibit good condition and is definitely a tortoise burrow but shows no evidence of recent use) was observed about 300 feet south of the southern boundary (Figures 5 & 6). A small class 5 tortoise burrow was also observed about 400 feet south of the property (Figures 5 & 6). Class 5 burrows are potential tortoise burrows that exhibit deteriorated condition.

5.3 Wildlife Species of Special Concern and Special Status Plants

There are three wildlife species that are of special concern and five sensitive status plants species which have been documented within about 5-miles of the site. These species include burrowing owl, Townsend's big-eared bat, Le Conte's thrasher, Mojave monkeyflower, Barstow woolly sunflower, Mojave menodora, creamy blazing star, and Beaver dam breadroot. Haney Brown #2 and small areas of Haney Brown #1 support an undisturbed desert scrub community with native vegetation dominated by creosote bushes and rocky areas that are suitable habitat for the five sensitive plants species listed above. However, none of the plant species were observed during the field investigation, although the species could potentially occur on the site.

Townsend's big-eared bats have been shown to occupy desert habitats when there is an availability of caves, mines, and or cave like roosting areas that they use for shelter. No caves, mine shafts, or potential roosting areas were identified during the surveys; consequently, Townsend's big-eared bats are not expected to inhabit the site. Le Conte's thrasher occur in open arid desert habitats with vegetation such as mesquite, saltbush, and creosote bushes. There was a potential sighting of the Le Conte's thrasher within the bou8ndaries of Haney Brown #2' however, the sighting was brief and could not be definitely confirmed.

Although burrowing owls have not been documented in the area based on the CNDDB search, the species is relatively mobile and is known to occur throughout Southern California. However, no burrowing owls or owl sign was observed during the field investigations.

6.0 IMPACTS, MITIGATION, AND RECOMMENDATIONS

Future mining activities in undisturbed areas of the mining claims will result in the removal of native vegetation and will be subject to reclamation activities summarized in the reclamation plan prepared for the mining claims. The removal of the vegetation during future mining activities may be considered significant given the presence of desert tortoise sign as discussed in Section 5.2. As noted above, the desert tortoise is listed as a threatened species and is protected under the State and Federal endangered species acts. No live tortoises were observed during the field investigations; however, CDFW and USFWS may consider the area occupied tortoise habitat due to the presence of a tortoise carcass and two tortoise burrows in the surrounding area. To minimize potential impacts to the biological resources occurring on the site, including special status species, the following mitigation measures may need to be implemented as per CDFW and USFWS requirements.

1. A pre-construction survey for nesting birds (including burrowing owls) shall be conducted no more than 10-days prior to the start of any ground disturbance mining activities. If active nests or burrows are identified on the site then a "no-disturbance" buffer may be required to minimize disturbance of the nests.

2. Due to the presence of desert tortoise sign (i.e., carcass and burrows) in the surrounding area, CDFW and USFWS may require the implementation of mitigation measures.

3. If any special status species are observed on the site during future mining activities San Bernardino County, CDFW and USFWS should be contacted to discuss specific mitigation which may be required for the individual species.

4. Prepare a revegetation plan as per the requirements of the California Department of Conservation

7.0 BIBLIOGRAPHY

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CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or other biologists under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: February 17, 2021 Signed: *Randall Arnold*

Field Work Performed By: Randall Arnold
Principal Biologist

Ryan Hunter
Environmental Scientist/ Biologist

Lisa Cardoso
Wildlife Biologist

Appendix A

Figures and Tables

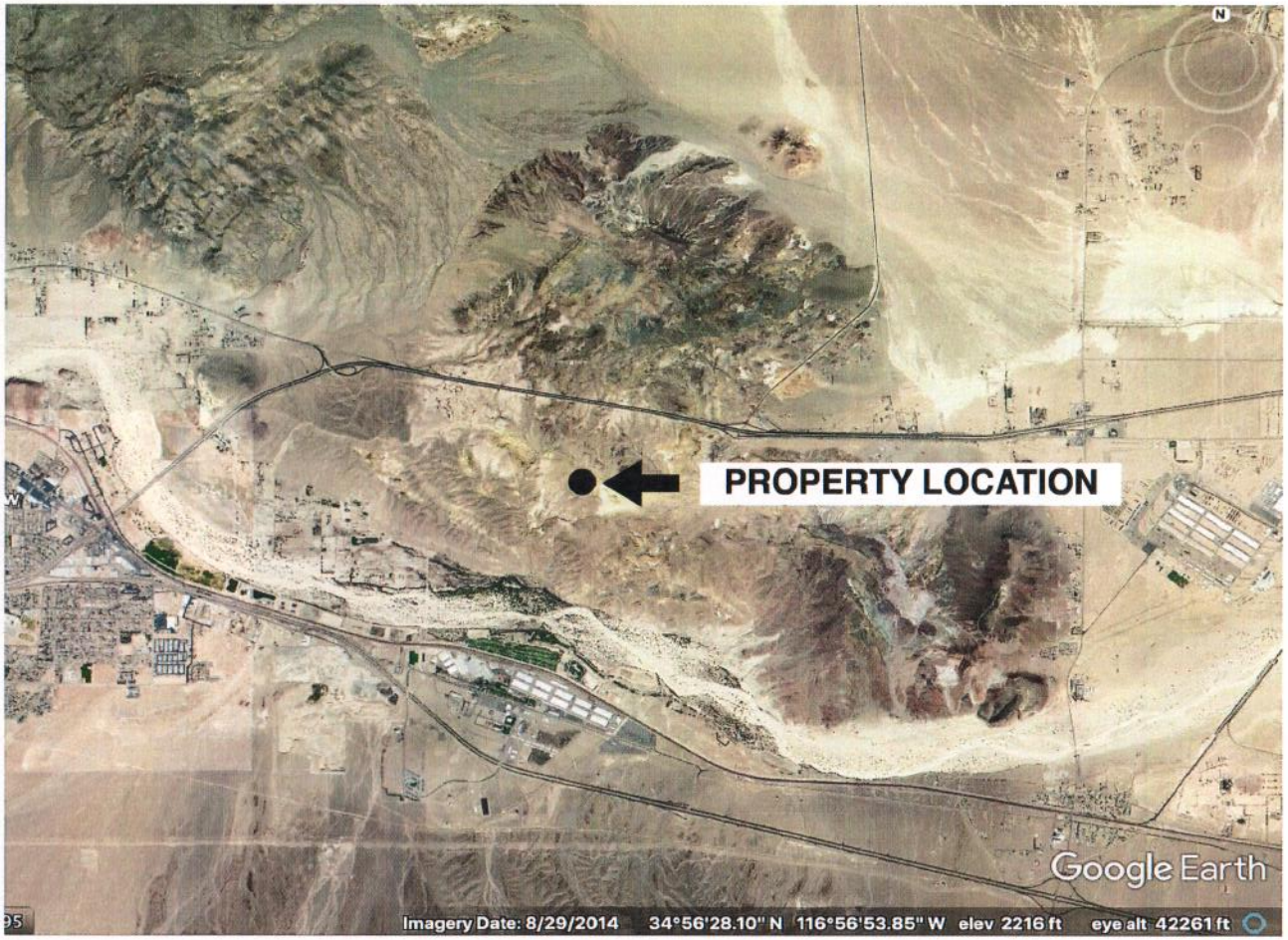

FIGURE 1: REGIONAL EXHIBIT

RCA ASSOCIATES, INC.
SOURCE: GOOGLE EARTH

RCA ASSOCIATES, INC.

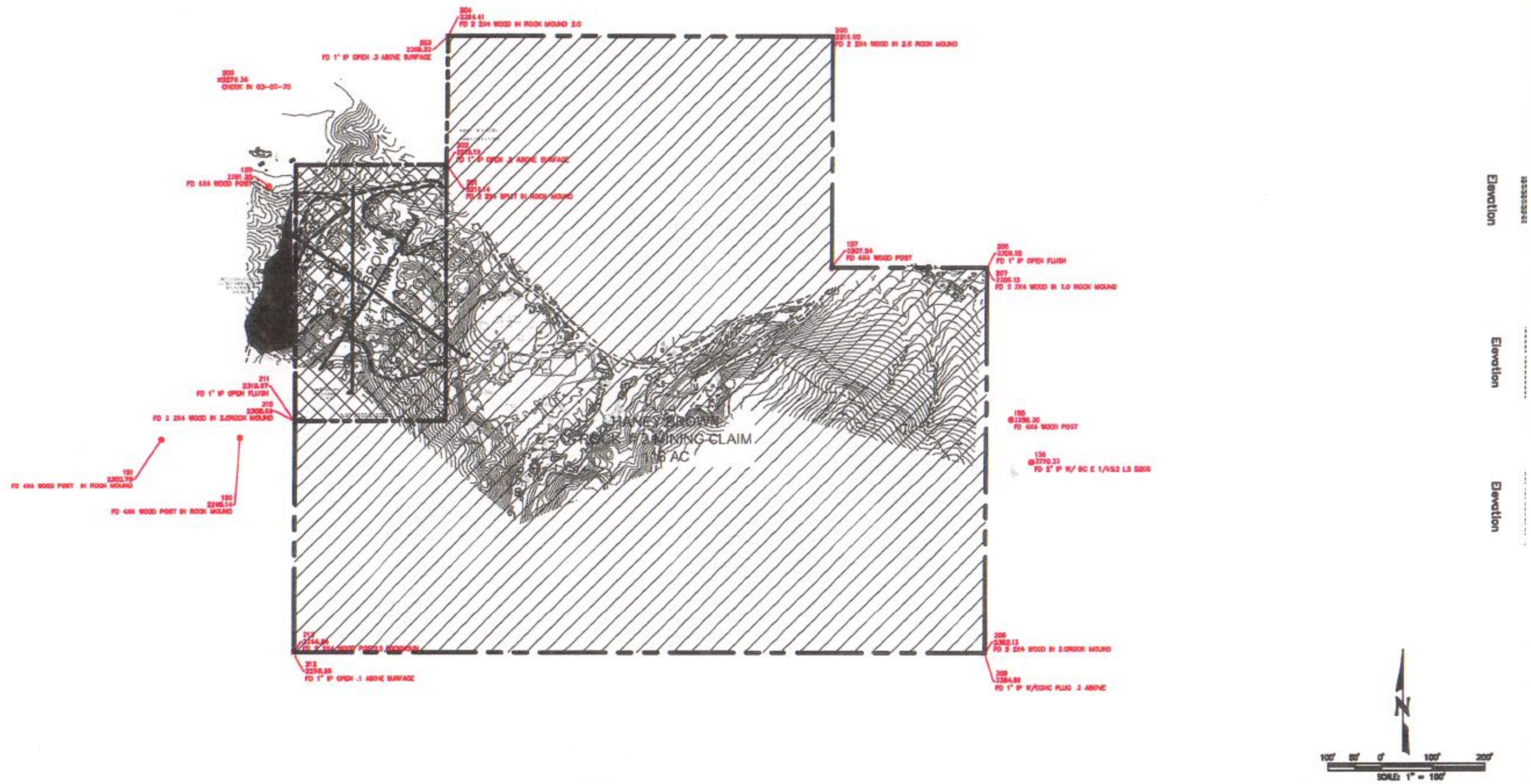

FIGURE 2: PROJECT LOCATION (Approximate Boundary Locations)

Know what's below. Call before you dig.

Merrell Johnson COMPANIES

HANEY BROWN
ROCK #1 QUARRY
SAN BERNARDINO COUNTY, CALIFORNIA

FOR
ANLEX ROCK AND MINERAL

CENTER OF SITE LOOKING NORTH

CENTER OF SITE LOOKING EAST

FIGURE 3
PHOTOGRAPHS OF SITE

CENTER OF SITE LOOKING SOUTH

CENTER OF SITE LOOKING WEST

FIGURE 3, cont.
PHOTOGRAPHS OF SITE

PHOTOGRAPH OF DESERT TORTOISE CARCASS

FIGURE 4

FIGURE 5
PHOTOGRAPHS OF DESERT TORTOISE BURROWS

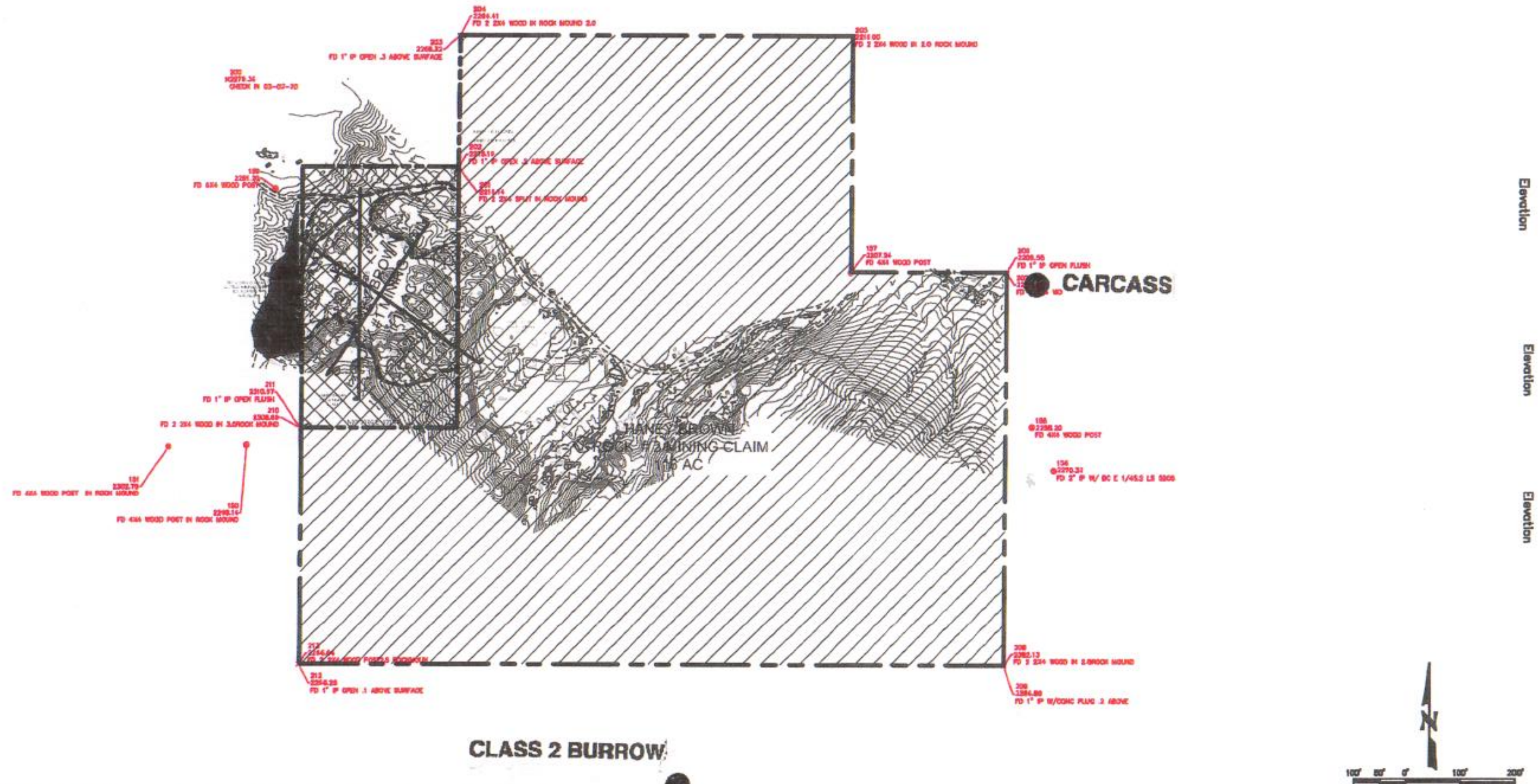

FIGURE 6: LOCATIONS OF DESERT TORTOISE CARCASS & BURROWS

811 Know what's below. Call before you dig.

LEGEND

No.	REVISION	DATE	BY

Merrell Johnson COMPANIES

HANEY BROWN
ROCK #1 QUARRY
SAN BERNARDINO COUNTY, CALIFORNIA

FOR
ANLEX ROCK AND MINERAL

Table 1 - Plants observed on the site and known to occur in the immediate surrounding area.

Common Name	Scientific Name	Location
Creosote bush	*Larrea tridentata*	On site and surrounding area
Saltbush	*Atriplex californica*	On site and surrounding area
Erodium	*Erodium cicutarium*	On site and surrounding area
Desertholly saltbush	*Atriplex hymenelytra*	On site and surrounding area
Matchweed	*Gutierrezia sarothrae*	On site and surrounding area
Catclaw acacia	*Senegalia greggii*	On site and surrounding area
Brome grass	*Bromus sp.*	On site and surrounding area
Harem cactus	*Echinocactus polycephalus*	On site and surrounding area
Beavertail cactus	*Opuntia basilaris*	On site and surrounding area
Fiddleneck	*Amsinckia tessellata*	On site and surrounding area
Mustard	*Descurainia pinnata*	On site and surrounding area
White-bursage	*Ambrosia dumosa*	On site and surrounding area
Neveda ephedra	*Ephedra nevadensis*	On site and surrounding area
Rabbitbrush	*Chrysothamnus nauseosus*	On site and surrounding area
Spiny allthorn	*Koeberlinia spinosa*	On site and surrounding area
Anderson's thornbush	*Lycium andersonii*	On site and surrounding area
Whitestem blazingstar	*Mentzelia albicaulis*	On site
Desert pincushion	*Chaenactis stevioides*	On site
Devil's spineflower	*Chorizanthe rigida*	On site and surrounding area
Desert gold	*Geraea canescens*	On site and surrounding area
Desert trumpet	*Eriogonum inflatum*	On site and surrounding area
California sagebrush	*Artemisia californica*	On site and surrounding area
Pencil cholla	*Cylindropuntia leptocaulis*	On site and surrounding area
Mojave yucca	*Yucca shidigera*	On site and surrounding area

Note: The above list is not intended to be a comprehensive list of every plant which may occur on the site or in the surrounding area.

Table 2 - Wildlife observed on the site and in the surrounding area during the field investigations.

Common Name	Scientific Name	Location
Common raven	*Corvus corax*	On-site
Desert cottontail	*Sylvilagus auduboni*	Known to occur in the area
Jackrabbit	*Lepus californicus*	On site and surrounding area
Antelope ground squirrel	*Ammospermophilus leucurus*	On site
Coyotes	*Canis latrans*	Tracks seen on site
Desert spiny lizard	*Sceloporus magister*	Known to occur in area
Western whiptail lizard	*Cnemidophorus tigris*	On site
Side-blotched lizard	*Uta stansburiana*	Known to occur in area
Le Conte's thrasher	*Toxostoma lecontei*	Potential sighting
Desert wood rat	*Neotoma lepida*	On site
Black-throated sparrow	*Amphispiza bilineata*	On site
Desert Tortoise	*Gopherus agassizii*	Carcass and burrows present on site
Chukar	*Alectoris chukar*	On site
Desert horned lizard	*Phrynosoma platyrhinos*	Known to occur in the area
Desert iguana	*Dipsosaurus dorsalis*	Known to occur in the area
Zebra-tailed lizard	*Callisaurud draconoides*	Known to occur in the area
Mojave green rattlesnake	*Crotalus scutulatus*	Known to occur in the area
Mojave patchnose snake	*Salvadora hexalepis mojavensis*	Known to occur in the area

Note: The above table is not a comprehensive lists of every animal species which may occur in the region, but is a list of those common species which were identified on the site or in the region by biologists from RCA Associates, Inc.

APPENDIX B

Regulatory

REGULATORY

The following provides a summary of federal and state regulatory jurisdiction over biological and wetland resources. Although most of these regulations do not directly apply to the site, given the general lack of sensitive resource, they provide important background information.

Federal Endangered Species Act

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (ESA) and its implementing regulations prohibit the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval pursuant to either Section 7 or Section 10 of the ESA. ESA defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Federal regulation 50CFR17.3 defines the term "harass" as an intentional or negligent act that creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering (50CFR17.3). Furthermore, federal regulation 50CFR17.3 defines "harm" as an act that either kills or injures a listed species. By definition, "harm" includes habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavior patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering (50CFR217.12).

Section10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes nonfederal entities to incidentally take federally listed wildlife or fish. Incidental take is defined by ESA as take that is "incidental to, and not the purpose of, the carrying out of another wise lawful activity." Preparation of a habitat conservation plan, generally referred to as an HCP, is required for all Section 10(a) permit applications. The USFWS and National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) have joint authority under the ESA for administering the incidental take program. NOAA Fisheries Service has jurisdiction over

anadromous fish species and USFWS has jurisdiction over all other fish and wildlife species.

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA, or result in the destruction or adverse modification of its habitat. Federal agencies are also required to minimize impacts to all listed species resulting from their actions, including issuance or permits or funding. Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants, and effects on critical habitat (ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered). This consultation results in a Biological Opinion prepared by the USFWS stating whether implementation of the HCP will result in jeopardy to any HCP Covered Species or will adversely modify critical habitat and the measures necessary to avoid or minimize effects to listed species.

Although federally listed animals are legally protected from harm no matter where they occur, Section 9 of the ESA provides protection for endangered plants by prohibiting the malicious destruction on federal land and other "take" that violates State law. Protection for plants not living on federal lands is provided by the California Endangered Species Act.

California Endangered Species Act

CDFW has jurisdiction over species listed as threatened or endangered under Section 2080 of the California Fish and Wildlife Code. Section 2080 prohibits the take of a species listed by CDFW as threatened or endangered. The state definition of take is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification. To qualify as take under the state ESA, an action must have direct, demonstrable detrimental effect on individuals of the species. Impacts on habitat that may ultimately result in effects on individuals are not considered take under the state ESA but can be considered take under the federal ESA.

Proponents of a project affecting a state-listed species must consult with CDFW and enter into a management agreement and take permit under Section 2081. The state ESA consultation process is similar to the federal process. California ESA does not require preparation of a state biological assessment; the federal biological assessment and the CEQA analysis or any other relevant information can provide the basis for consultation. California ESA requires that CDFW coordinate consultation for joint federally listed and state-listed species to the extent possible; generally, the state opinion for the listed species is brief and references provisions under the federal opinion.

Clean Water Act, Section 404

The COE and the U.S. Environmental Protection Agency regulate the placement of dredged or fill material into "Waters of the United States" under Section 404 of the Clean Water Act. Waters of the United States include lakes, rivers, streams, and their tributaries, and wetlands. Wetlands are defined for regulatory purposes as "areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3).

The COE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits (NWP's) are general permits issued to cover particular fill activities. All NWP's have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each NWP.

Clean Water Act, Section 401

Section 401 of the Clean Water Act requires water quality certification and authorization of placement of dredged or fills material in wetlands and Other Waters of the United States. In accordance with Section 401 of the Clean Water Act, criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board,

Division of Water Quality. As such, proponents of any new project which may impair water quality as a result of the project are required to create a post construction storm water management plan to insure offsite water quality is not degraded. The resulting requirements are used as criteria in granting National Pollution Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Central Valley Regional Water Quality Control Board (RWQCB). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

California Fish and Wildlife Code, Sections 1600-1616

Under the California Fish and Wildlife Code, Sections1600-1616, CDFW regulate projects that divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. Proponents of such projects must notify CDFW and enter into streambed alteration agreement with them.

Section 1602 of the California Fish and Wildlife Code requires a state or local government agency, public utility, or private entity to notify CDFW before it begins a construction project that will: (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. Once the notification is filed and determined to be complete, CDFW issues a streambed alteration agreement that contains conditions for construction and operations of the proposed project.

California Fish and Wildlife Code, Section 3503.5

Under the California Fish and Wildlife Code, Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders Falconiformes (hawks, eagles, and flacons) or Strigiformes (owls). Take would include the disturbance of an active nest resulting in the abandonment or loss of young.

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term "take" is defined as "to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires." Most bird species native to North America are covered by this act.

Sensitive Natural Communities

The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA. This definition applies to certain natural communities because of their scarcity and ecological values and because the remaining occurrences are vulnerable to elimination. For this study, the term "sensitive natural community" includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., not special status species) could become less viable. Loss of sensitive natural communities also can eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands for example.

Protected Plants

The California Desert Native Plant Act was passed in 1981 to protect non-listed California desert native plants from unlawful harvesting on both public and privately-owned lands.

Harvest, transport, sale, or possession of specific native desert plants is prohibited unless a person has a valid permit. The following plants are under the protection of the California Desert Native Plants Act:

- Dalea spinosa (smoketree)
- All species of the genus Prosopis (mesquites)
- All species of the family Agavaceae (century plants, nolinas, yuccas)
- All species of Cactus
- Creosote Rings, ten feet in diameter or greater
- All Joshua Trees
- No plants protected under the California Desert Native Plants Act are present on the site.