

**United States Department of the Interior
Bureau of Land Management
Las Cruces District Office
1800 Marquess
Las Cruces, NM 88005**



**Environmental Assessment for
ENTRÉE GOLD (US), Inc.
LORDSBURG EXPLORATION PROJECT
NMNM 125758
DOI-BLM-NM-L000-2011-0028-EA
Hidalgo County**

Michael Smith, GEOLOGIST

7/12/2011

Signature and Title of Project Lead

Date

Jennifer Muehle Planning & Env. Coordinator

7/12/2011

Signature and Title Lead of Reviewer

Date

Contents

1	INTRODUCTION AND PURPOSE FOR THE PROPOSED ACTION	4
1.1	Applicant.....	4
1.2	Purpose and Need for Proposed Action	4
1.3	Conformance with the Land Use Plan	4
1.4	Scoping and Public Involvement Issues	5
1.4.1	Internal Scoping	5
1.4.2	External Scoping.....	5
1.4.3	Resource Issues Identified	5
2	DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES	5
2.1	Proposed Action.....	5
2.1.1	Location and Ownership	5
2.1.2	Reclamation Plans.....	14
2.1.3	Interim Management Plans	15
2.1.4	Post-Closure & Monitoring Plans.....	15
2.2	No Action Alternative.....	15
2.3	Alternatives Considered but not Analyzed in Detail	15
3	AFFECTED ENVIRONMENT	16
3.1	Air Resources, Quality & Climate.....	16
3.2	Cultural resources	16
3.3	General Topography/Surface Geology	17
3.4	Invasive Non-native Species.....	18
3.5	Livestock Grazing Management.....	18
3.6	Migratory Birds.....	18
3.7	Public Health & Safety	18
3.8	Recreation	18
3.9	Social & Economic Values	20
3.10	Soils	20
3.11	Threatened or Endangered Species.....	20
3.12	Vegetation.....	20
3.13	Visual Resources.....	21

3.14	Wastes, Hazardous or Solids.....	21
3.15	Water Quality, Surface/Ground	22
3.16	Watershed/Hydrology	22
3.17	Wildlife	23
3.18	Lands and Realty	24
4	ENVIRONMENTAL CONSEQUENCES	24
4.1	Air Resources, Quality and Climate	25
4.2	Cultural Resources.....	25
4.3	General Topography/Surface Geology	26
4.4	Invasive Non-native Species.....	26
4.5	Livestock Grazing Management.....	26
4.6	Migratory Birds.....	27
4.7	Public Health & Safety	27
4.8	Recreation	27
4.9	Social and Economic Values	28
4.10	Soils	28
4.11	Threatened or Endangered Species.....	28
4.12	Vegetation.....	29
4.13	Visual Resources.....	29
4.14	Wastes, Hazardous or Solids.....	30
4.15	Water Quality, Surface/Ground	30
4.16	Watershed/Hydrology	30
4.17	Lands and Realty	31
4.18	Cumulative Impacts	31
5	INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED.....	32
6	LIST OF PREPARERS	32
7	APPENDICES	33
8	REFERENCES	33

1 INTRODUCTION AND PURPOSE FOR THE PROPOSED ACTION

1.1 Applicant

The applicant, Entrée Gold (US), Inc. (Entrée), holds mining claims in the Lordsburg Mining District south of Lordsburg, New Mexico.

1.2 Purpose and Need for Proposed Action

The mining claims provide for exploration under the 43 CFR 3809 regulations. The applicant has drilled 13 reconnaissance core holes exploring the general area under a Notice of Intent (NMNM121093). The results of this testing show certain areas have greater and lesser potential to yield valuable locatable minerals. Entrée needs to drill closely spaced core holes to further sample one area of greater potential. This testing will define the extent of the deposit and yield more definitive data regarding the locatable minerals. This information is required to determine if mineral development is feasible and if so, design those development plans.

In addition, elsewhere in the general vicinity more reconnaissance core holes are needed to better evaluate some of the potentially productive areas and rule out other less promising areas.

1.3 Conformance with the Land Use Plan

This proposed action conforms to the Mimbres Resource Management Plan approved in April 30, 1993 because it is clearly consistent with the following of the RMP:

Objective – The objective of the minerals program is to provide for the public use of leasable, locatable, and saleable minerals consistent with the laws that govern these activities and to minimize environmental damage.

Policy – The policy of the BLM is to make mineral resources available in accordance with the objectives of the Mining and Minerals Policy Act of 1970 and the National Materials and Minerals Policy Research and Development Act of 1980. These acts require the Federal government to facilitate the development of mineral (Mimbres RMP, 1993, p. 2-3).

RMP Locatable Mineral Decision – The General Mining Law of 1872 as amended allows for the location of mining claims on public land for the purpose of exploration, development, and production of minerals. Before commencing any surface-disturbing mining activities (of greater than 5 acres), an operator is required to submit a "plan of operation" to the BLM under the 43 CFR 3809 regulations. The BLM must consider and evaluate the potential impacts due to this plan of operations through compliance with the National Environmental Policy Act (NEPA). Reclamation bonds are mandatory for plans of operation (Mimbres RMP, 1993, p. 2-5).

BLM Mineral Resource Policy encourages the development of mineral resources in a manner that satisfies National and local needs and provides for economically and environmentally sound exploration, extraction and reclamation practices (Mimbres RMP, 1993, Appendix B-1).

The proposed project would not be in conflict with any local, county, or State plans. Entrée will obtain the necessary permit from the Mining and Minerals Division of the New Mexico Energy, Minerals and Natural

Resources Department and from other State agencies if required. They will also obtain any county or local permits that may be necessary.

1.4 Scoping and Public Involvement Issues

1.4.1 Internal Scoping

The Proposed Action for Entrée Gold was described to the Las Cruces District NEPA Interdisciplinary Team on the December 13, 2010; which completed review on June 1, 2011.

1.4.2 External Scoping

The BLM identified sixteen potentially parties who may be interested in or affected by the proposed action. The identified parties include community officials, range allotment users and recreational groups. Scoping letters requesting comment on the proposed action were mailed to all sixteen identified parties on March 9, 2011. After a thirty day period, comments were received from one of the scoping letter recipients.

1.4.3 Resource Issues Identified

- **Cultural Resources:** The proposed action occurs in an area with potential for cultural resources.
- **Special Status Species:** The proposed action could adversely affect specimens or populations of a listed BLM sensitive species (Night Blooming Cereus).
- **Recreation:** Mitigation may be needed to ensure the Continental Divide National Scenic Trail will remain open, relatively unaffected, and be safe for public use throughout the proposed project timeline.
- **Reclamation:** The proposed action is in an area where site vegetation may be difficult or uncertain.
- **Visual Impact:** Much of the proposed action area is rated Visual Resource Management (VRM) Class II. Road and pad construction could alter the visual qualities of the area. Reclamation may not completely mitigate these affects.

2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 Proposed Action

2.1.1 Location and Ownership

Entrée Gold (US) Inc. is continuing its exploration approximately 3 miles south of Lordsburg, NM and is proposing to drill up to 65 exploration holes on its mining claims on the public lands located in Township 23 South; Ranges 18 and 19 West in Hidalgo County. The total potential new surface disturbance from drill pads and access routes would be up to approximately 28.2 acres.

Entrée holds numerous mining claims in the vicinity (Maps 1 & 2). Further information regarding the mining claims in the vicinity are on file at the BLM LCDO (Appendix A). The specific claim names and serial numbers where disturbance will occur by drill hole are listed in Table 1:

Table 1 Entree Gold Mining Claims

Drill Hole	Claim Name	BLM Serial Number
A	BB82	NMMC184870
B	BB183	NMMC184972
C	BB141	NMMC184929
D	BB146 & BB148	NMMC184935 & NMMC184938
E	BB181 & BB182 & BB184	NMMC184970 & NMMC184971 & NMMC184973
F	BB78	NMMC184866
G	BB8	NMMC184795
H	BB23	NMMC184810
I	BB45	NMMC184831
1	BB68	NMMC184856
2	BB68	NMMC184856
3	BB66	NMMC184854
4	BB117	NMMC184905
6	BB66	NMMC184854
8	CC14	NMMC188100
9	BB68	NMMC184856
10	BB66	NMMC184854
11	BB66	NMMC184854
12	CC14	NMMC188100
13	BB68	NMMC184856
14	BB66	NMMC184854
15	BB66 & CC14	NMMC184854
16	CC14	NMMC188100
17	BB66	NMMC184854
18	BB66	NMMC184854
19	CC14	NMMC188100
20	CC14 & CC21	NMMC188100 & NMMC188107
21	CC21 & BB65	NMMC188107 & NMMC184853
22	BB65	NMMC184853
23	BB67	NMMC184855
24	BB67	NMMC184855
25	BB65	NMMC184853
29	BB67 & BB65	NMMC184855 & NMMC184853
30	CC14	NMMC188100
31	CC22	NMMC188108
32	BB119	NMMC184907
33	BB117	NMMC184905
34	BB119	NMMC184907
35	BB117	NMMC184905
36	BB119	NMMC184907
37	BB117 & BB119	NMMC184905 & NMMC184907
38	BB119 & BB121	NMMC184907 & NMMC184909
39	BB121	NMMC184909
40	BB119	NMMC184907

Drill Hole	Claim Name	BLM Serial Number
41	BB119	NMMC184907
42	BB70	NMMC184858
43	BB68	NMMC184856
45	BB68	NMMC184856
46	BB70	NMMC184858
47	BB117	NMMC184905
48	BB70 & BB72	NMMC184858 & NMMC184860
49	BB70	NMMC184858
50	BB68 & BB70	NMMC184856 & NMMC184858
51	BB70	NMMC184858
52	BB70	NMMC184858
53	BB72	NMMC184860
54	BB70	NMMC184858
55	BB70 & BB121	NMMC184858 & NMMC184909
56	BB121	NMMC184909
57	BB123 & BB121	NMMC184911 & NMMC184909
58	BB67	NMMC184855
59	BB69	NMMC184857
60	BB70 & BB69	NMMC184858

The Plan of Operations (Map 1) shows the entire project area, including all drill pad locations and access to each location. The nine proposed reconnaissance drill holes are lettered A through I and the close spaced drill holes are congregated in grid-like fashion to the north of those reconnaissance drill holes and closer to Lordsburg.

Map 2, the Close Spaced Hole ID Numbers, shows the close spaced drill holes at a scale sufficient to include the individual drill hole/pad location numbering.

A total of 65 new drill holes are proposed. Two of those (N-6 and N-7) would be drilled on two existing pads that were created as a part of the initial Notice Level exploration project (NMNM121093). They were previously identified as EG-L-09-006 and EG-L-09-007. Therefore, 63 new drill pads would need to be prepared for drilling. The combined area of the 63 new pads would be approximately 25.4 acres.

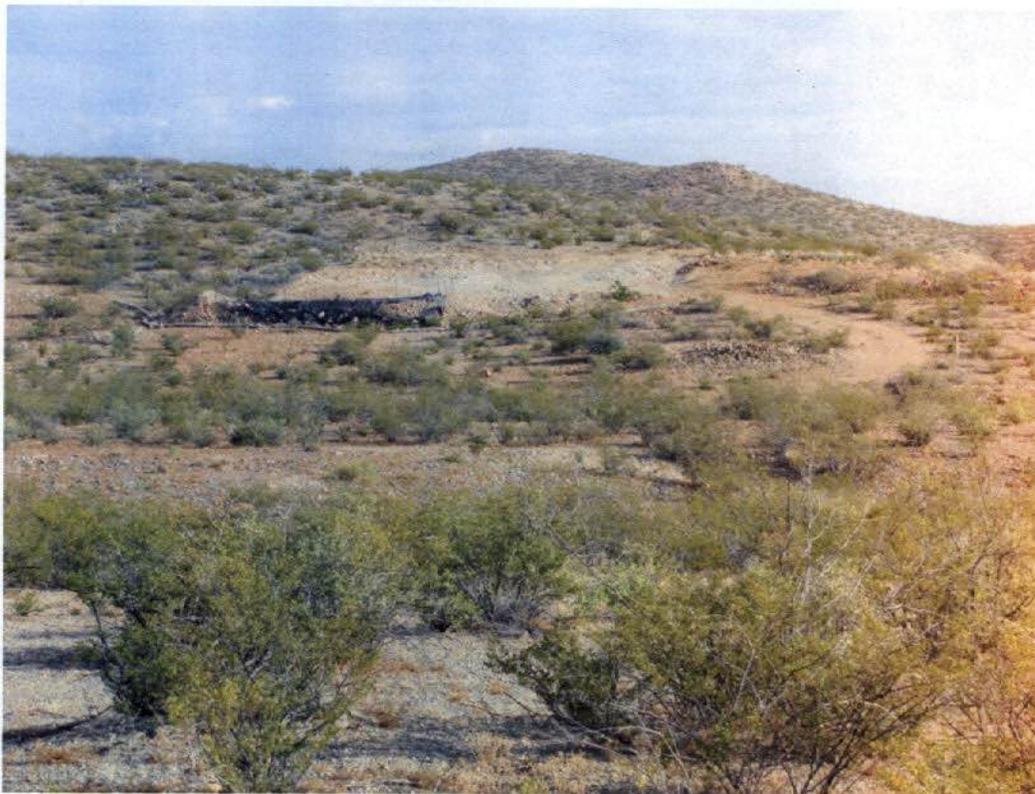
Forty four drill sites need access improvement. A total of 8,219 feet of new access route needs to be developed. At approximately 15 feet width, the maximum disturbance for access would be 2.8 acres.

All proposed drill pad locations and access routes have been marked in the field. The details of the proposed exploration development follow in the next section 2.1.2.

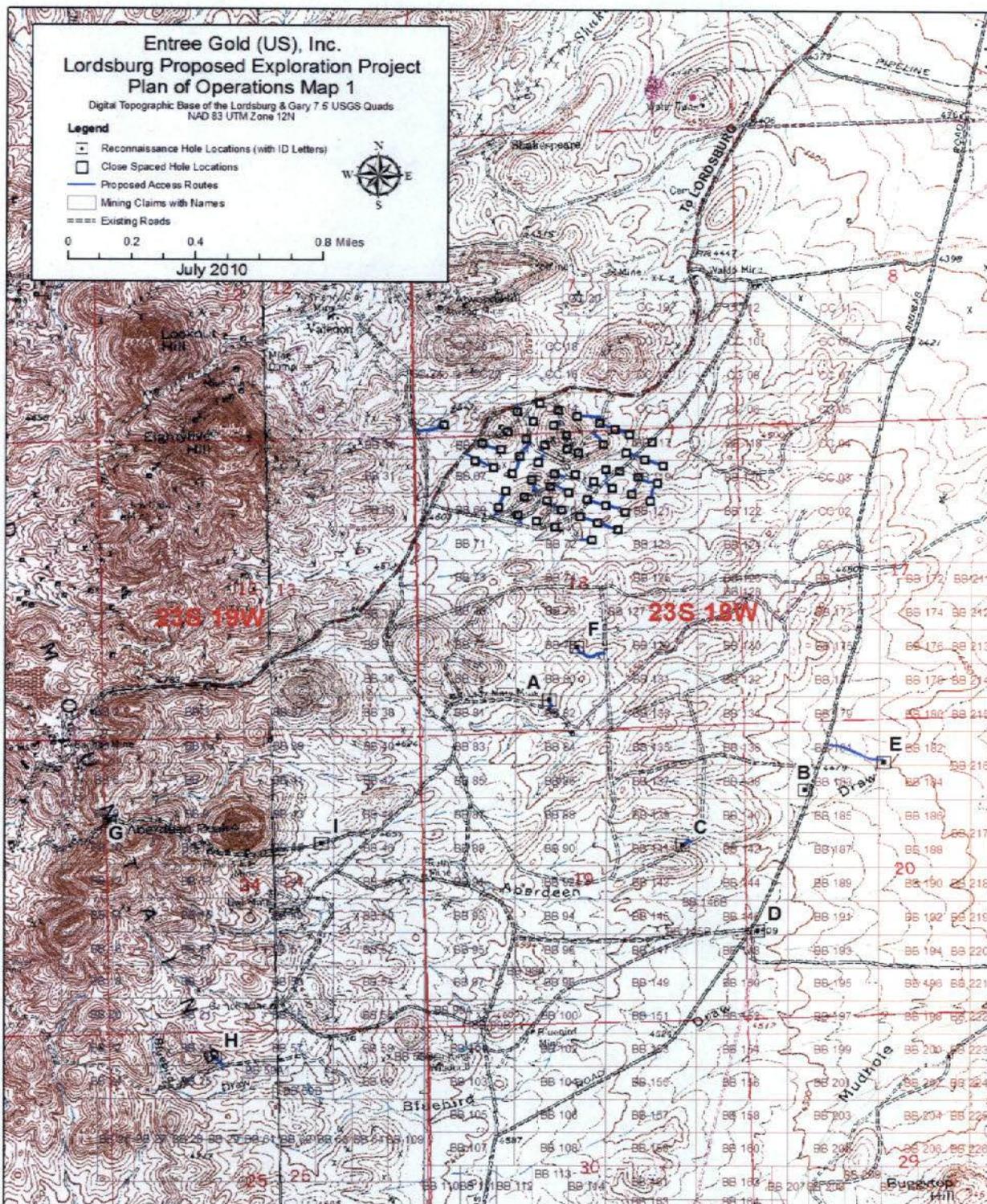
Access to the site is provided by New Mexico State Highway 494 and Hidalgo County Road A009 (the Animas Road). Access to the locations would be along existing roads and existing two tracks to the extent possible; no improvements of existing roads or two tracks would be required. Some cross country travel would occur; however, access would follow natural contours, and blading of routes or ways would be done only as necessary (Table 2).

New access routes would follow natural contours to the extent possible and clearing will be kept to a minimum, limiting clearing to vegetation and rock removal to the extent possible. Road cut and fill will be done only where absolutely necessary because of slope. Some drill pads are located on existing roads, and thus require no access route. Where clearing is needed, access routes would require 12 feet of running surface, and another three feet on one side to store vegetation and loose surface material prior to reclamation. Any and all scraped material will be stockpiled for part of later reclamation. Although soil blading would not occur along the extent of all access routes, compaction would occur and 3 feet is needed for scraped material; therefore, the entire area of all access routes, assumes a 15 foot width, and is tallied in the total disturbance for reclamation (2.8 acres).

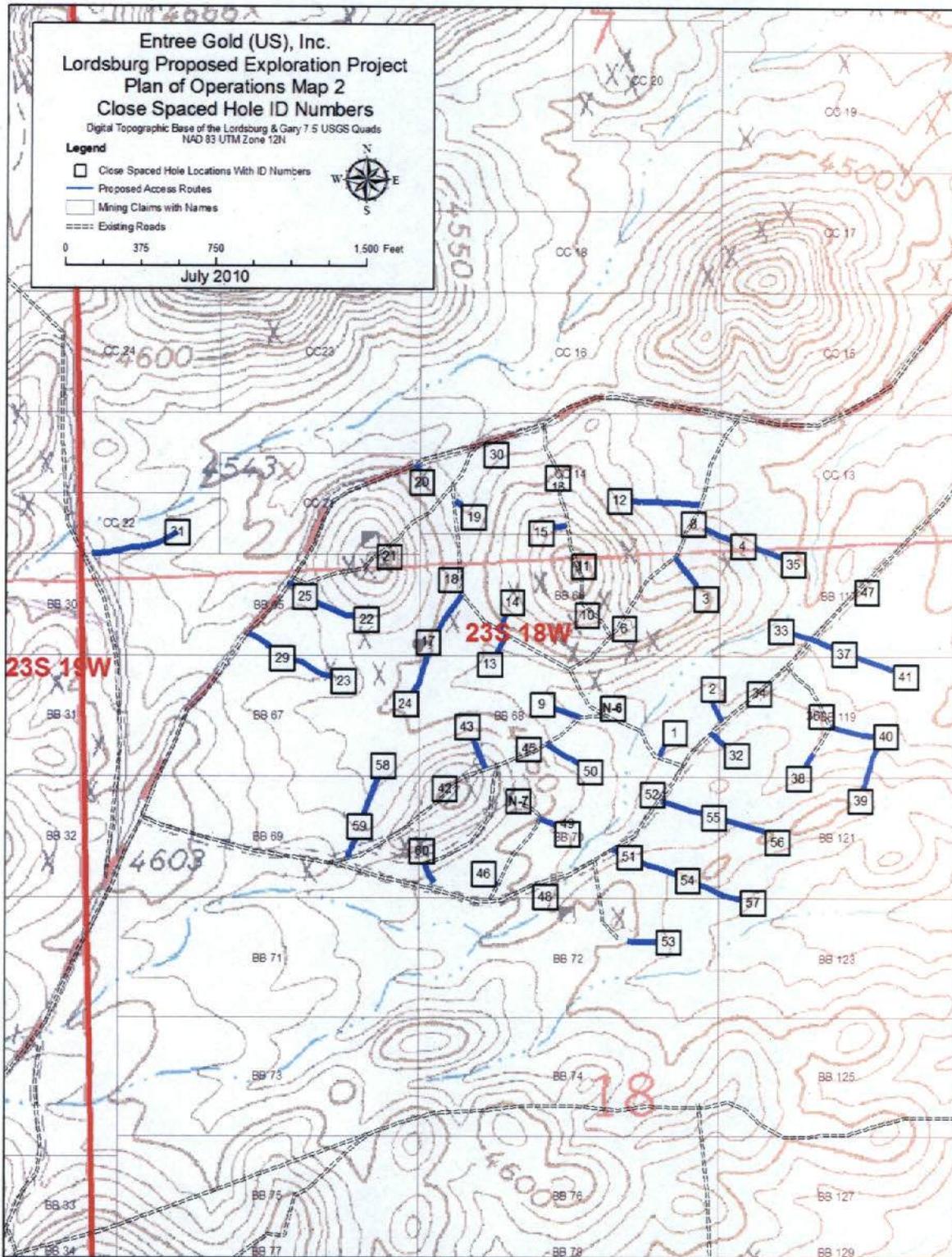
Figure 1 Typical drill site development on slope.



Pad grading would be required for some drill pads, but only to the extent to make the pads sufficiently level for drill operation (Figure 1). Vegetation and loose surface material would be scraped to one side of each drill pad as each location is prepared for drilling. Minimal clearing will be completed, and on level ground approximately 75 feet by 100 feet is usually sufficient for the drilling operation. For calculating disturbance for reclamation, each drill pad is considered to be 120 feet wide by 120 feet long. The exception would be 14 pads where, due to location on steeper slopes, a maximum size of 0.66 acres would be used to accommodate all grading or other unanticipated possible disturbance is used. The 14 pads that would have larger disturbance due to slope and the resulting cut and fill slopes are 3, 4, 10, 11, 14, 15, 16, 21, 42, 60, C, F, G, and H. Hence, although it is expected that total new disturbance will be less, the calculated total new pad disturbance could be as much as 25.4 acres (49 pads at 0.33 acres plus 14 pads at 0.66 acres). Surface topsoil and vegetation will be gathered into a wind-row for eventual spreading as part of reclamation.



Map 1 Operations Map for Entree Gold



Map 2 Entree Gold Proposed Exploration Project.

Table 2 Access Road Development and Acres Disturbance.

Drill Hole ID	Length in Feet (Approx.)	Acres-15' width (Approx.)
1	65	.02
2	111	.04
3	188	.06
4	141	.05
9	133	.05
12	342	.12
13	97	.03
14	78	.02
15	63	.02
17	211	.07
19	42	.01
20	35	.01
22	202	.07
23	208	.07
24	204	.07
25	20	.01
29	127	.04
31	443	.15
32	96	.03
33	99	.03
35	139	.05
37	105	.04
38	72	.02
39	214	.07
40	225	.07
41	200	.07
43	162	.06
46	12	.01
49	89	.03
50	189	.07
51	28	.01
53	145	.05
54	182	.06
55	215	.07
56	207	.07
57	220	.08
58	192	.07
59	101	.03
60	110	.03

Drill Hole ID	Length in Feet (Approx.)	Acres-15' width (Approx.)
A	137	.05
C	183	.06
E	1400	.48
F	570	.20
H	<u>217</u>	<u>.07</u>
Totals	8,219	2.8

Note: (1) There are no hole ID numbers 5,7,26,27,28,44 proposed. (2) There is no new route necessary for hole ID numbers N-6,6,8,10,11,16,18,21,30,34,36,42,45,47,48, and 52 or ID letters B,D,G, and I. (3) Drill hole N-7 has a route existing from previous Notice activity.



Figure 2 Cleared pad, typical pit (except for liner) and excavation pile.

A mud pit (or sump) about 12 feet wide by 30 feet long and 6 feet deep would be dug within each drill pad (Figure 2). The excavated material would be piled adjacent to the pit for eventual filling and re-leveling of the pit. Mud pits would be constructed with wildlife ramps to minimize injury to wildlife that might enter them. A cattle proof fence would be erected around each pit. One end of each mud pit would be constructed at a 3:1 slope (or gentler) for animal egress. The mud pit in Figure 2 is lined but lining is not proposed for this project. Where drill locations are sloped, the pit would be dug on the down slope side of the pad, and surface runoff directed to the pit.

Each drill hole is planned to be up to 3,500 ft deep. Some of the holes may be initiated with a reverse circulation (RC) drill, and core subsequently taken. Drill core (HQ or NQ) would be retained for testing. Drill cuttings and excess drilling mud would be placed in the pit and the pit backfilled. Non-mineralized portions of the drill core may be disposed of in the pit prior to backfilling. All mud pits would remain fenced until backfilled. Water for drilling would be obtained from a local source and trucked to the locations. After drilling has been completed:

- Drill hole plugging would immediately follow and comply with NM State Engineer's Office plugging requirements;

- Any remaining contaminated soil, debris, or trash on the pad would be removed and properly disposed of;
- After sufficient consolidation, each mud pit would be backfilled;
- Pads that required cut and fill will be re-contoured to approximate the original topography;
- The vegetation and loose surface material previously scraped to one side would be uniformly replaced over the drill pad and pit;
- The area would be scarified to reduce soil compaction; and
- The access routes would be treated the same as pads.

Entrée and its contractors would comply with all applicable local, state, and federal laws regarding environmental protection. Sediment control structures would be utilized as needed and would include, but not be limited to: fabric and/or hay bale (certified weed-free) filter fences, siltation or filter berms/wattles, mud pits, and armoring down gradient drainage channels. Should surface disturbance be required during the migratory bird breeding season (April 1 through July 31), Entrée would conduct a migratory bird nest survey within the planned disturbance area and buffer prior to construction. The nest survey would be conducted by a qualified biologist and a report would be submitted to BLM. If nests are located, or if other evidence of nesting (i.e. mated pairs, territorial defense, carrying nest material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) would be delineated and the buffer area avoided preventing destruction or disturbance to nests until they are no longer active. Noxious weeds would be controlled through implementation of preventive BMPs, which would include, but not be limited to the following: (a) any heavy equipment moving into the Project Area would have wheel wells, undercarriage, etc., cleaned with high pressure water or air to remove any weed seeds prior to moving onto the site; (b) only certified weed-free seed and mulch would be used for reclamation seeding; and (c) all reclamation would be monitored for infestations of noxious weeds. Eradication measures would be implemented if noxious weeds were found.

To the extent practicable, Entrée and its contractors would protect all survey monuments. Should any survey monument need to be affected or be accidentally damaged or destroyed, that would be immediately reported to the BLM. Care will be taken to avoid soil contamination from fuels, oils, and grease that could potentially spill or leak from the drill and equipment during operation. Any soils contaminated with fuels, oils, and/or grease would be promptly removed from the site and properly disposed of in accordance with applicable federal and New Mexico state laws. All refuse, debris and trash would be kept in appropriate containers and also would be promptly removed from the site and properly disposed of. Sanitary facilities (e.g. portable toilet) would be provided at each active drill pad. The placing and maintenance of the sanitary facilities would be contracted to a local vendor. Neither Entrée nor any contractor would knowingly disturb or alter any scientifically important paleontological remains or any historical or archaeological site, structure, building, or object on federal lands. Entrée and its contractors would comply with all applicable local, state, and federal fire laws and would take all reasonable measures to prevent and suppress fires in the area of operations.

The equipment proposed for use is:

- Truck or track mounted core drill with an HQ/NQ drilling system
- Truck or track mounted reverse circulation drill rig
- 1200 gallon tandem axle truck for water transportation
- A light plant and generator
- 1500 gallon drilling fluid mixing system
- Four wheel drive vehicles for crew transport
- Appropriate casing carrier

Also, Entrée would use two, four wheel drive vehicles for project management access.

Up to three drilling crews may be in operation at any given time. Each drill crew member would be Mine Safety and Health Administration certified and at least one crew member would have a CDL driving license. Two – 12 hour shifts per day are planned in order to complete the exploration in as short a time as is reasonable. Night operations include a small elevated light support so that the lights are directed downward at the drill rig base.

Entrée Gold (US) Inc. plans to initiate drilling in the first quarter of 2011. The drilling operation is anticipated to last up to 12 months. Reclamation of the pits would be completed as soon as the mud pits are dry enough to backfill. Reclamation of the drill pads and access routes would occur immediately after drilling operations under the Plan of Operations are complete and a decision has been made regarding the need to drill additional holes using any of these drill pads and access routes. Reclamation is anticipated to take one or two days for each drill pad/access route. The BLM would be notified as each drill pad/access route is reclaimed.

Entrée may curtail the drilling activity at their discretion based on evidence collected during the core sampling and analysis. If curtailed, fewer sites and much less disturbance would be done. In any case Entrée is fully committed to the full reclamation of any and all disturbance created as a part of this project and would be bonded to accomplish that reclamation.

2.1.2 Reclamation Plans

Drill pads and access routes would be reclaimed as soon as possible after drilling operations are complete. Immediately after drilling has been completed for each hole, the hole would be plugged; any remaining contaminated soil, debris, or trash on the pad would be removed and properly disposed of; and the pit would be backfilled as soon as practical. Pads that required cut and fill will be re-contoured to approximate the original topography. Vegetation and loose surface material previously scraped to one side would be uniformly replaced over the drill pad, pit, and access routes. All disturbed areas would be scarified to reduce soil compaction.

All disturbed areas would then be revegetated during the time period of June 15 to July 15 to correspond with summer precipitation. Revegetation would consist of seeding the area with the approved BLM seed mix, raking or dragging to cover seed, and mulching the seeded areas with the approved BLM mulch (Table 3). Seeds and mulch must be certified weed-free by New Mexico State University Cooperative Extension Office:
<http://aces.nmsu.edu/ces/seedcert/certified-weed-free-fora.html>

Table 3 Proposed reclamation seeding mix for all pads and new roads.

Species Common Name/ Scientific Name	Pounds/Acre Pure Live Seed
Sideoats grama var. Niner or Vaughn <i>Bouteloua curtipendula</i>	3.0
Black grama <i>Bouteloua eriopoda</i>	4.0
Purple three-awn <i>Aristida purperea</i>	1.0
Winterfat <i>Krascheninnikovia lanata</i>	4.00
Scarlet Globemallow <i>Sphaeralcea coccinia</i>	0.25

After the seed is distributed, mulch shall be placed to prevent loss of moisture and seed to the wind. Mulch shall be free of noxious weeds and weed seeds under the New Mexico Noxious weed and seed list. Mulching shall be done using one of the following methods:

- a) straw (2 tons/Ac)
- b) wood residues (sawdust, wood chips, small bark (2 tons/Ac)
- c) hydro mulching (1,500 lb/Ac)
- d) composted manure (5 tons/Ac)
- e) excelsior blanket
- f) straw jute

Livestock would be temporarily kept off the seeded pads by fencing. The fencing would remain until the reclamation is stable, and the plants have grown well enough to withstand grazing. This would be a minimum of two growing seasons after planting.

2.1.3 Interim Management Plans

Completing the proposed exploration project would take one year based on having no major cessation of activity. A maximum of three drilling operations would be active at any time. Plugging the drill hole and reclamation would begin immediately after the core sample is complete. If any site is to be left inactive for any reason, fuel, lubricants, drilling materials, and trash would be removed from the site. All necessary measures would be taken to stabilize the site, including but not limited to assuring that the fence around the pit is sound and that any erosion control features are adequately functioning. Entrée would perform regular inspections and provide documentation to ensure that unnecessary and undue degradation is not occurring at the project site from exploration activities. Entrée would perform additional site inspections to ensure the site BMPs are performing properly, and would take corrective actions as deemed necessary.

2.1.4 Post-Closure & Monitoring Plans

Entrée would oversee all activities and ensure that all contractors, including drilling contractors, operate within the approved plan and that a safe and clean condition exists for the Project. Regular inspections of the work areas would be completed. In addition, Entrée would provide an annual report that will provide the following :

- Activities initiated and completed for the year;
- Acres of disturbance for the year;
- Cumulative acres of disturbance;
- Areas/acreage of re-grading and seeding; and
- Cumulative acres of reclamation.

2.2 No Action Alternative

Under the No Action Alternative, the Proposed Action would not be approved by the BLM and exploration in the Project Area would be denied. Hence, no new pad clearing, drilling or access routes would be completed. This no action alternative provides a baseline for comparison with the proposed action. Practically the BLM cannot deny a mining claimant the ability to operate on their claim once they have submitted a complete plan of operations, completed NEPA analysis including mitigations, and bonded for surface disturbance. However, the No Action alternative is still evaluated to provide a baseline for identifying and comparing resource affects.

2.3 Alternatives Considered but not Analyzed in Detail

Entrée has moved two drill hole locations from an area that was identified as containing significant cultural artifacts. This avoided the consideration of an alternative that would be unacceptable without significant impacts,

complications and cost. The alternative of drilling these originally considered exploration holes will therefore not be analyzed in detail.

3 AFFECTED ENVIRONMENT

The affected environment is approximately 3 miles south of Lordsburg, NM on BLM administered public lands located in Township 23 South; Ranges 18 and 19 West in Hidalgo County. Issues and concerns identified and certain other relevant or required resources and issues are addressed as part of the potentially affected environment. Elements of the environment that are either not present or are not impacted are not included.

3.1 Air Resources, Quality & Climate

The climate of Lordsburg and the affected environment is typically very variable in this high desert. The average maximum temperature is 91.5°F and the average minimum temperature is 28.7°F with extremes from 12 to 104°F. Precipitation is typically low and variable also. The wettest month is July with an average maximum precipitation of 2.67 inches followed by August with 2.43 inches where the total average maximum annual precipitation is 10.34 with the lowest average precipitation in October. The annual average range is from 7.35 to 11.90 inches. High winds from the west and southwest are common from March to June and spring moisture conditions are only occasionally adequate to result in significant vegetative growth.

Air quality in this region is generally good, and the area is not designated by the EPA as a “non-attainment area” for any listed pollutants regulated by the Clean Air Act. The region is designated a Class II air quality area. Class II areas allow for moderate amounts of air quality degradation. Presently, the primary source of air degradation is PM₁₀ (dust) generated off-site during high wind events. These events are fairly common in southern New Mexico, especially during the spring months. Unpaved roads and other disturbed areas are especially susceptible to contributing to fugitive dust during high wind events.

The Air Quality index is based on annual reports from the EPA. Higher values are better. The number of ozone alert days is used as an indicator of air quality, as are the amounts of seven pollutants including particulates, carbon monoxide, sulfur dioxide, lead, and volatile organic chemicals. As of June 2010 Hidalgo County rated 99 out of 100.

3.2 Cultural resources

The town of Lordsburg, New Mexico, is situated approximately 3 miles northeast of the close-spaced drilling area, and the ghost town of Shakespeare is approximately 1 mile northwest. The early histories of both towns were strongly influenced by metal mining. The cultural environment of the project area consists of mining activities dating from the middle 1800s to the present. Active pit mines are located to the northwest and southwest of the project area.

No listed National or State Register properties are located within ¼ mile of the project area, although the historic town of Shakespeare is to the northwest. A cultural inventory of the project area performed for this project identified 19 previously recorded sites within ¼ mile of the project area. Eight of these previously recorded sites are located within the project area and were updated during the inventory.

These eight previously recorded sites, plus 11 newly recorded sites, and 103 isolated occurrences were identified within the project area. No in-use structures were identified. Details of the sites and isolated occurrences are available in the Cultural Inventory Report prepared for this project and submitted to BLM for the administrative record.

Much of what was documented on the sites includes mine prospects (Figure 3). These prospects were generally drilled, detonated, and excavated by hand, and range in size from 3 to 10 feet in diameter. They were used to determine potential for further mining activity. Previous cultural resource projects were conducted in the area for Abandoned Mine Land Program of the NMMMD includes capping of mine shafts for safety reasons. As a result, the historic integrity of these sites was compromised to the extent previous cultural resource studies were not completed.



Figure 3 Typical historical pit in project area.

Hundreds of small check dams were observed throughout the project area. These structures generally appear as a single line of rocks (20 cm rhyolite cobbles), placed across arroyos and small rivulets within the project area to prevent head cutting erosion. Due to their extremely high frequency and lack of dating potential, they were not formally recorded as either sites or isolates. Though these structures are undated, they may be associated with the Civilian Conservation Corps, or with later groups involved in providing jobs during the depression. None are considered eligible for inclusion in the NRHP.

3.3 General Topography/Surface Geology

The project area is generally characterized as rolling steep hills and slopes of the Pyramid Mountain range. The elevation is between 4400 and 5000 feet generally rising from east to west. Slopes range from 5 to 50% and are also generally steeper to the west of the project area. Rocky surface and some bedrock outcrops are present with dissecting arroyos.

Surface geology is best described as consisting of andesitic lavas and volcanoclastic rocks from the lower Tertiary and upper Cretaceous periods (New Mexico Geological Society 2003). The eastern portions of the project area begin to see distal alluvial fans being formed of rubble, gravel and sands.

3.4 Invasive Non-native Species

A biological inventory was completed for this project area and submitted to BLM for the record. No New Mexico Class A, B or C noxious weeds were identified.

3.5 Livestock Grazing Management

The project area is leased for grazing as the Shakespeare Allotment (#01024). The Shakespeare Allotment contains approximately 8,561 acres, with an 80% public land use. The permitted numbers on the allotment are 70 cattle and 3 horses. This permit is a yearlong permit, making a total of 701 active AUMs (Animal Unit Months).

3.6 Migratory Birds

Migratory birds are known to pass through and nest within and adjacent to the project area. A biological inventory was completed for the project area. Nests indicative of the black throated sparrows were observed during the inventory. Details of the occurrences are available in the Biological Inventory Report prepared for this project and submitted to BLM for the record (Appendix A).

3.7 Public Health & Safety

Drilling operations are inherently dangerous for those working the rig or anyone in the vicinity, especially if they are not properly trained and actively aware of the ongoing drilling work. No problems have been reported with any of the existing drill sites in the area, but the uninvolved public must be excluded from the site and workers must be qualified to participate. Each drill crew member would be Mine Safety and Health Administration certified and at least one crew member would have a commercial driving license.

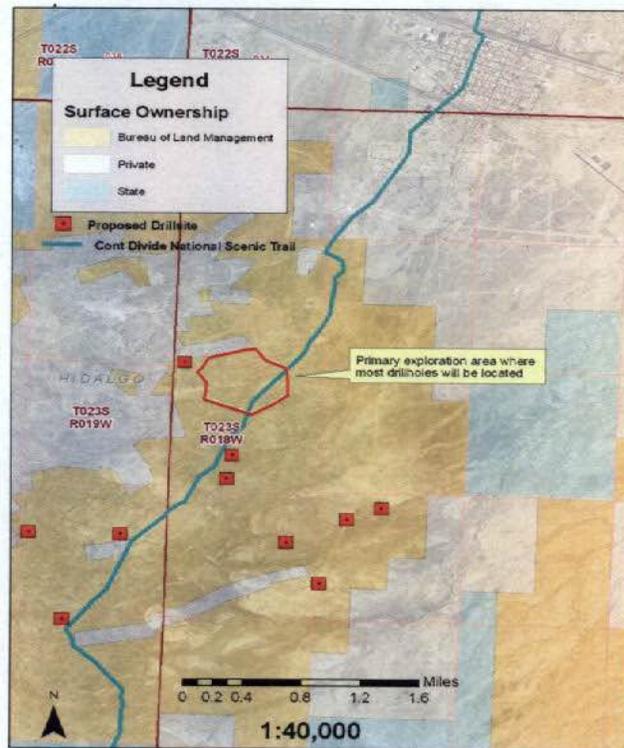
3.8 Recreation

Recreation activities within the project area include off-road and back road driving, target shooting, hunting, and hiking, probably in that order of interest. Of particular interest is the location of the Continental Divide National Scenic Trail (Map 3, Figure 4)) crossing the area as shown by this photo of a sign along the designated route. The Mimbres RMP shows the trail location approximately 30 miles to the east on Map 5-18. A 2006 Mimbres Resource Management Plan Amendment (The Continental Divide National Scenic Trail Realignment) allows for the trail to be moved 50 miles on either side of the actual divide or "as far away as necessary to provide for safe travel and diverse recreation appeal, to be economically feasible, and to keep environmental impacts to an acceptable level".



Figure 4 Continental Divide National Scenic Trail Marker

There is no improved hiking trail through the vegetation along the designated trail through the project area. The designated trail is not on or near the continental divide but located here on public lands per the 2006 RMP Amendment.



Map 3 Entree Gold US Inc. Mine Plan of Operations Area relative to Continental Divide National Scenic Trail.

3.9 Social & Economic Values

Hidalgo County is one of 33 counties in New Mexico. The estimated population in 2004 was 5,186. This was a decrease of 12.58% from the 2000 census. In 2002, the per capita personal income in Hidalgo County was \$17,471. This was an increase of 2.7% from 1997. The 2002 figure was 57% of the national per capita income, which was \$30,906. As of 2010, Hidalgo County's population is 4,882 people. Since 2000, it has had a population growth of -17.73 percent. The median home cost in Hidalgo County is \$77,910. Home appreciation in 2009 has been 0.44 percent. Hidalgo County's cost of living is 19.80% lower than the U.S. average. The unemployment rate in Hidalgo County is 7.90 percent (U.S. avg. is 10.20%). Recent job growth is Negative.

3.10 Soils

Soils within the Project Area are typical of Lehmans extremely rocky loam of 10 to 25% slope and a minor involvement of the Lehmans-Nickel association at 1 to 9% slope. Slopes vary from gentle valley fans with medium runoff to steep slopes with rapid runoff. Refer to Appendix B – Web Soil Survey for the Lordsburg Exploration Project, Natural Resource Conservation Service (NRCS) submitted to BLM for the record. A more thorough description of these two soil mapping units is contained therein. This soil survey also contains identifications of and discussions of the following:

- Ecological Site – Rangeland hills, Ecological site ID (code) – R042XB027NM;
- Soil Map Units – Lehmans and Lehmans-Nickel;
- Soil Taxonomy Classification - Clayey, montmorillonitic, thermic Lithic Haplargids;
- Water Erosion Potential – High potential
- Range Production (normal year) – Lehmans 325 pounds/acre/year & Lehmans-Nickel 181
- Burrowing Mammals & Reptiles – Somewhat limited
- Hills Ecological Site Plant Community – Historic climax, shrub/bare, and creosote state

3.11 Threatened or Endangered Species

The project area contains suitable habitat for the Orcutt pincushion cactus and the night-blooming cereus plants and for Texas horned lizard, the reticulate Gila monster, the grey-checked whiptail, Botteri's sparrow, Baird's sparrow, Arizona grasshopper sparrow, common black-hawk, burrowing owl, common ground dove, aplomado falcon, peregrine falcon, arctic peregrine falcon, ferruginous hawk, loggerhead shrike, grey vireo, pale Townsend's big-eared bat, cave myotis bat, fringed myotis bat, long legged myotis bat, Mexican long-tongued bat, greater western mastiff bat, western small-footed myotis bat, Yuma myotis bat, white-nosed coati, yellow-nosed cotton rat, desert bighorn sheep, and Mexican gray wolf. The habitat in the survey area does not appear suitable for other state or federally listed endangered or threatened wildlife species that may occur in Hidalgo County. Details of the potential for occurrence for each species are available in the Biological Inventory Report prepared for this project and submitted to BLM for the record (Appendix A). No threatened or endangered species were identified.

3.12 Vegetation

The temperature regime and rainfall distribution favor warm season perennial plants. The project area is primarily a rangeland hills ecological site of the Shrubland Plant Community best categorized as being in the creosotebush state. Observed vegetation is characteristic of this desert scrub with intermixed grasslands. The area is dominated

by creosotebush with intermixed grassland patches dominated by alkali sacaton. Numerous other forbs, shrubs, grasses, cactus, and some trees are present sporadically. Details of the existing vegetation are available in the Biological Inventory Report prepared for this project submitted to BLM for the record. The Web Soil Survey dated July 24, 2010 section entitled Shrubland Plant Community – Plant Community Description (Creosote state) accurately describes the majority of this project area and outlines potential re-vegetating complications due to soil factors.

3.13 Visual Resources

The project area is roughly bounded on the west by the extension of New Mexico State Highway #494 from Lordsburg south called Banner Mine Road (paved) and on the east by Hidalgo County Road called Animas Road (gravel). In this particular area there are existing roads and trails and small historic and present day openings that create the elements of form, line, color, and texture of the characteristic landscape. Generally, the project area up close is perceived as unspectacular scenery and as having been significantly disturbed by roads, historic mining, and sporadic material dumps. Viewed from afar, the open expanse of rolling hills and relatively uniform and sparse vegetation is perceived as spectacular vast wild land (Figure 5).

Proposed drilling locations are within the BLM Visual Resource Management (VRM) rating class of VRM-2 except for the locations D, B, and E that are located in areas rated as VRM-4 (Map 4). VRM ratings are defined in BLM Manual H8410-1 (Visual Resource Inventory). In Class-2 areas management objective is to retain the existing character of the landscape. Any change to the character should be low, where activities may be seen, but should not attract attention of the casual observer. Changes that repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape are acceptable. In Class-4 areas activities that make major modifications of the existing landscape are acceptable. Change to the character can be high and activities can dominate the landscape attracting the attention of viewers. Still, in these areas efforts should be made to minimize impacts.



Figure 5 Panorama of Project Area, Banner Road at left of photo.

3.14 Wastes, Hazardous or Solids

The project area is the closest open public land to the town of Lordsburg, and has long been the “community playground.” Recreational off-road driving, shooting areas, simple dumping grounds, and general uncontrolled use of the land have left sporadic wastes and litter (Figure 6). Hazardous nature is unknown but most wastes are household, yard, and shooting wastes.

All refuse generated by the Project would be disposed of at an authorized landfill facility off site, consistent with applicable regulations. No refuse would be disposed of on site. Hazardous substances to be utilized would include diesel fuel, gasoline, and lubricating grease. Approximately 2,500 gallons of diesel fuel and gasoline would be stored in fuel delivery systems on the drill rig and support vehicles. Approximately 500 gallons of gasoline would be stored in fuel delivery systems for light vehicles. Approximately 500 pounds of lubricating grease would be stored on the drill rig or transported by drill trucks. Water and/or nontoxic drilling fluids, including abantonite, Alcomer 120L, bentonite, EZ-mud, polyplus, and super plug, would be utilized as necessary during drilling and would be stored on site only as needed. Self-contained, portable, chemical toilets would be used for human waste. The human waste and toilet chemicals would be removed from the site and disposed of in an authorized facility. All containers of hazardous substances would be labeled and handled in accordance with applicable regulations. Contract drillers would maintain spill kits on site for use in case of a spill. In the event that hazardous or regulated materials are spilled, immediate measures would be taken to control the spill, clean up the spill including removal from the site in accordance with all applicable local, state, and federal regulations and notice made as required.

3.15 Water Quality, Surface/Ground

Drainage in the proposed action area consists of intermittent arroyos and channels that only flow during and immediately after precipitation events. Surface waters may persist, however, for several months in playas located to the north and west of the proposed action area. There are no recognized impaired (USEPA 303d listed) drainages or designated or proposed Wild and Scenic Rivers near (within ten miles) the proposed action. No specific surface water quality issues in the project area have been identified by the BLM. Intermittent surface water runoff is most likely to be affected by erosion and sediment loading and by stormwater runoff from nonpoint sources such as grazing operations, paved roads, and urban areas.

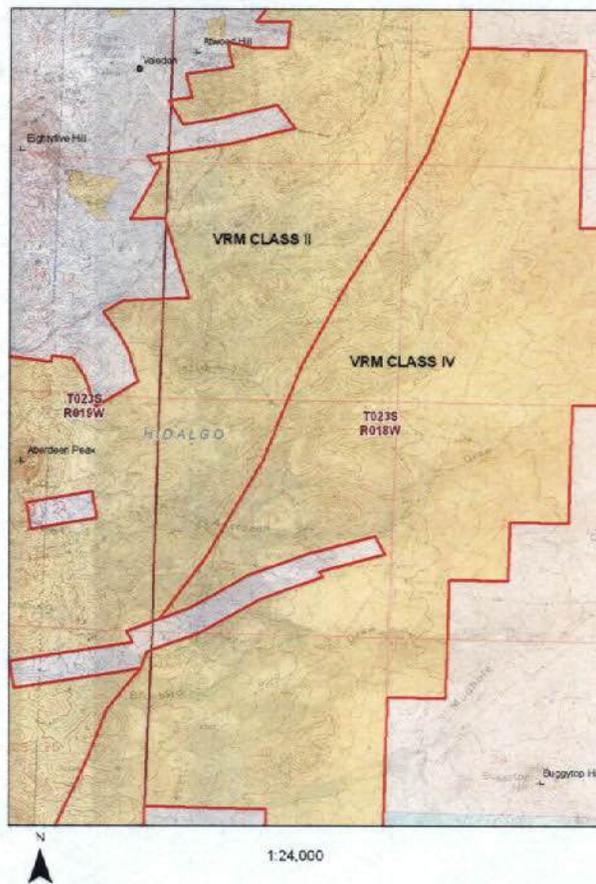
Local groundwater flow is generally from higher slopes (Pyramid Mountains) to ephemeral stream valleys. In the vicinity of the Pyramid Mountains, the primary aquifer is fractured bedrock; particularly welded tuff or volcanic breccia of Cretaceous to Tertiary age. Few well level measurements are available for the vicinity, and reported depths to water table range between 25 to 800 feet with most wells near the 100' mark. Some wells are reported to only yield water after precipitation events, probably in response to rapid infiltration along bedrock fractures. Ground water quality is generally good, with total dissolved solid (TDS) measurements ranging from approximately 300 to 900 mg/l (Stone and O'Brien, 1990). Local water-quality issues include, hardness, and a few case of elevated nitrate and sulfate concentrations (Stone and O'Brien, 1990).

3.16 Watershed/Hydrology

The project area is wholly within the Animas Valley Watershed (USGS Cataloging Unit 15040003). Existing drill holes in the vicinity have encountered very limited groundwater. Several dry arroyos cut through the project area that carry water only intermittently during times of heavy rain. The project area lies within a closed basin where the flowing water in these arroyos does not reach the Mimbres River. No wetlands regulated under Section 404 of the Clean Water Act and as defined by the US Army Corp of Engineers were identified in the project area.



Figure 6 Trash being used for target shooting.



Map 4 VRM Map of Project Area

3.17 Wildlife

The project area contains two habitat types, montane grasslands and desert shrub of the Chihuahuan Desert. Several species of wildlife were observed within the project area and are noted in Table 4. Activity indicators of wildlife included rabbit scat, rodent burrows and middens, cow patties, snake vertebra, coyote (*Canis latrans*)

bones and tracts of small mammals and birds. Bird nests were identified within or close proximity to the survey areas. The following list shows the species observed on the project area.

Table 4 Wildlife Observed in the Project Area

Scientific Name	Common Name	Abundance
<i>Amphispiza belli</i>	Black-throated sparrow	Common
<i>Buteo jamaicensis</i>	Red-tailed hawk	1
<i>Corvus cryptoleucus</i>	Chihuahuan raven	1
<i>Grus canadensis</i>	Sandhill cranes	2 migrating flocks
<i>Lepus californicus</i>	Black-tailed jackrabbit	Common
<i>Odocoileus hemionus</i>	Desert mule deer	5
<i>Sylvilagus audubonii</i>	Desert cottontail	Common

The project area contained several burrows and middens. Several burrows observed within the project area were potentially large enough to be used by burrowing owls. Although burrowing owls and/or their activity indicators were not observed during the survey, they have the potential to be located within the project area. Details of the potential for occurrence are available in the Biological Inventory Report prepared for this project and submitted to BLM for the record.

3.18 Lands and Realty

The BLM has primary authority for issuing rights-of-way (ROW) across Federal lands for a variety of public purposes such as roads, pipelines, powerlines and communications infrastructure. At Entrée Gold Inc's Lordsburg Project, the most dense concentration of exploration sites (sections 7 and 18 of T. 23 S. R. 18 W.) is bounded on the north by an existing telephone-telegraph ROW (NMNM 70086). Three of the proposed drill sites (B, D and E – Map 1) are located along a road ROW granted to Hidalgo County (NMNM45806), which roughly parallels a telephone-telegraph ROW (NMNM58256). No adjacent or overlapping ROWs are associated with the proposed exploratory sites in T. 23 S. R. 19 W. Most of the proposed exploratory sites in section 7, 18, 19 and 20 of T. 23 S. R. 18 W. and in section 24 of T. 23 S. R. 19 W. are located in areas identified as ROW avoidance for the Continental Divide National Scenic Trail or for grassland restoration. In areas designated as ROW avoidance, the BLM will only grant future rights-of-way if no feasible alternative route is available.

The Bureau of Land Management also identifies lands for disposal for public purposes through various legislative initiatives. None of the proposed exploratory drilling sites are located within lands identified for disposal in the 1993 Mimbres RMP.

4 ENVIRONMENTAL CONSEQUENCES

The direct, indirect and reasonably foreseeable effects of the proposed action and alternatives are discussed in this section. Standard operating procedures and normal mitigative actions are included in the proposed action and the no action alternative.

4.1 Air Resources, Quality and Climate

Proposed Action: There would be about 28.2 acres of newly disturbed land exposed to wind erosion and causing dust to be carried in the air. The greatest risk would occur during high wind events typical of the March through June period. Once reclaimed, typically within one year, the risk of dust increase would greatly decrease and should be returned to normal levels within 2 years. Vehicle traffic typically raises dust levels from roads and increases with speed. Equipment and vehicle traffic to and from the drill sites would be traveling relatively slow due to rough road conditions thereby keeping dust contributions relatively low. The quantity of air borne dust attributable to this project would not be a substantial addition to the existing cumulative particulates derived from existing roads and disturbances in the general area. This exploration project's contribution is a temporary (seasonal) and short term (less than 2 year) impact.

During drilling operations, exhaust from internal combustion engines (diesel and gasoline) would locally increase due to operations drilling equipment, portable generators and vehicles. Consequent increases in atmospheric particulates, NO_x and SO_x are not expected to be significant, and would only persist for the duration of the project.

Mitigation: Mitigation measures can be implemented on an as-needed basis to control fugitive dust emissions such as minimizing the area disturbed by drilling and watering of ads and other disturbed areas; after exploratory operations are complete, reclamation activities such as mulch application and seeding will mitigate future dust emissions.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of air resources, quality and climate.

4.2 Cultural Resources

Proposed Action: Nineteen sites were updated or newly documented during the survey, including 18 historic mining related sites, and one large prehistoric site. None of the mining sites are recommended as eligible for inclusion in the NRHP. All of the previously recorded sites contain shafts that were closed using mechanical blading/filling techniques during abandoned mine closure projects, further reducing their integrity. The remaining historic sites documented during this project contain even fewer resources, including prospect pits and historic dumps with limited assemblages.

One site because of its large and diverse artifact assemblage of over 10,000 artifacts, fire-cracked rock features that may contain carbonized remains suitable for radiocarbon dating, and soils that have potential to contain subsurface deposits, is recommended as eligible for inclusion in the NRHP. Originally Considered Recon Drill Holes B and E, as well as an access road would have impacted this site. As this site is very large, no re-route could be identified, so Alternative (Proposed Action) Recon Areas B and E were surveyed, thus avoiding the need for drilling or constructing any road within the boundaries of this site. No sites and five isolates were documented in these two alternative areas. No further work is recommended as the Originally Considered Recon Areas B and E and associated access road were abandoned for Alternative (Proposed Action) Recon Areas B and E. Refer to Section 2.3 Alternatives Considered but Not Analyzed in Detail.

Mitigation: BLM will stipulate that the proponent retain an archeological contractor to monitor ground disturbing activities during drilling operations within proximity to site LA 164721. The monitor will prepare a final monitoring report for BLM's record. As part of this report, the monitor will record and illustrate a representative sample of the features described in the fifth paragraph on page nine of the report (the CCC dams) as a site.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of cultural resources.

4.3 General Topography/Surface Geology

Proposed Action: Minor land surface disturbance will be required, primarily at 14 drill sites where some cut and fill would be necessary to prepare a relatively level drill pad. The maximum disturbance at those sites would be 0.66 acres. Therefore, a total of approximately 9.2 acres would have some cut and fill of the land surface. Reclamation of all sites will return the site to its original contour. No permanent impact is anticipated from the proposed action.

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of the general topography/surface geology.

4.4 Invasive Non-native Species

Proposed Action: It would be possible for this project to introduce seed of invasive non-native plant species particularly by way of tag-along seeds on heavy equipment used in the project.

Mitigation: Prevention is emphasized. All equipment shall be washed prior to reaching the project area to remove all attached mud and seed. Special attention shall be paid to the undercarriage. The operator and BLM shall monitor for infestations of non-native plants caused by this project, and will develop an appropriate mitigation strategy should any infestation occur. Only certified weed-free live seed and mulch shall be applied during reclamation.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of invasive non-native species.

4.5 Livestock Grazing Management

Proposed Action: A total of less than 28.2 acres would have vegetation removed and hence potential forage also removed temporarily. Mud pits will be fenced to exclude cattle and entire pads being reclaimed will be fenced to exclude cattle until reclamation is successful. This forage loss would be for less than 2 or 3 years depending on re-vegetation success, and represents a small fraction of the total allotment area (8,561 acres). It is likely that forage would be increased by the re-vegetation thereafter. An inconsequential impact to grazing management is anticipated and no adjustment to any grazing permit would be necessary.

Mitigation: Cattle shall be excluded from the mud pits with appropriate fencing to avoid accidental losses. Ramps shall be sloped such that an animal that might accidentally get into a pit could escape the pit. Fences will be removed upon successful re-vegetation. Crew members will be required to reduce speeds in the project area and exercise care in operating vehicles and equipment to minimize possible dangers to cattle and range improvements.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of livestock grazing management.

4.6 Migratory Birds

Proposed Action: No vegetative or surface disturbance would occur during the migratory bird nesting season without a site specific biological professional inspection and clearance to proceed. Impacts to migratory birds should be prevented by this standard mitigative condition.

Mitigation: Netting or floating barrier devices ("bird balls") will be applied to reserve pits at inactive drill sites prior to reclamation. Inactive drill sites will be monitored for avian use or mortality.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of migratory birds.

4.7 Public Health & Safety

Proposed Action: Drilling sites are manned continuously while operating and no public would be permitted in the danger zone. All workers will be qualified and certified to be on site. Risk of accident is always possible but all reasonable preventative actions would be employed.

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of public health & safety.

4.8 Recreation

Proposed Action: The activities proposed should have no permanent effect on the access or use of the area by the recreating public. Drilling activities may result in loss of access to the segments of the Continental Divide National Scenic Trail (CDNST), or may distract from the hiking experience, but these affects will be temporary in nature and are not expected to exceed one year's duration. Exploration activities may also locally disrupt hunting, hiking, camping and other dispersed recreation activities, but these disruptions would be temporary while opportunities for dispersed recreation would remain on adjacent public lands.

Mitigation: The proponent will take measures to assure that the CDNST will remain open and safe for public use during operations. The proponent will avoid damaging existing CDNST marker signs and will be responsible for

replacing any such signs damaged or destroyed by exploration activities. The proponent will be required, if instructed by the Las Cruces BLM, to temporarily reposition CDNST trail markers to help trail users avoid drilling operations, and subsequently reposition CDNST trail markers in the original position immediately after completing drilling operations near the trail. If necessary, the proponent will engage trail users encountered during operations and assist them in avoiding operational areas area and safely returning to the trail alignment

Similar exploratory drilling and reclamation activities on the same claims occurred in the proponent's previous mining Notice (NMNM121093). Field reviews by BLM staff of these reclaimed areas determined that reclamation practices are sufficient to mitigate the long-term effects that exploratory drilling will have on the access to and views from the Continental Divide National Scenic Trail.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of recreation.

4.9 Social and Economic Values

Proposed Action: The proposed action mineral exploration is in tradition with the social and economic history of the Lordsburg area. There will be some opportunity for local employment during implementation of the project as well as during the reclamation portion. No social or economic effect is expected.

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of the social and economic values.

4.10 Soils

Proposed Action: Up to a maximum of 28.2 acres of surface soil will be disturbed and moved to "windrows" during the time that drill sites and access roads are in use. The purpose of the "windrows" is to store the topsoil for redistribution over the disturbed area to help facilitate re-establishment of vegetation from seed. Additionally, dead vegetation will accumulate in the wind-rows and be spread over the soils to aid in shading and mulching the surface. On steeper sites (14 drill pads) a deeper effect will occur as the pad is leveled. The disturbed soil horizon will be mixed to a greater degree, but the surface soil will still be stored in windrows and re-distributed as before. Ultimately, over time the soil will respond to reclamation and recover full function as a viable substrate for vegetation.

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of the soils.

4.11 Threatened or Endangered Species

Proposed Action: No threatened or endangered species were observed during the survey of the project area. Of the species with suitable habitat in the project area an impact is not anticipated because if they were to be in the area at the time of drilling operation they would most likely avoid the area. Bat species in particular, if they came to the project area would avoid the drilling areas. No impact to threatened or endangered species is expected. Refer to the submitted Biological Survey Report, particularly section 5.1 (Appendix A).

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of threatened or endangered species.

4.12 Vegetation

Proposed Action: A maximum of 28.2 acres of vegetation will be removed for the development of roads and drill pads. This acreage would be scattered over the project area at 63 separate locations. The maximum size of pad clearing would be 0.66 acres. There are 14 of this size pad possible. Road clearing would impact less than 15 feet wide. Full reclamation and revegetation of all disturbed areas is planned making the impact to vegetation time limited to about 3 years or less.

The concentration of drill pads and the associated clearing of vegetation within the "close spaced" area is denser than elsewhere. In the approximate area of 175 acres there would be 54 new drill pads totaling approximately 21.1 acres or about 12% of the area.

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of vegetation.

4.13 Visual Resources

Proposed Action: In this particular area there are existing roads and trails and small historic and present day openings that create the present character of the landscape. The clearing of small openings and road strips in the shrublands would cause additional visual change to the elements of form, line, color, and texture of the existing landscape. The cleared vegetation along access routes and the pads would alter existing landscape color patterns. Ultimately, the existing character of the landscape is retained. Refer to Exhibit E. A Visual Contrast Rating Analysis and Photos for Proposed Project near Lordsburg, Hidalgo County, New Mexico

Mitigation: The following visual mitigation measures will be specified by the BLM in operating plan approval (43 CFR 3809.420(a)(4)):

- Drilling at sites 16, 20, 25, 30 and 31 (the ones near the County Road). The delay will be for a minimum of 3 months so Entree may assess nearby holes and decide if drilling these sites is absolutely necessary.
- Brush and slash cleared during pad preparation will be stockpiled on site and will be scattered by hand over drill pad during reclamation in order to minimize visual contrast.

- Concurrent reclamation will begin when there are 10 disturbed pads in place (this limit may have to be temporarily exceeded based on conditions and will ultimately be evaluated on a case-by-case basis.

Reclamation and re-vegetation of these clearings makes much of the impact temporary in nature as well.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of the visual resources.

4.14 Wastes, Hazardous or Solids

Proposed Action: Rules and regulations controlling wastes should prevent any contamination and if an accidental spill should occur full clean-up is required. This could and most likely would entail collection of any and all contaminated soil or materials for removal from the site and appropriate legal disposal off site.

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of wastes, hazardous or solids.

4.15 Water Quality, Surface/Ground

Proposed Action: Surface water is limited to occasional rainfall and should be contained on site or dissipated naturally as it flows off site. Surface disturbance would remove vegetative and rock cover making the areas of the well pads more susceptible to erosion, but the area of new disturbance for each pad would generally be less than one acre. Accidental spills of fuel, hydraulic fluids or drilling fluids could locally contaminate soil and water resources.

Ground water is not expected to be encountered by the drilling, but if it is, rules and regulations of New Mexico State dictate how to handle the plugging of the drill hole so as to avoid any adverse impact. All drill holes would be plugged immediately upon completion. With standard operating procedures and standard mitigation, including in cases of leaks, no adverse impact to water quality is expected.

Mitigation: Will focus on erosion control and spill prevention and containment. In the event that erosion is observed at drill pads or access roads, short-term erosion control measures such as mulch application or installation of straw waddle or silt fencing will be applied to mitigate short-term sediment loading. In the event of an accidental fluid or fuel leak, contaminated soil will be removed and disposed at an appropriate facility. Such spills will be reported to BLM and to New Mexico Environmental Department as required by applicable law and regulations.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of water quality, surface/ground.

4.16 Watershed/Hydrology

Proposed Action: Except in the case of unusually high storm-water runoff, surface waters would be collected on site by the sump pit or absorbed into the soil close to the pads or roads. Any runoff contributed due to the project would be minimal and would not change the natural hydrology of the watershed.

Mitigation: Special mitigation is not required.

No Action Alternative The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of the watershed/hydrology.

4.1.17 Wildlife

Proposed Action: There will be a temporary direct loss of habitat of less than 34.7 acres. These acres are relatively scattered, especially in regards to the recon drill sites. Reclamation will reverse this habitat loss and add to the vegetative variety available for wildlife. Most species located in this area will avoid the activity of drilling operations but will return once the equipment moves on to a new site. The disturbance to wildlife is minimized by limiting drilling activity to less than 3 drilling operations ongoing at any one time. Certain animals could enter or accidentally fall into the sump pit so all pits would be constructed to have wildlife ramps available for easy escape.

No long term impacts to wildlife are likely to occur and minimal immediate direct impacts would result.

Mitigation: Special mitigation is not required.

No Action Alternative: The applicant would not be allowed to create any new disturbance as proposed, nor affect the environment as described in the above resource and issue impacts and mitigation section. There would be no change from the present condition of wildlife.

4.17 Lands and Realty

Proposed Action: No new rights-of-way need to be issued for the proposed action because the mine claimant and operator are entitled to non-exclusive access to their claims (43 USC 1732(b), 1976), subject to BLM regulation through the mine plan of operations. Some new access routes would be developed to access drill sites from existing roads (Map 1), but these new routes will be relatively short (1400' or less) and will be reclaimed at the end of the project. One likely affect would be an increase in traffic on existing rights-of-way due to equipment mobilization and daily commutes by site workers. This increase, however, is expected to be too small to create congestion issues and will only occur during the one-year life of the project.

Mitigation: Special mitigation is not required.

No Action Alternative: In the no action alternative, the exploratory drilling and roadwork would not commence and there would be no affects to existing rights-of-way.

4.18 Cumulative Impacts

This section gathers all known projects and reasonably foreseeable projects and individual cumulative impacts from the above and combines them into a comprehensive discussion of cumulative impacts. The outcome of the

core samples and analysis of the samples should determine answers to those and other commercial and economic questions regarding the probability and the design of any future mineral development. No reasonably foreseeable development action can be described for analysis of impacts or included in cumulative impact analysis at this point. Further environmental impact analysis would be required of any future development plan or proposal.

Within the project area there has been historic surface mineral exploration as evidenced by the scattered prospect pits described in several locations in this document. These prospects also extend beyond the project area. There is a minor cumulative impact to the environment from the combined effect of this surface disturbance. Since the historic prospecting was completed approximately 100 years ago, and the State of New Mexico has made efforts to reduce hazards and historic prospect pits to a large extent have reclaimed themselves the cumulative impact is negligible.

Expanding the area of consideration beyond the immediate project area finds the existence of several other developments. They are the Banner Mine/Lordsburg Millsite area development and the Aven/Lordsburg West Exploration Drilling project. In addition, there are various aggregate developments that are active and inactive as demand for their products change. Historically, the entire area has been explored by surface prospecting methods and small disturbances abound. The Banner Mine/Lordsburg Millsite development is located approximately 1.5 miles west-southwest of the close spaced drilling area of this proposed action. Presently, the Santa Fe Gold Corporation is operating a mill on approximately 1500 acres of patented claims that accepts ore material from off site. The Aven/Lordsburg West project is approximately 4 miles west of this proposed action close spaced drilling area. In the last year approximately 6 exploration drill holes, similar to those proposed in this proposed action, were completed at this site.

5 INDIVIDUALS, ORGANIZATIONS, OR AGENCIES CONSULTED

Entrée Gold has considered its contact with and knowledge of the local environment. They have contracted with companies familiar with issues and concerns in resource management who have visited the site to gather information for this environmental assessment and submitted reports. Refer to the below List of Preparers. Entrée has contacted the State of New Mexico - Energy, Minerals and Natural Resources Department, Mining and Minerals Division and is making application for the appropriate permit from them.

6 LIST OF PREPARERS

This environmental assessment was prepared by David Hallock; Land, Environmental & Natural Resource Services. Jack Clark; Clark Mining Services provided a specific Plan of Operations for this project (under direction of Tom A. Watkins; Entrée Gold (US), Inc.). Victor Gibbs and Victoria Brown; Zia Engineering & Environmental Consultants prepared a Cultural Resources Survey Report (NMCRIS Activity No. 116061 – BLM Permit 197-2920-09-J) specifically for this project. Robert Deitner, Jennifer Hyre, Fenton Kay, and Leah Markiewitz; Zia Engineering & Environmental Consultants prepared a Biological Survey Report specifically for this project. David Hallock; Land Environmental & Natural Resource Services cooperatively with the Natural Resources Conservation Service prepared a web soil survey report specifically for this project.

7 APPENDICES

The following reports have been submitted to BLM to supplement this Environmental Assessment.

- Exhibit A. Listing of Mining Claims held by Entrée Gold in the Project Area.
- Exhibit B. A Web Soil Survey for the Lordsburg Exploration Project, Natural Resource Conservation Service; July 24, 2010.
- Exhibit C. A Biological Survey for Proposed Test Drilling Locations and Access Roads near Lordsburg, Hidalgo County, New Mexico; ZIA Engineering & Environmental Consultants, LLC.; June 9, 2010.
- Exhibit D. A Cultural Resources Survey for Proposed Test Drilling Locations and Access Roads near Lordsburg, Hidalgo County, New Mexico; ZIA Engineering & Environmental Consultants, LLC.; June 3, 2010.
- Exhibit E. A Visual Contrast Rating Analysis and Photos for Proposed Project near Lordsburg, Hidalgo County, New Mexico

8 REFERENCES

- Bennett, I. W. (1986). Climatic Information. In Jerry L. Williams (ed.). *New Mexico in Maps*.
- University of New Mexico Press: Albuquerque, NM.
- Best Places. http://www.bestplaces.net/zip-code/Lordsburg-New_Mexico-88045.aspx
- Bureau of Land Management. (1993). *Mimbres Resource Management Plan*. Las Cruces Field Office, NM.
- Bureau of Land Management. (2007). *Visual Resource Management*.
- <http://www.blm.gov/nstc/VRM/index.html>.
- Bureau of Land Management. <http://www.blm.gov/lr2000>
- Bureau of Land Management. (2010) Review and Correspondence of Environmental Assessment, Entrée Gold (Us), Inc. Lordsburg, New Mexico Exploration Project
- Clean Air Act. (1970). 42 U.S.C. 7401 *et seq.*
- Clean Water Act, (1977). 33 U.S.C. 1251 *et seq.*
- Comprehensive Environmental Response, Compensation and Liability Act. (1980). 42 U.S.C. 9601-9675.
- Council on Environmental Quality. (1997). *Considering Cumulative Effects Under the National*
- Environmental Policy Act. U.S. Government Printing Office: Washington, D.C.
- Council on Environmental Quality. (1986). *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*. U.S. Government Printing Office: Washington D.C.
- Endangered Species Act. (1973). 16 U.S.C. 1531-1543.

- Executive Order 11988. (1977). *Flood Plan Management*. 42 C.F.R. 26951.
- Executive Order 11990. (1977). *Protection of Wetlands*. 23 C.F.R. 777.
- Executive Order 12898. (1994). *Environmental Justice*. 60 C.F.R. 125.
- Hidalgo County. www.hidalgocounty.org
- Migratory Bird Treaty Act. (1918). 16 U.S.C. 703-711.
- National Environmental Policy Act. (1969). 42 U.S.C 4321 et seq.
- National Historic Preservation Act. (1966). Section 106. 16 U.S.C. 470.
- National Pollution Discharge Elimination System. (1990). 40 C.F.R. 122.
- Native American Grave Protection and Reparation Act. (1990). 25 U.S.C. 3001 et seq.
- Natural Resources Conservation Service. (2007). *Farmland Classification*.
- <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.
- Natural Resource Conservation Service. A Web Soil Survey for the Lordsburg Exploration Project, July 24, 2010.
- New Mexico Department of Agriculture. (2007). *Noxious Weed Information*.
- <http://www.nmda.nmsu.edu/>.
- New Mexico Environment Department. (2007). *New Mexico Air Quality Control Regions*.
- http://www.nmenv.state.nm.us/aqb/modeling/aqcr_map.html.
- New Mexico Geologic Society. (1996). *New Mexico Highway Geologic Map*. Socorro, NM.
- New Mexico Geological Society. <http://geoinfo.nmt.edu/publications/nmgs/home.cfm>
- New Mexico Noxious Weeds Act. (1963). 76-7-23 NMSA.
- New Mexico Home Locator. <http://newmexico.hometownlocator.com/nm/hidalgo/lordsburg.cfm#16>
- Revised Guidelines for Successful Mining and Exploration Revegetation. (1997) BLM, USFS, and NDEP.
- Stone, W. J., and O'Brien, K. M., 1990, Preliminary work for a hydrologic report on Hidalgo County, New Mexico: New Mexico Bureau of Mines and Mineral Resources Open File Report 372, 147 p.
- University of New Mexico. <http://hsc.unm.edu/community/CountyReportCards/hidalgo.shtml>
- U.S. Census Bureau. (2007). *State and County Quick Facts: Hidalgo County, New Mexico*.
- U.S. Geological Survey. <http://water.usgs.gov/lookup/getwatershed?15040003>
- <http://Quickfacts.census.gov/qfd/states/35/35013.html>.
- Western Regional Climate Center. 2008. <http://www.wrcc.dri.edu.html>.
- Wikipedia. www.en.wikipedia.org/wiki/hidalgo_county_newmexico
- ZIA Engineering & Environmental Consultants, LLC. A Biological Survey for Proposed Test Drilling Locations and Access Roads near Lordsburg, Hidalgo County, New Mexico; June 9, 2010.
- ZIA Engineering & Environmental Consultants, LLC. A Cultural Resources Survey for Proposed Test Drilling Locations and Access Roads near Lordsburg, Hidalgo County, New Mexico; June 3, 2010.