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APR 18 2018

MINING & MINERALS DIVISION

PART 3 MINIMAL IMPACT EXPLORATION OPERATION

PERMIT APPLICATION

Accompanying instructions for this permit application are available from MMD, and on MMD webpage:

<http://www.emnrd.state.nm.us/MMD/MARP/MARPAApplicationandReportingForms.htm>

Send 6 copies of the completed application to:

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT**

Director

Mining and Minerals Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505
Telephone: (505) 476-3400

Webpage: www.emnrd.state.nm.us/MMD/index.htm

CHECK OFF LIST TO DETERMINE YOUR PROJECT'S STATUS AS A MINIMAL IMPACT EXPLORATION OPERATION:

- ☐ Yes ☒ No My project will exceed 1000 cubic yards of excavation, per permit.
- ☐ Yes ☒ No Surface disturbances for constructed roads, drill pads and mud pits will exceed 5 acres total for my project.
- ☐ Yes ☒ No My project is located in or is expected to have a direct surface impact on wetlands, springs, perennial or intermittent streams, lakes, rivers reservoirs or riparian areas.
- ☐ Yes ☒ No My project is located in designated critical habitat areas as determined in accordance with the federal Endangered Species Act of 1973 or in areas determined by the Department of Game and Fish likely to result in an adverse impact on an endangered species designated in accordance with the Wildlife Conservation Act, Sections 17-2-37 through 17-2-46 NMSA 1978 or by the State Forestry Division for the Endangered Plants Act, section 75-6-1 NMSA 1978.
- ☐ Yes ☒ No My project is located in an area designated as Federal Wilderness Area,

Wilderness Study Area, Area of Critical Environmental Concern, or an area within the National Wild and Scenic River System.

- ☐ Yes ☒ No My project is located in a known cemetery or other burial ground.
- ☐ Yes ☒ No My project is located in an area with cultural resources listed on either the National Register of Historic Places or the State Register of Cultural Properties.
- ☐ Yes ☒ No My project will or is expected to have a direct impact on ground water that has a total dissolved solids concentration of less than 10,000 mg/L, except exploratory drilling intersecting ground water may be performed as a minimal impact operation.
- ☐ Yes ☒ No My project is expected to use or using cyanide, mercury amalgam, heap leaching or dump leaching in its operations.
- ☐ Yes ☒ No My project is expected to result in point or non-point source surface or subsurface releases of acid or other toxic substances from the permit area.
- ☐ Yes ☒ No My project requires a variance from any part of the Mining Act Rules as part of the permit application.

If you answer yes to any of the above questions, your project does not qualify as a minimal impact exploration operation.

Confidential Information

- ☐ Yes ☒ No Is any of the information submitted in this application considered by the applicant to be confidential in nature? If yes, please provide this information separately and marked as "confidential."

Timeline

- Exploration applications must be provided no less than 45 days prior to the anticipated date of operations desired by the applicant.
- Renewal applications shall be filed at least 30 days preceding expiration of the current permit. Permits are valid for one year.
- Approved permit is valid for one year from the date of approval.

SECTION 1 – OPERATOR INFORMATION (§304.D.1)

Project Name: Apache Hills

Nearest Town To Project: Hachita

Applicant Name and Contact Information (entity obligated under the Mining Act):

Name: 1077615 US LLC - Scott Burkett

Address: 408 Sylvia Lake Rd , Gouverneur, NY 13642

Office Phone: 315-535-3253

Cell Phone: 303-870-3692

Fax Number: _____

Email: sburkett@titanminingcorp.com

Name of On-Site Contact, Representative, or Consultant:

Name: Jerry Willis

Address: 14 Tavalopa, Los Lunas, NM 87031

Office Phone: _____

Cell Phone: 505-977-5945

Fax Number: _____

Email: jerry_minemappers@yahoo.com

SECTION 2 – RIGHT TO ENTER INFORMATION (§302.D.1)

- A. Describe or attach copies of documents that give the applicant the right to enter the property to conduct the exploration and reclamation, include: lease agreements, access agreements, right of way agreements, surface owner agreements, and claim numbers, if applicable.

Unpatented mining claims AH1-AH12, AH14-AH21 and AH23-AH94. Recorded with Hidalgo County and filed with the BLM as Serial numbers NMMC199010-NMMC199101.

Attachment _____

- B. List the names and addresses of surface and mineral ownership within the proposed permit area. If the mineral is federal mineral, indicate as federal mineral, but provide the name of the claim holder or lease holder.

Surface Estate Owner(s):

Name	Address	Phone #
<input checked="" type="checkbox"/> U.S. BLM	Las Cruces District Office	575-525-4337
	1800 Marquess St.	
<input type="checkbox"/> U.S. Forest Service	Las Cruces, NM. 88005	
	_____	_____
<input type="checkbox"/> State of NM	_____	_____
	_____	_____
<input type="checkbox"/> Private/Corporate	_____	_____
Name: _____	_____	_____
<input type="checkbox"/> Other	_____	_____
Name: _____	_____	_____

Lease Holder(s) of Surface Estate (if applicable):

Name	Address	Phone #
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Mineral Estate Owner(s):

Name	Address	Phone #
<input checked="" type="checkbox"/> Bureau of Land Management	_____	_____

<input type="checkbox"/> US Forest Service	_____	_____

<input type="checkbox"/> State of NM	_____	_____

<input checked="" type="checkbox"/> Claim/Lease Holder	<u>408 Sylvia Lake Rd</u>	<u>315-535-3253</u>
Name: <u>1077615 US LLC</u>	<u>Gouverneur, NY 13642</u>	
Claim Numbers: <u>NMMC199010-NMMC199101</u>		

<input type="checkbox"/> Claim/Lease Holder	_____	_____
Name: _____	_____	
Claim Numbers: _____		

<input type="checkbox"/> Other	_____	_____
Name: _____	_____	

C. Has a Cultural Resource Survey been performed on the site? ☐ Yes ☒ No

If yes, please provide the author, title, date and report number, and include a copy of the survey with this application, if possible:

Attachment _____

D. Has a wildlife survey or vegetation survey been performed for the permit area?

☐ Yes ☒ No If yes, please provide the author, title, date and report number, and include a copy of the survey with this application, if possible:

Attachment _____

SECTION 3 – MAPS AND PROJECT LOCATION (§302.D.2)

A. Project Location:

Township 28 South Range 14 West Section 29, 30, 33, 34

Township _____ Range _____ Section _____

Township _____ Range _____ Section _____

List the drill hole/exploration name and the GPS coordinates for each site.

I.D. Number	Northing / Latitude	Easting / Longitude	I.D. Number	Northing / Latitude	Easting / Longitude
PRC-01, 3524708, 758475					
PRC-02, 3524815, 758610					
PRC-03, 3524725, 758300					
PRC-04, 3524825, 758315					
PRC-05, 3524840, 757815					
PRC-06, 3524950, 757775					
PRC-07, 3524950, 757900					
PRC-08, 3524725, 758060					
PRC-09, 3524850, 757700					
PRC-10, 3524975, 758060					
PRC-11, 3524975, 757565					
PRC-12, 3525105, 757710					
PRC-13, 3526550, 754425					
PRC-14, 3526675, 754600					
PRC-15, 3526400, 754800					
PRC-16, 3526425, 755175					
PRC-17, 3526300, 755325					
PRC-18, 3526025, 755825					

Coordinate system used to collect GPS data points:

- ☐ NAD83 Geographic
☒ NAD83 UTM Zone 13 (or 12)
☐ WGS 1984

- ☐ NAD27 Geographic
☐ NAD27 UTM Zone 13 (or 12)
☐ Other: _____

Attachment _____ (for listing additional boreholes)

B. Maps (see application form instructions for examples of maps to be included):

Are topographic maps included with the application that show the following items:

- ☒ Yes – The boundary of the proposed exploration project Permit Area
- ☒ Yes – The proposed exploration locations (i.e., borehole locations)
- ☒ Yes – Existing roads, new roads and overland travel routes
- ☒ Yes ☐ N/A – Areas of proposed road improvement

Attachments 1-5

Are maps or figures included with the application showing the approximate dimensions and locations of drill pads and other disturbances:

- ☒ Yes – Drill pad dimensions and constructed drill pad locations

Attachments 1-5

C. Provide detailed driving directions to access the site:

South on NM 19 from Exit 49 on I-10E to Hachita, NM for approximately 19 miles.

East on NM 9 to NM 81, approximately 0.5 miles.

South on NM 81 to unimproved BLM road, approximately 4 miles.

East on unimproved BLM Road to drill sites, approximately 3 miles, near Apache Peak.

Roads are unnamed and not numbered.

SECTION 4 – EXPLORATION DESCRIPTION (§302.D.3 & 4)

A. Anticipated exploration: Start Date: 21 May 2018 End Date: 1 Sept 2018

B. List the mineral(s)/element(s) to be explored for: Cu, Au

C. Proposed method(s) of exploration:

☐ **Air drilling (air rotary, coring, etc.):**

_____ # of holes _____ Depth (ft.) _____ Diameter (in.)

_____ # of drill pads _____ Length (ft.) 10 _____ Width (ft.)

Will drill pads be graded/bladed or overland: ☐ Graded/bladed ☐ Overland

Will drill pads need some mechanical leveling (grading/blading): ☐ Yes ☐ No

Approx. Weight of Drill Rig (lbs.) 9,000 Number of Axles: Trackmnt

Total length of drill stem that can be carried on the rig: _____

Is a support pipe truck anticipated? ☐ Yes ☐ No _____ Weight (lbs.)

Weight of support compressor (lbs.): _____ Trailer mounted? _____

Anticipated Drilling Contractor: Godbe Drilling LLC License No. WD-1677

☒ **Mud/fluid drilling:**

18 # of holes 500 Depth (ft.) 4 Diameter (in.)

18 # of drill pads 25 Length (ft.) 25 Width (ft.)

Will drill pads be graded/bladed or overland: ☒ Graded/bladed ☐ Overland

Will drill pads need some mechanical leveling (grading/blading): ☒ Yes ☐ No

Will a closed loop system be used or will mud/fluid pits be used? Mud/fluid pits

If mud/fluid pits are proposed:

18 # of pits 20 Length (ft.) 10 Width (ft.) 5 Depth (ft.)

Anticipated excavating equipment: Rubber tired or tracked backhoe

How will excavating equipment be transported to the site (i.e., driven, low-boy, etc.):

Low-boy to convenient and safe offloading site, then driven.

Will mud pits be lined?: ☒ Yes ☐ No

If yes, proposed material to line the mud pits: Heavy gauge plastic sheeting

Approx. Weight of Drill Rig (lbs.) 9,000 Number of Axles: Trackmnt

Anticipated Drilling Contractor: Godbe Drilling LLC License No. WD-1677

☐ **Test pits / exploratory trenches:**

_____ # of pits _____ Length (ft.) _____ Width (ft.) _____ Depth (ft.)

Anticipated excavating equipment: _____

How will excavating equipment be transported to the site (i.e., driven, low-boy, etc.):

☒ **Other methods of exploration** (i.e., cuts, shafts, tunnels, adits, declines, blasting, etc.). Indicate method and details:

Mineral Exploration diamond core drilling.

TOTAL ACREAGE TO BE DISTURBED DUE TO DRILL PADS = .26 acres
(to convert to acres, multiply total square footage of drill pads by 0.0000229)

D. Disposal of drill cuttings

If this exploration project is for uranium or other radioactive elements/minerals, applicant agrees to perform a gamma radiation survey at each drill site prior to, and after, exploration activities. Applicant/Owner/Operator agrees to restore gamma radiation levels at each drill site to pre-exploration levels. ☐ Yes ☐ No ☒ N/A

Will excess drill cuttings be buried at each drill site location or within a single disposal pit?
☒ At each drill pad location ☐ Within a single disposal pit

If a single disposal pit is proposed, please provide the following:

Description or GPS coordinates of the proposed cuttings disposal pit location:

Dimensions of the single proposed cuttings disposal pit (length, width, and depth):

_____Length (ft.) _____Width (ft.) _____Depth (ft.)

TOTAL ACREAGE TO BE DISTURBED DUE TO DISPOSAL PIT = N/A acres
(to convert to acres, multiply total square footage of disposal pit by 0.0000229)

E. Other Supporting Equipment (check all that apply):

<input checked="" type="checkbox"/> 4x4 Trucks/Vehicles	Quantity: <u>2</u>
<input checked="" type="checkbox"/> Water Truck	Weight (lbs.): <u>16,000</u>
<input type="checkbox"/> Geophysical Truck	Weight (lbs.): _____
<input checked="" type="checkbox"/> Pipe Truck (rig support)	Weight (lbs.): <u>16,000</u>
<input checked="" type="checkbox"/> Bulldozer	Type: <u>Allis Chalmers 7</u>
<input checked="" type="checkbox"/> Backhoe	Type: <u>John Deere 710</u>
<input type="checkbox"/> Trackhoe	Type: _____
<input type="checkbox"/> Scaper/Grader	Type: _____
<input type="checkbox"/> Trailers	Quantity/Type: _____
<input checked="" type="checkbox"/> Portable Toilet	Quantity: <u>1</u>
<input type="checkbox"/> Other	List: _____

F. Roads and Overland Travel:

List of new roads to be constructed for this exploration project:

Description of <i>NEW</i> Roads	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
Temporary access for tracked drill rig. (Total)	4420	10	1.01
Equipment Staging Area	25	25	.01
TOTAL ACRES DISTURBED BY NEW ROAD CONSTRUCTION :			1.02

Describe how new roads will be constructed:

1) Routes marked with survey flags. 2) surface smoothed to allow safe passage of tracked drill rig and 4-wheel drive support vehicles. 3) Temporary sump excavated within footprint of drill pad.

List for extension or widening of existing roads:

Description of Modification to <i>EXISTING</i> Roads	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
General clean-up and repair of washouts. (Totals)	1185	10	.27
TOTAL ACRES DISTURBED BY ROAD IMPROVEMENTS :			0.27

Describe how existing roads will be extended or widened:

Not planned nor anticipated.

List for routes of overland travel:

Description of <i>OVERLAND TRAVEL</i> Routes	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
Temporary access for tracked drill rig. (Totals)	110	10	.03
TOTAL ACRES DISTURBED BY OVERLAND TRAVEL :			0.03

G. Support Facilities

Describe (location and size) any support facility disturbances (equipment staging, equipment and material storage and/or lay down areas, vehicle parking, temporary housing and/or trailers) to be created or situated on the site during exploration operations.

See Figure 1-2 for equipment staging area location. Area of staging facility is approximately at the intersection of two secondary roads. Area will be 25ft x 25ft = .01 Acres

H. TOTAL ACREAGE TO BE DISTURBED BY PROJECT = 1.58 acres
(include all disturbed acreage from drill pads, cuttings disposal pit, new roads, improved roads and overland travel routes)

SECTION 5 – CHEMICAL USE (§302.D.4)

A. Check any and all chemicals that will be used for this project.

<input checked="" type="checkbox"/> Drilling Mud (i.e., EZ Mud)	Type/Quantity:	EZ Mud, Bentonite Gel (varies w
<input checked="" type="checkbox"/> Diesel Fuel	Quantity:	45-50 Gallons per 12 hour shift
<input type="checkbox"/> Down-hole Lubricants	Type/Quantity:	
<input checked="" type="checkbox"/> Lost Circulation Materials	Type/Quantity:	Shredded Paper (varies with for
<input checked="" type="checkbox"/> Oils/Grease	Quantity:	As needed
<input type="checkbox"/> Gasoline	Quantity:	
<input checked="" type="checkbox"/> Hydraulic Fluid	Quantity:	As needed
<input type="checkbox"/> Ethylene Glycol	Quantity:	
<input checked="" type="checkbox"/> Cement	Type/Quantity:	Top 2' of holes
<input checked="" type="checkbox"/> Water	Source:	12,000 gal/day
<input checked="" type="checkbox"/> Bentonite	Quantity:	Varies with formation
<input type="checkbox"/> Fertilizer	Type/Quantity:	
<input type="checkbox"/> Other	Type/Quantity:	

B. Describe, in detail, a plan for the containment, use and disposal of all chemicals listed above:

All Flammables to be placed in clearly marked and contained flam-bin, these include flat steel horse troughs. Water will be stored in plastic storage tanks (1500 gallon & 2800 gallon).

C. Describe where equipment fueling/refueling will occur:

The drill will be fueled at each hole location. The drill will be lined with heavy ROC plastic. All fueling and possible leak points will be lined with absorbent diaper. The drill will be fueled using a hose from a tank located in the pickup bed and pumped directly into drill rig tank.

D. Describe how hazardous material spills/leaks will be handled:

A spill kit will be at each drilling location. This includes a 55-gal. drum, absorbent diaper material, shovel and 5 gallon plastic bucket. If a spill happens all personnel is trained in proper clean-up. Absorbent diaper material is first placed on top of the spill, all spilled fluid is absorbed by diaper material, diaper material is then placed in 55-gal containment drum. All remaining spilled material shall be shoveled and placed in 55-gal. drum. Ground will be shoveled to a depth of 1' below initial saturation level. 55-gal. drum to be hauled off location to proper waste disposal facility.

E. Identify spill cleanup materials that will be kept on-site (check all that apply):

☒ Bentonite clay or cat litter

☒ Adsorbent pads, rolls, mats, socks, pillows, dikes, etc.

☒ Drum or barrel for containing contaminated soil/adsorbent materials

☐ Other/list: _____

☐ Other/list: _____

☐ Other/list: _____

F. Applicant/owner/representative agrees to immediately notify the State of New Mexico immediately of any spills of hazardous materials (see page 1 of this application for phone numbers to notify): ☒ Yes ☐ No

SECTION 6 – GROUNDWATER/SURFACE WATER INFORMATION (§302.D.5)

- A. Provide an estimate of depth to ground water and the total dissolved solids (TDS) concentration.

Depth to groundwater (ft.): 40 - 400 TDS concentration (mg/L): No data

Describe the source of this information:

Local rancher reports 40 ft. DTW. The two wells found in NM Office of the State Engineer water column report an average of 400 ft. in nearby township and range.

- B. Will dewatering activities be conducted: ☐ Yes ☒ No

If yes, please describe:

- C. Is groundwater anticipated to be encountered during exploration: ☒ Yes ☐ No

If **YES**:

Have you completed Form WR-07 (Application for permit to drill a well with no consumptive use of water) and mailed it to the District Office of the State Engineer? ☒ Yes

Have you completed Form WD-08 (Well plugging plan of operations) and mailed it to the District Office of the State Engineer? ☒ Yes

Attachment 6 (copies of the completed WR-07 and WD-08 forms)

- D. Exploration Borehole Abandonment

Dry Boreholes

- ☐ Dry hole abandonment (option 1): 100% bentonite pellets/chips (i.e. HOLEPLUG® manufactured by Baroid Industrial Products), dropped from surface then hydrated in place according to the manufacturer's recommendations, emplaced from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.

- ☐ Dry hole abandonment (option 2): Neat cement slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- ☐ Dry hole abandonment (option 3): Cement + 6% bentonite slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- ☒ Dry hole abandonment (option 4): High-density bentonite clay ($\geq 20\%$ active solids; i.e. QUIK-GROUT® manufactured by Baroid Industrial Products), mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.
- ☐ Dry hole abandonment (option 5): Other materials / describe and justify use:

Wet Boreholes

- ☐ Wet hole abandonment (option 1): Neat cement slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- ☒ Wet hole abandonment (option 2): High-density bentonite clay ($\geq 20\%$ active solids; i.e. QUIK-GROUT® manufactured by Baroid Industrial Products), mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.
- ☐ Wet hole abandonment (option 3): Other sealing material approved by the Office of the State Engineer. Describe and include well plugging plan approval by the State Engineer:

- D. Applicant agrees to contain any water produced from the exploration borehole at the drill site and acknowledges that discharge of this water to a watercourse may be a violation of the Federal Clean Water Act: ☒ Yes ☐ No

E. Is any drilling proposed to occur within the channel of any perennial, intermittent, or ephemeral streams? ☐ Yes ☒ No

F. Is any drilling anticipated to occur within 100 feet of any perennial, intermittent, or ephemeral streams? ☐ Yes ☒ No

SECTION 7 – RECLAMATION & OPERATION PLAN (§302.D.6 AND 302.I.K)

A. Salvage/Preservation of Topsoil

Before any grading/blading or similar activities occur in relation to this project, operator agrees to salvage and preserve all topsoil and topdressing for use in future reclamation of this project ☒ Yes ☐ No

Describe how topsoil will be salvaged prior to initiation of exploration activities (check all that apply):

- ☐ N/A – no construction work will occur, therefore no soil salvage is needed.
- ☒ Excavated from drill pads and stored at each drill pad
- ☒ Excavated from road improvements/construction and stored adjacent to road
- ☒ Excavated from mud/fluid pits and storage at each pit
- ☐ Other, describe:

B. Erosion Control

Describe the best management practices that will be implemented to control erosion:

- | | | |
|---|----------------|---------------------------|
| <input type="checkbox"/> Silt fencing | Location: | |
| <input checked="" type="checkbox"/> Straw waddles | Location: | As needed for drill pads. |
| <input type="checkbox"/> Straw bales | Location: | |
| <input type="checkbox"/> Ditches/swales | Location: | |
| <input type="checkbox"/> Berms/dikes/dams | Location: | |
| <input type="checkbox"/> Sediment basins | Location: | |
| <input type="checkbox"/> Other or N/A | Type/Location: | |
| | | |

C. Wildlife Protection / Noxious Weed Prevention

Will the perimeter of drill pits be fenced to prevent wildlife entrapment? ☒ Yes ☐ No

Proposed pit perimeter fence material:

Standard 4-inch wire net fencing secured with steel fence posts.

Describe how the pit perimeter fencing will be installed and secured (i.e., T-posts, wooden stakes, etc.):

Fence posts will be located at corners of sumps with fencing material attached.

Will at least one side of the interior of the drill pits be sloped at 3:1 as a ramp for wildlife escape? ☒ Yes ☐ No

If No, will another type of constructed escape ramp be installed? Describe:

Applicant/Owner/Operator commits to pressure-washing or steam-clean all equipment prior to entering the permit area: ☒ Yes ☐ No

D. Reclamation Details

Describe in general how re-contouring or re-establishment of the surface topography will be restored:

1) Recontouring will occur immediately after completion of drilling and removal of drilling equipment and supporting materials. 2) Cuts will be refilled to match topographic relief with material originally excavated and stored immediately adjacent to the disturbance with backhoe and dozer as appropriate.

Describe how the reclamation of portals, adits, drilling fluid/mud and/or waste pits, shafts, ponds, roads and other disturbances will be performed:

1) Excess fluids will be removed from drill sumps. 2) Drill cuttings will be wrapped inside the impermeable barrier and left in the bottom of the sump. 3) The sump will be refilled and recontoured along with the drill pad and returned to a state matching the original surface topography.

Is seeding of the reclaimed areas proposed: ☒ Yes ☐ No

If no, provide a justification as to why no revegetation is needed:

Revegetation seed types and application rates will follow recommendations prescribed by the BLM, county agricultural authorities and state authorities.

Plant mix to be used in the re-establishment of vegetation:

- ☐ US Forest Service specified mix applied through broadcast at their recommended rate
☒ BLM specified mix applied through broadcast at their recommended rate
☐ Other:

Plant Name	Seeding Rate (lbs./acre)

Broadcast applied or drill-seeded: ☒ Broadcast ☐ Drill-seeded

Scarification Methods (check all that apply):

- ☒ Primary tillage to greater than 6-inches depth of all constructed drill pads and roads
- ☐ Secondary tillage of all constructed drill pads and roads, and/or overland travel routes
- ☐ Chain drag or tire drag over seeds in areas used for overland travel
- ☒ Light raking of soil over seeds in areas used for overland travel
- ☐ None
- ☐ Other/describe:

Mulch Use:

- ☐ Certified weed-free straw mulch will be placed over areas that have been tilled/disc'd or ripped at a rate of 2 tons per acre, and will be crimped in place
- ☒ No mulch is proposed

E. Reclamation Timeline

Applicant/Owner/Operator commits to reclamation of the disturbed area as soon as possible following the completion or abandonment of the exploration operation, unless the disturbed area is included within a complete permit application for a new mining permit:

- ☒ Yes ☐ No

Anticipated Start of Reclamation:

- ☒ 0-30 days after completion of drilling
- ☐ 31-60 days after completion of drilling
- ☐ Other/specify: _____

SECTION 8 – PERMIT FEES AND FINANCIAL ASSURANCE (§302.1.2 AND 5)

- A. Financial assurance must be posted with Mining and Minerals Division prior to approval of this application. The acceptable forms of financial assurance are surety bonds, letters of credit, and certificates of deposit. Provide an estimate of, and an instrument for, the proposed financial assurance required by Subpart 3.

- ☒ Surety Bond
☐ Letter of Credit
☐ Cash Account / Certificate of Deposit

☒ Estimated amount of financial assurance: 90,566

Or

- ☐ Applicant will provide the amount of financial assurance calculated by MMD.

- B. Attach the permit fees as determined pursuant to Subpart 2. The application fee for a minimal impact exploration permit is \$500.00.

- ☐ Money Order/Cashier's Check
☒ Check

Check Number : 49

Financial Institution: Bank of Montreal

SECTION 9 – CERTIFICATION REQUIREMENT (§302.1.3 & 4)

I certify that I have personally examined and am familiar with the information submitted herein, and based on my inquiry of those individuals responsible for obtaining the information; I believe the submitted information is true, accurate, and complete. I agree to comply with the reclamation requirements set forth in this permit application and related correspondence, the New Mexico Mining Act and the Rules. Further, I certify that I am not in violation of any other obligation under the New Mexico Mining Act or the Rules adopted pursuant to that Act and I allow the Director to enter the permit area, without delay, for the purposes of conducting inspections during exploration and reclamation.

Signature of Permittee or Authorized Agent: _____



Name (type or print): _____

Scott Burkett

Title/Position: _____

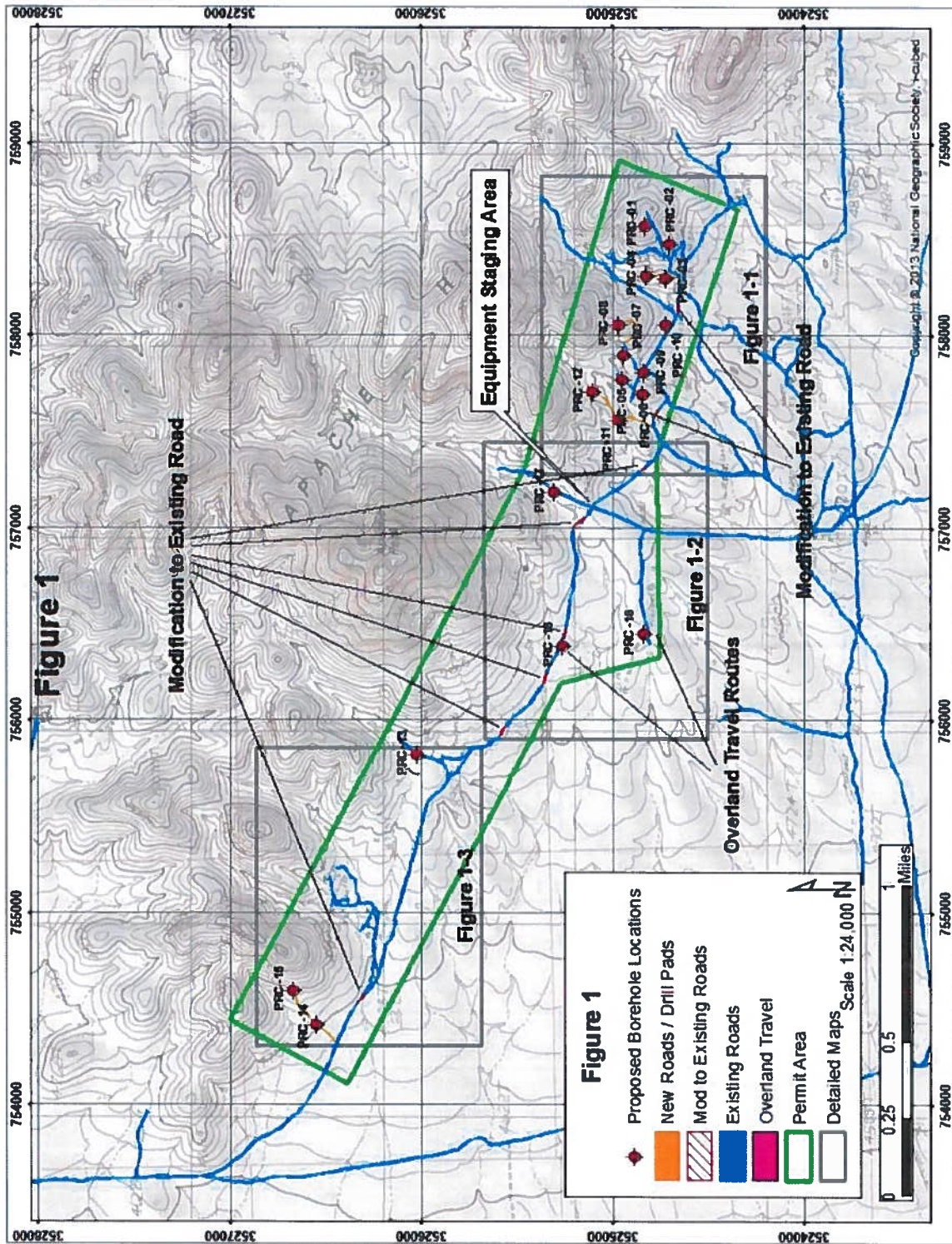
VP of Exploration

Date: _____

4/10/18

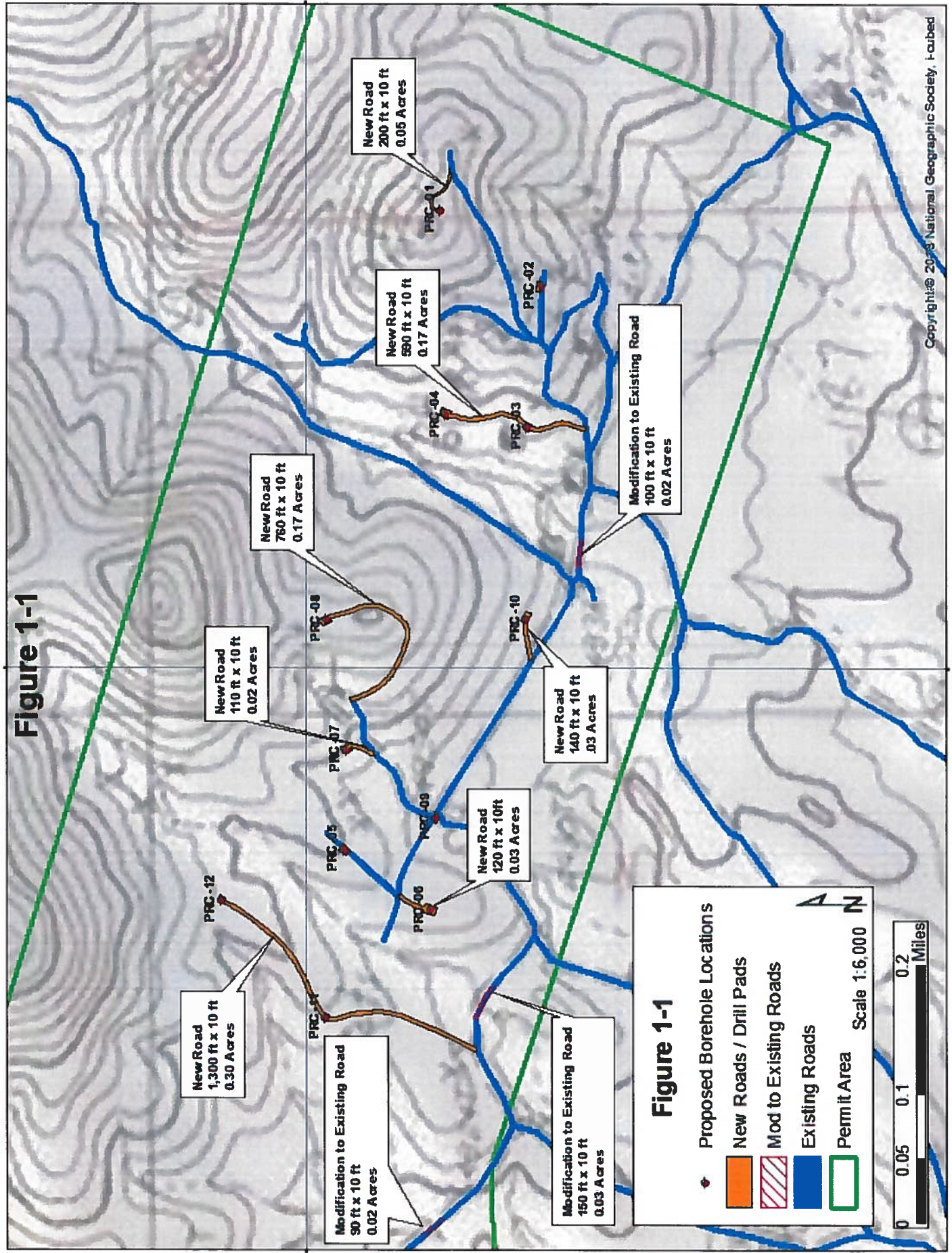
ATTACHMENT 1-5

Figures



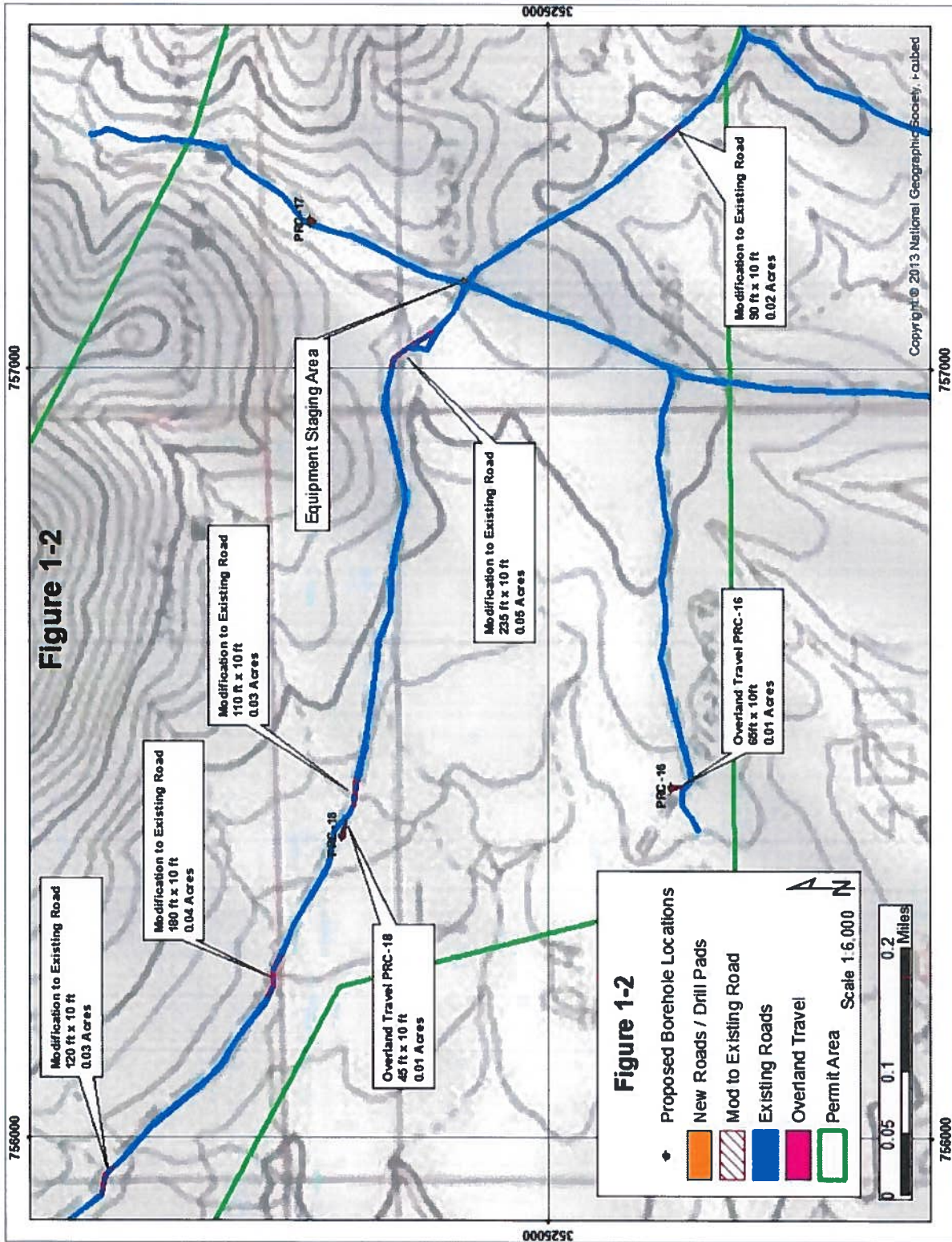
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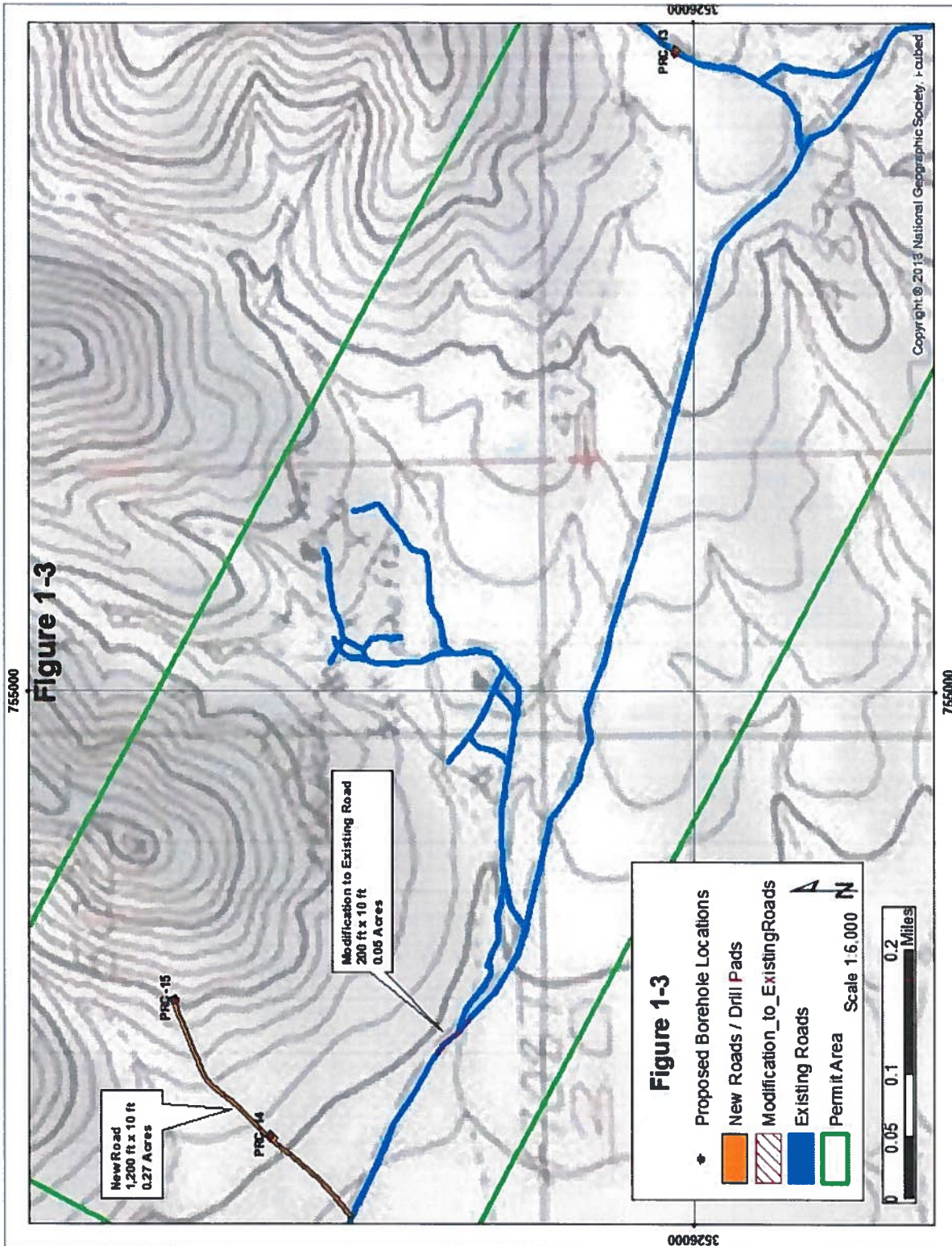
Figure 1-1

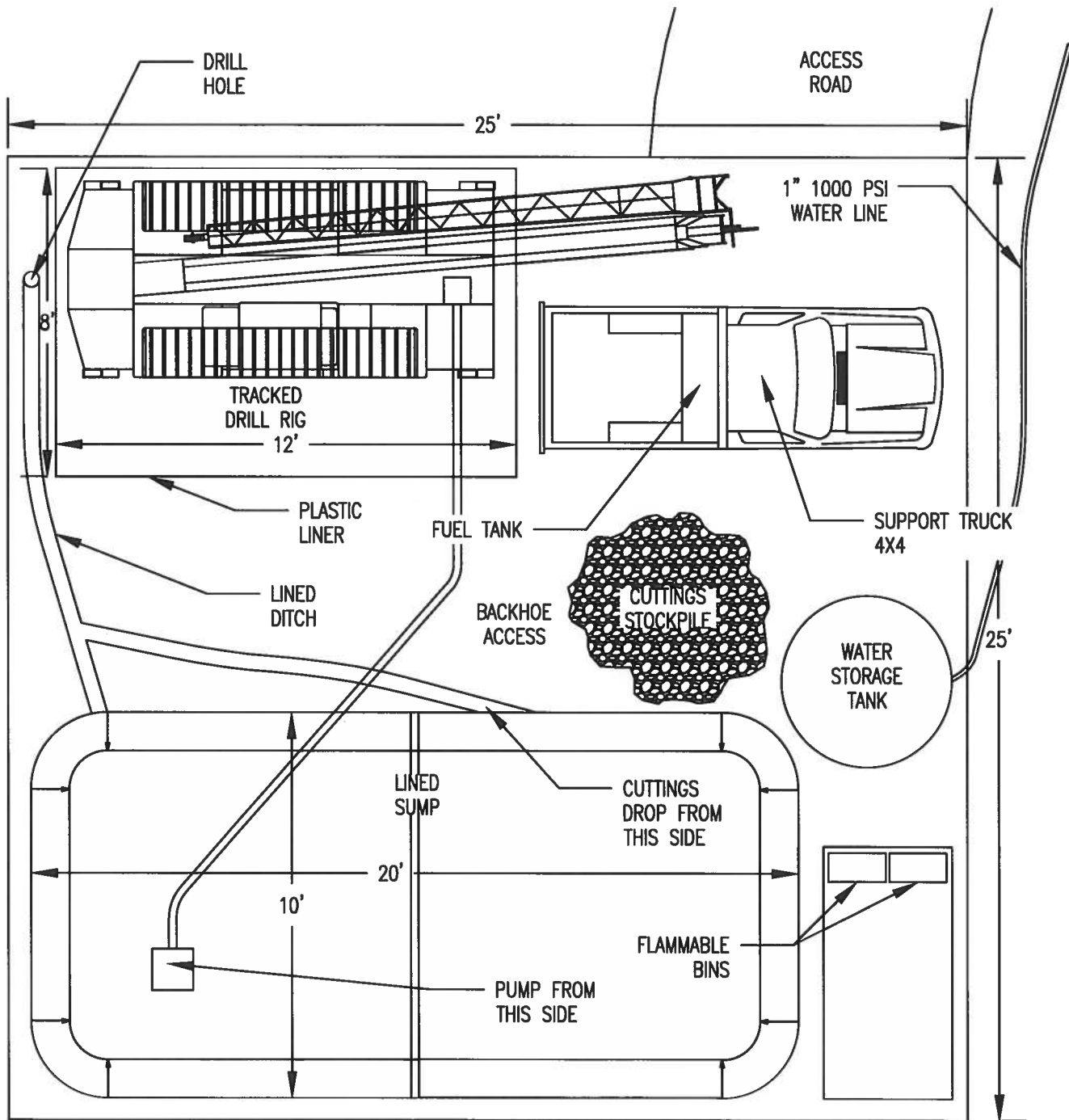


3525000

758000







ANSI EXPAND A (8.50 X 11.00 INCHES)

S:\Spatial\Eng\Surf\ApacheHills\DrillSiteLayout2018.dwg

1077615 US LLC

APACHE HILLS PROJECT - 2018
DRILL SITE LAYOUT

ATTACHMENT 6

Copies of WR-07 And WD-08

Submitted to NM OSE



WELL PLUGGING PLAN OF OPERATIONS



NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP:

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: _____

Name of well owner: 1077615 US LLC

Mailing address: 408 Sylvia Lake Road

City: Gouverneur State: NY Zip code: 13462

Phone number: 315-535-3253 E-mail: sburkett@titanminingcorp.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Godbe Drilling LLC

New Mexico Well Driller License No.: WD-1677 Expiration Date: 2019

IV. WELL INFORMATION:

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 31 deg, 49 min, 43.6188 sec
Longitude: -108 deg, 16 min, 8.573 sec, WGS84

See attachments

☐ Check if seconds are decimal format.

2) Reason(s) for plugging well:

Per NM regulations once exploration drill hole has been completed.

3) Was well used for any type of monitoring program? No If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? NO If yes, provide additional detail, including analytical results and/or laboratory report(s):

5) Static water level: TBD feet below land surface / feet above land surface (circle one)

6) Depth of the well: 500 feet

- 7) Inside diameter of innermost casing: 3" inches.
- 8) Casing material: 4130 Steel - non-perforated (temporary) to be pulled
- 9) The well was constructed with:
☐ an open-hole production interval, state the open interval: NA
☐ a well screen or perforated pipe, state the screened interval(s): NA
- 10) What annular interval surrounding the artesian casing of this well is cement-grouted? NA
- 11) Was the well built with surface casing? NA If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? NA If yes, please describe:
- 12) Has all pumping equipment and associated piping been removed from the well? NA If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

- 1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well:

Once the exploration well/hole has been completed to required depth. Abandonment with bentonite grout (20% Solids by volume) which will be pumped and displaced using the drill string as a tremmie pipe. The driller will pump the bentonite grout mixture from the bottom of the hole to 20' beneath ground level (B.G.L.). The hole will be cemented from
- 2) Will well head be cut-off below land surface after plugging? NA will be pulled

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

- 1) For plugging intervals that employ cement grout, complete and attach Table A.
- 2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.
- 3) Theoretical volume of grout required to plug the well to land surface: 287.35 gallons from 500' to 20' BGL
- 4) Type of Cement proposed: Portland neat cement
- 5) Proposed cement grout mix: 5.2 gallons of water per 94 pound sack of Portland cement.
- 6) Will the grout be: batch-mixed and delivered to the site
 x mixed on site

- 7) Grout additives requested, and percent by dry weight relative to cement:

N/A

- 8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

VIII. SIGNATURE:

I, Scott Burkett, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Scott Burkett  Digitally signed by Scott Burkett
Date: 2018.04.06 15:27:44 -04'00'

Signature of Applicant

4/6/18

Date

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

_____ Approved subject to the attached conditions.
_____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this _____ day of _____,

Tom Blaine P.E., New Mexico State Engineer

By: _____

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			
Bottom of proposed interval of grout placement (ft bgl)			
Theoretical volume of grout required per interval (gallons)			
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			
Mixed on-site or batch-mixed and delivered?			
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			
Bottom of proposed sealant of grout placement (ft bgl)			
Theoretical volume of sealant required per interval (gallons)			
Proposed abandonment sealant (manufacturer and trade name)			



NEW MEXICO OFFICE OF THE STATE ENGINEER



ATTACHMENT 1 POINT OF DIVERSION DESCRIPTIONS

This Attachment is to be completed if more than one (1) point of diversion is described on an Application or Declaration.

a. Is this a: <input type="checkbox"/> Move-From Point of Diversion(s) <input type="checkbox"/> Move-To Point of Diversion(s)		b. Information on Attachment(s): Number of points of diversion involved in the application: _____ Total number of pages attached to the application: <u>4</u>	
<input type="checkbox"/> Surface Point of Diversion OR <input checked="" type="checkbox"/> Well			
Name of ditch, acequia, or spring:			
Stream or water course:			
Tributary of:			
c. Location (Required): Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)			
NM State Plane (NAD83) (feet) NM West Zone <input type="checkbox"/> NM Central Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/>	UTM (NAD83) (meters) Zone 13N <input type="checkbox"/> Zone 12N <input checked="" type="checkbox"/>	<input type="checkbox"/> Lat/Long-- (WGS84) 1/10 th of second	OTHER (allowable only for move-from descriptions - see application form for format) <input type="checkbox"/> PLSS (quarters, section, township, range) <input type="checkbox"/> Hydrographic Survey, Map & Tract <input type="checkbox"/> Lot, Block & Subdivision <input type="checkbox"/> Grant
POD Number: PRC-02	X or Longitude 758610	Y or Latitude 3524815	Other Location Description:
POD Number: PRC-03	X or Longitude 758300	Y or Latitude 3524725	Other Location Description:
POD Number: PRC-04	X or Longitude 758315	Y or Latitude 3524825	Other Location Description:
POD Number: PRC-05	X or Longitude 757815	Y or Latitude 3524840	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:

FOR OSE INTERNAL USE

Form wr-08

POD DESCRIPTIONS - ATTACHMENT 1

File Number:

Trn Number:

Trans Description (optional):



NEW MEXICO OFFICE OF THE STATE ENGINEER



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Stream or water course:			
Tributary of:			
c. Location (Required): Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)			
NM State Plane (NAD83) (feet) <input type="checkbox"/> NM West Zone <input type="checkbox"/> NM Central Zone <input type="checkbox"/> NM East Zone	UTM (NAD83) (meters) Zone 18N Zone 12N <input checked="" type="checkbox"/>	<input type="checkbox"/> Lat/Long-- (WGS84) 1/10 th of second	OTHER (allowable only for move-from descriptions - see application form for format) <input type="checkbox"/> PLSS (quarters, section, township, range) <input type="checkbox"/> Hydrographic Survey, Map & Tract <input type="checkbox"/> Lot, Block & Subdivision <input type="checkbox"/> Grant
POD Number: PRC-06	X or Longitude 757775	Y or Latitude 3524950	Other Location Description:
POD Number: PRC-07	X or Longitude 757900	Y or Latitude 3524950	Other Location Description:
POD Number: PRC-08	X or Longitude 758060	Y or Latitude 3524725	Other Location Description:
POD Number: PRC-09	X or Longitude 757700	Y or Latitude 3524850	Other Location Description:
POD Number: PRC-10	X or Longitude 758060	Y or Latitude 3524975	Other Location Description:
POD Number: PRC-11	X or Longitude 757565	Y or Latitude 3524975	Other Location Description:
POD Number: PRC-12	X or Longitude 757710	Y or Latitude 3525105	Other Location Description:
POD Number: PRC-13	X or Longitude 754425	Y or Latitude 3526550	Other Location Description:
POD Number: PRC-14	X or Longitude 754600	Y or Latitude 3526675	Other Location Description:

FOR OSE INTERNAL USE

Form wr-08
POD DESCRIPTIONS - ATTACHMENT 1

File Number:	Trn Number:
Trans Description (optional):	



NEW MEXICO OFFICE OF THE STATE ENGINEER



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<input type="checkbox"/> Surface Point of Diversion OR <input type="checkbox"/> Well			
Name of ditch, acequia, or spring:			
Stream or water course:			
Tributary of:			
c. Location (Required): Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)			
NM State Plane (NAD83) (feet) NM West Zone <input type="checkbox"/> NM Central Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/>	UTM (NAD83) (meters) Zone 13N <input type="checkbox"/> Zone 12N <input checked="" type="checkbox"/>	<input type="checkbox"/> Lat/Long-- (WGS84) 1/10 th of second	OTHER (allowable only for move-from descriptions - see application form for format) <input type="checkbox"/> PLSS (quarters, section, township, range) <input type="checkbox"/> Hydrographic Survey, Map & Tract <input type="checkbox"/> Lot, Block & Subdivision <input type="checkbox"/> Grant
POD Number: PRC-15	X or Longitude 754800	Y or Latitude 3526400	Other Location Description:
POD Number: PRC-16	X or Longitude 755175	Y or Latitude 3526425	Other Location Description:
POD Number: PRC-17	X or Longitude 755325	Y or Latitude 3526300	Other Location Description:
POD Number: PRC-18	X or Longitude 755825	Y or Latitude 3526025	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:

FOR OSE INTERNAL USE

Form wr-08

POD DESCRIPTIONS - ATTACHMENT 1

File Number:	Trn Number:
Trans Description (optional):	

Attachment to WD-08, WR-07 and WR-08 - Well locations (in WGS84)**Apache Hills Project**

Well No. (exploration borehole)	Latitude	Longitude
PRC-01	31 deg, 49 min, 43.6188 sec	-108 deg, 16 min, 8.573 sec
PRC-02	31 deg, 49 min, 46.9776 sec	-108 deg, 16 min, 3.338 sec
PRC-03	31 deg, 49 min, 44.3136 sec	-108 deg, 16 min, 15.204sec
PRC-04	31 deg, 49 min, 47.5428 sec	-108 deg, 16 min, 14.538 sec
PRC-05	31 deg, 49 min, 48.4392 sec	-108 deg, 16 min, 33.524 sec
PRC-06	31 deg, 49 min, 52.0392 sec	-108 deg, 16 min, 34.939 sec
PRC-07	31 deg, 49 min, 51.9384 sec	-108 deg, 16 min, 51.9384 sec
PRC-08	31 deg, 49 min, 44.508 sec	-108 deg, 16 min, 24.326 sec
PRC-09	31 deg, 49 min, 48.8568 sec	-108 deg, 16 min, 37.884 sec
PRC-10	31 deg, 49 min, 52.6188 sec	-108 deg, 16 min, 24.085 sec
PRC-11	31 deg, 49 min, 53.022 sec	-108 deg, 16 min, 42.895 sec
PRC-12	31 deg, 49 min, 57.1224 sec	-108 deg, 16 min, 37.261 sec
PRC-13	31 deg, 50 min, 46.6584sec	-108 deg, 18 min, 40.738 sec
PRC-14	31 deg, 50 min, 50.5716 sec	-108 deg, 18 min, 33.97 sec
PRC-15	31 deg, 50 min, 41.4888 sec	-108 deg, 18 min, 26.626 sec
PRC-16	31 deg, 50 min, 42 sec	-108 deg, 18 min, 12.352 sec
PRC-17	31 deg, 50 min, 37.824 sec	-108 deg, 18 min, 6.768 sec
PRC-18	31 deg, 50 min, 28.4964 sec	-108 deg, 17 min, 48.026 sec

File No. **NEW MEXICO OFFICE OF THE STATE ENGINEER****WR-07 APPLICATION FOR PERMIT TO DRILL****A WELL WITH NO WATER RIGHT**

(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

- | | | |
|--|--|--|
| Purpose: | <input type="checkbox"/> Pollution Control And/Or Recovery | <input type="checkbox"/> Ground Source Heat Pump |
| <input checked="" type="checkbox"/> Exploratory Well (Pump test) | <input type="checkbox"/> Construction Site/Public Works Dewatering | <input checked="" type="checkbox"/> Other(Describe): Diamond Core Drilling |
| <input type="checkbox"/> Monitoring Well | <input type="checkbox"/> Mine Dewatering | |

A separate permit will be required to apply water to beneficial use regardless if use is consumptive or nonconsumptive.

☐ Temporary Request - Requested Start Date:

Requested End Date:

Plugging Plan of Operations Submitted? ☒ Yes ☐ No**1. APPLICANT(S)**

Name: 1077615 US LLC	Name:
Contact or Agent: check here if Agent <input type="checkbox"/> Scott Burkett	Contact or Agent: check here if Agent <input type="checkbox"/>
Mailing Address: 408 Sylvia Lake Road	Mailing Address:
City: Gouverneur	City:
State: NY Zip Code: 13462	State: Zip Code:
Phone: 315-535-3253 work <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional): sburkett@titanminingcorp.com	E-mail (optional):

FOR OSE INTERNAL USE

Application for Permit, Form WR-07, Rev 11/17/16

File No.:	Trm. No.:	Receipt No.:
Trans Description (optional):		
Sub-Basin:	PCW/LOG Due Date:	

2. WELL(S) Describe the well(s) applicable to this application.

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.			
<input type="checkbox"/> NM State Plane (NAD83) (Feet) <input type="checkbox"/> NM West Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/> NM Central Zone			
<input checked="" type="checkbox"/> UTM (NAD83) (Meters) <input checked="" type="checkbox"/> Zone 12N <input type="checkbox"/> Zone 13N			
<input type="checkbox"/> Lat/Long (WGS84) (to the nearest 1/10 th of second)			
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
PRC - 01	758475	3524708	Section 29, 30, 33, 34 of Township 28S, Range 14W
PRC-02	758610	3524815	
PRC-03	758300	3524725	
PRC-04	758315	3524825	
PRC-05	757815	3524840	
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, how many <u>13</u>			
Other description relating well to common landmarks, streets, or other: South of the town of Hachita, near Apache Peak.			
Well is on land owned by: Richard Faulkner, local rancher.			
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, how many <u>18</u>			
Approximate depth of well (feet): 500		Outside diameter of well casing (inches):	
Driller Name: Godbe Drilling		Driller License Number: WD-1677	

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

Exploratory Mineral Exploration Diamond Core Drilling. Casing will be pulled and each hole abandoned using abandonite grout from 500' BGL to 20' BGL. From 20' BGL to 2' BGL will be cemented with Portland neat cement. Top 2' will be natural fill
--

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:	Trm No.:
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4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

Exploratory: <input checked="" type="checkbox"/> Include a description of any proposed pump test, if applicable.	Pollution Control and/or Recovery: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	Construction De-Watering: <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	Mine De-Watering: <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water. <input type="checkbox"/> The method of measurement of water diverted.
Monitoring: <input type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	Ground Source Heat Pump: <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The number of boreholes for the completed project and required depths. <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

ACKNOWLEDGEMENT

I, We (name of applicant(s)),

Print Name(s)

Scott Burkett

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Scott Burkett

Digitally signed by Scott Burkett
Date: 2018.04.10 08:10:31 -04'00'

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☐ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this _____ day of _____ 20 _____, for the State Engineer,

_____, State Engineer

By: _____
Signature _____ Print _____

Title: _____
Print _____

FOR OSE INTERNAL USE

Application for Permit, Form WR-07

File No.:

Tm No.:



NEW MEXICO OFFICE OF THE STATE ENGINEER



ATTACHMENT 1 POINT OF DIVERSION DESCRIPTIONS

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<input type="checkbox"/> Surface Point of Diversion OR <input type="checkbox"/> Well			
Name of ditch, acequia, or spring:			
Stream or water course:			
Tributary of:			
c. Location (Required): Required: Move to POD location coordinate must be either New Mexico State Plane (NAD 83), UTM (NAD 83), or Lat/Long (WGS84)			
NM State Plane (NAD83) (feet) NM West Zone <input type="checkbox"/> NM Central Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/>	UTM (NAD83) (meters) Zone 18N <input type="checkbox"/> Zone 12N <input checked="" type="checkbox"/>	<input type="checkbox"/> Lat/Long-- (WGS84) 1/10 th of second	OTHER (allowable only for move-from descriptions - see application form for format) <input type="checkbox"/> PLSS (quarters, section, township, range) <input type="checkbox"/> Hydrographic Survey, Map & Tract <input type="checkbox"/> Lot, Block & Subdivision <input type="checkbox"/> Grant
POD Number: PRC-06	X or Longitude 757775	Y or Latitude 3524950	Other Location Description:
POD Number: PRC-07	X or Longitude 757900	Y or Latitude 3524950	Other Location Description:
POD Number: PRC-08	X or Longitude 758060	Y or Latitude 3524725	Other Location Description:
POD Number: PRC-09	X or Longitude 757700	Y or Latitude 3524850	Other Location Description:
POD Number: PRC-10	X or Longitude 758060	Y or Latitude 3524975	Other Location Description:
POD Number: PRC-11	X or Longitude 757565	Y or Latitude 3524975	Other Location Description:
POD Number: PRC-12	X or Longitude 757710	Y or Latitude 3525105	Other Location Description:
POD Number: PRC-13	X or Longitude 754425	Y or Latitude 3526550	Other Location Description:
POD Number: PRC-14	X or Longitude 754600	Y or Latitude 3526675	Other Location Description:

FOR OSE INTERNAL USE

Form wr-08

POD DESCRIPTIONS - ATTACHMENT 1

File Number:	Trn Number:
Trans Description (optional):	



NEW MEXICO OFFICE OF THE STATE ENGINEER



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Stream or water course:			
Tributary of:			
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NM State Plane (NAD83) (feet) NM West Zone <input type="checkbox"/> NM Central Zone <input type="checkbox"/> NM East Zone <input type="checkbox"/>	UTM (NAD83) (meters) Zone 13N <input type="checkbox"/> Zone 12N <input checked="" type="checkbox"/>	<input type="checkbox"/> Lat/Long-- (WGS84) 1/10 th of second	OTHER (allowable only for move-from descriptions - see application form for format) <input type="checkbox"/> PLSS (quarters, section, township, range) <input type="checkbox"/> Hydrographic Survey, Map & Tract <input type="checkbox"/> Lot, Block & Subdivision <input type="checkbox"/> Grant
POD Number: PRC-15	X or Longitude 754800	Y or Latitude 3526400	Other Location Description:
POD Number: PRC-16	X or Longitude 755175	Y or Latitude 3526425	Other Location Description:
POD Number: PRC-17	X or Longitude 755325	Y or Latitude 3526300	Other Location Description:
POD Number: PRC-18	X or Longitude 755825	Y or Latitude 3526025	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:
POD Number:	X or Longitude	Y or Latitude	Other Location Description:

FOR OSE INTERNAL USE

Form wr-08

POD DESCRIPTIONS - ATTACHMENT 1

File Number:

Trn Number:

Trans Description (optional):

Attachment to WD-08, WR-07 and WR-08 - Well locations (in WGS84)**Apache Hills Project**

Well No. (exploration borehole)	Latitude	Longitude
PRC-01	31 deg, 49 min, 43.6188 sec	-108 deg, 16 min, 8.573 sec
PRC-02	31 deg, 49 min, 46.9776 sec	-108 deg, 16 min, 3.338 sec
PRC-03	31 deg, 49 min, 44.3136 sec	-108 deg, 16 min, 15.204sec
PRC-04	31 deg, 49 min, 47.5428 sec	-108 deg, 16 min, 14.538 sec
PRC-05	31 deg, 49 min, 48.4392 sec	-108 deg, 16 min, 33.524 sec
PRC-06	31 deg, 49 min, 52.0392 sec	-108 deg, 16 min, 34.939 sec
PRC-07	31 deg, 49 min, 51.9384 sec	-108 deg, 16 min, 51.9384 sec
PRC-08	31 deg, 49 min, 44.508 sec	-108 deg, 16 min, 24.326 sec
PRC-09	31 deg, 49 min, 48.8568 sec	-108 deg, 16 min, 37.884 sec
PRC-10	31 deg, 49 min, 52.6188 sec	-108 deg, 16 min, 24.085 sec
PRC-11	31 deg, 49 min, 53.022 sec	-108 deg, 16 min, 42.895 sec
PRC-12	31 deg, 49 min, 57.1224 sec	-108 deg, 16 min, 37.261 sec
PRC-13	31 deg, 50 min, 46.6584sec	-108 deg, 18 min, 40.738 sec
PRC-14	31 deg, 50 min, 50.5716 sec	-108 deg, 18 min, 33.97 sec
PRC-15	31 deg, 50 min, 41.4888 sec	-108 deg, 18 min, 26.626 sec
PRC-16	31 deg, 50 min, 42 sec	-108 deg, 18 min, 12.352 sec
PRC-17	31 deg, 50 min, 37.824 sec	-108 deg, 18 min, 6.768 sec
PRC-18	31 deg, 50 min, 28.4964 sec	-108 deg, 17 min, 48.026 sec

ATTACHMENT 7

NOI Project Approval by

Bureau of Land Management



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Las Cruces District Office
1800 Marquess Street
Las Cruces, New Mexico 88005
www.blm.gov/new-mexico



IN REPLY REFER TO:

3809 (L0310)
NMNM 138006

MAR 13 2018

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
7006 0100 0004 5388 8486

DECISION

1077615 US LLC.	:	
Attn: Mark Osterberg	:	Surface Management
2210 East Ft. Lowell Road	:	
Tucson, AZ 85719	:	

DETERMINATION OF REQUIRED FINANCIAL GUARANTEE AMOUNT

The 1077615 US LLC, Notice to conduct exploration trenching and drilling in the Apache Hills near Hatchita, NM was received by this office on February 20, 2018. The Notice has been assigned Bureau of Land Management (BLM) case file number NMNM 138006. Please refer to this number in any future communication concerning this project.

The BLM has reviewed the Notice and has determined it to be complete, containing all the information required by the surface management regulations at 43 CFR 3809.301. The BLM has reviewed the proposed operation and determined it is adequate to prevent unnecessary or undue degradation as defined by 43 CFR 3809.5.

Amount of Financial Guarantee - This office has reviewed 1077615 US LLC's reclamation cost estimate for this project and determined that the amount of \$7,500 is sufficient to meet all anticipated reclamation requirements. The amount of the reclamation cost estimate is based on the operator complying with all applicable operating and reclamation requirements as outlined in the Notice and the regulations at 43 CFR 3809.420.

Line items in the approved reclamation cost estimate are not to be considered as the limits of the reclamation expenditures should forfeiture of the financial guarantee be necessary. The line items listed are solely for the purpose of arriving at a total amount for the financial guarantee. This amount may be spent as the BLM deems necessary to implement the approved reclamation plan. The financial guarantee amount does not represent reclamation liability limits or constraints should the actual cost of reclamation exceed this amount.

Required Financial Guarantee -The financial guarantee in the amount of \$7,500 must be submitted to and accepted by the BLM New Mexico State Office at P.O. Box 27115, Santa Fe, NM 87502 . You must receive written notification from that office accepting and obligating your financial guarantee before you begin any surface-disturbing operations.

The types of instruments that are acceptable to the BLM for financial guarantees are found at 43 CFR 3809.555. Please contact Ida Viarreal, (505) 954-2163 for forms and further information regarding acceptable financial guarantees.

The BLM's review of your proposed operations, determination that your Notice is complete, finding that the activity will not cause unnecessary or undue degradation, and decision concerning the amount of the required financial guarantee does not relieve you, the operator, of the responsibility to comply with all applicable Federal, state, and local laws, regulations, and permit requirements. You are responsible for preventing any unnecessary or undue degradation and for reclaiming all lands disturbed by your operations. This decision does not constitute certification of ownership to any entity named in the Notice, recognition of the validity of any associated mining claims, or recognition of the economic feasibility of the proposed operations.

Term of Notice - Your Notice will remain in effect for 2 years from the date of this decision, unless you notify this office beforehand that operations have ceased and reclamation is complete. If you wish to conduct operations for another 2 years after the expiration date of your Notice, you must notify this office in writing on or before the expiration date as required by 43 CFR 3809.333. You will also have to submit an updated reclamation cost estimate at that time.

Range: There are several fences within your project area. Some of these fences cross your proposed roads. If there is not a gate, a temporary gate will need to be installed. All temporary gates must be removed and the fence repaired upon reclamation of your project area.

There are several range improvements, including a well, within your project area. It is recommended that you document the condition of the improvements, as you will be responsible for any damages.

Cultural Resources: The project is located within a historical mining district; it is highly recommended you hire an archaeological monitor to help avoid any cultural or historic sites.

Sensitive Species: The project area is located in known habitat for BLM sensitive specie Night-Blooming Cereus. A quick ID sheet is enclosed.

Dust Abatement: The operator shall implement dust abatement measures as needed to prevent fugitive dust from vehicular traffic, equipment operations, or wind events. The BLM may direct the operator to change the level and type of treatment (watering or application of various dust agents,

surfactants, and road surfacing material) if dust abatement measures are observed to be insufficient to prevent fugitive dust

Erosion Control: Cut-and-fill slopes shall be protected against erosion with the use of water bars, lateral furrows, or other measures approved by the BLM. Cut-and-fill slopes along drainages or in areas with high erosion potential shall also be protected from erosion using hydromulch designed specifically for erosion control or biodegradable blankets/matting, bales, or wattles of weed-free straw or weed-free native grass hay. A well-anchored fabric silt fence shall also be placed at the toe of cut-and-fill slopes along drainages or to protect other sensitive areas from deposition of soils eroded off the slopes. Additional BMPs shall be employed as necessary to reduce soil erosion and offsite transport of sediments.

Noxious Weeds: all equipment utilized on the project shall be cleaned off site on private land with a high pressure power washer to remove any oil, grease, dirt, and debris that may contain noxious and invasive weed seed.

Appeal of the Decision - If you are adversely affected by this decision, you may request that the BLM New Mexico State Director review this decision. If you request a State Director Review, the request must be received in the BLM New Mexico State Office at 301 Dinosaur Trail, Santa Fe, NM 87508 no later than 30 calendar days after you receive or have been notified of this decision. The request for State Director Review must be filed in accordance with the provisions in 43 CFR 3809.805. This decision will remain in effect while the State Director Review is pending, unless a stay is granted by the State Director.

If the State Director does not make a decision on your request for review of this decision within 21 days of receipt of the request, you should consider the request declined and you may appeal this decision to the Interior Board of Land Appeals (IBLA). You may contact the BLM New Mexico State Office to determine when the BLM received the request for State Director Review. You have 30 days from the end of the 21-day period in which to file your Notice of Appeal with this office at 1800 Marquess St., Las Cruces, NM 88005, which we will forward to IBLA.

If you wish to bypass a State Director Review, this decision may be appealed directly to the IBLA in accordance with the regulations at 43 CFR 3809.801(a)(1). Your Notice of Appeal must be filed in this office at 1800 Marquess St., Las Cruces, NM 88005 within 30 days from receipt of this decision. As the appellant you have the burden of showing that the decision appealed from is in error. Enclosed is BLM Form 1842-1 that contains information on taking appeals to the IBLA. This decision will remain in effect while the IBLA reviews the case, unless a stay is granted by the IBLA.

Request for a Stay - If you wish to file a petition pursuant to regulations 43 CFR 4.21 for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by Interior Board of Land Appeals (IBLA), the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of this notice of appeal and petition for a stay must also be submitted to each party named in

the decision and to the IBLA and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay - Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

- 1) The relative harm to the parties if the stay is granted or denied,
- 2) The likelihood of the appellant's success on the merits,
- 3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- 4) Whether the public interest favors granting the stay.

If you have any questions, please contact Leighandra Keeven, Geologist, at (575) 525-4337.



David Wallace
Assistant District Manager
Multi-Resources
Las Cruces District Office

2 Enclosures

- 1 - Form 1842-1, Information on Taking Appeals to the Interior Board of Land Appeals
- 2 - Night-Blooming Cereus Quick ID Sheet

cc:

Holland Shepard
New Mexico Energy, Minerals
and Natural Resources Department
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Ida Villareal
BLM New Mexico State Office
301 Dinosaur Trail
Santa Fe, NM 87508

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

INFORMATION ON TAKING APPEALS TO THE INTERIOR BOARD OF LAND APPEALS

DO NOT APPEAL, UNLESS

1. This decision is adverse to you,
AND
2. You believe it is incorrect

IF YOU APPEAL, THE FOLLOWING PROCEDURES MUST BE FOLLOWED

1. NOTICE OF
APPEAL

A person who wishes to appeal to the Interior Board of Land Appeals must file in the office of the officer who made the decision (not the Interior Board of Land Appeals) a notice that he wishes to appeal. A person served with the decision being appealed must transmit the *Notice of Appeal* in time for it to be filed in the office where it is required to be filed within 30 days after the date of service. If a decision is published in the FEDERAL REGISTER, a person not served with the decision must transmit a *Notice of Appeal* in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).

2. WHERE TO FILE

Bureau of Land Management, 1800 Marquette Street, Las Cruces, NM 88005

NOTICE OF APPEAL

WITH COPY TO
SOLICITOR...

Office of the Regional Solicitor, Southwest Regional Office, 505 Marquette Ave. NW, Suite 1800
Albuquerque, NM 87102

3. STATEMENT OF REASONS

Within 30 days after filing the *Notice of Appeal*, file a complete statement of the reasons why you are appealing. This must be filed with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. If you fully stated your reasons for appealing when filing the *Notice of Appeal*, no additional statement is necessary (43 CFR 4.412 and 4.413).

WITH COPY TO
SOLICITOR...

4. ADVERSE PARTIES

Within 15 days after each document is filed, each adverse party named in the decision and the Regional Solicitor or Field Solicitor having jurisdiction over the State in which the appeal arose must be served with a copy of: (a) the *Notice of Appeal*, (b) the Statement of Reasons, and (c) any other documents filed (43 CFR 4.413).

5. PROOF OF SERVICE

Within 15 days after any document is served on an adverse party, file proof of that service with the United States Department of the Interior, Office of Hearings and Appeals, Interior Board of Land Appeals, 801 N. Quincy Street, MS 300-QC, Arlington, Virginia 22203. This may consist of a certified or registered mail "Return Receipt Card" signed by the adverse party (43 CFR 4.401(c)).

6. REQUEST FOR STAY

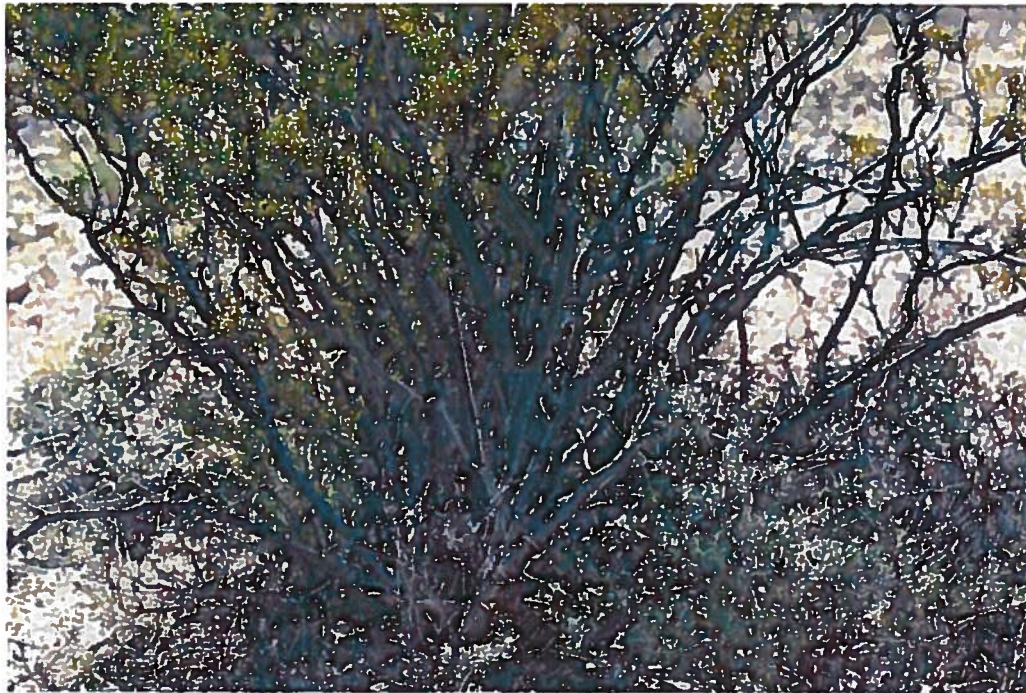
Except where program-specific regulations place this decision in full force and effect or provide for an automatic stay, the decision becomes effective upon the expiration of the time allowed for filing an appeal unless a petition for a stay is timely filed together with a *Notice of Appeal* (43 CFR 4.21). If you wish to file a petition for a stay of the effectiveness of this decision during the time that your appeal is being reviewed by the Interior Board of Land Appeals, the petition for a stay must accompany your *Notice of Appeal* (43 CFR 4.21 or 43 CFR 2801.10 or 43 CFR 2881.10). A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the *Notice of Appeal* and Petition for a Stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (43 CFR 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay. Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards: (1) the relative harm to the parties if the stay is granted or denied, (2) the likelihood of the appellant's success on the merits, (3) the likelihood of immediate and irreparable harm if the stay is not granted, and (4) whether the public interest favors granting the stay.

Unless these procedures are followed, your appeal will be subject to dismissal (43 CFR 4.402). Be certain that all communications are identified by serial number of the case being appealed.

NOTE: A document is not filed until it is actually received in the proper office (43 CFR 4.401(a)). See 43 CFR Part 4, Subpart B for general rules relating to procedures and practice involving appeals.

QUICK ID SHEET
Night-Blooming Cereus – *Peniocereus greggii* var. *greggii*



Characteristics: Roots a very large tuber; stems 3 to 6 ribbed (angled), narrow, dull green to dull purple (winter), 6" to 3' tall, up to 2.5 cm / 1" diameter; spine clusters oval, spaced along ribs, spines short, 2-3mm / 1/16" to 1/8" long; flowers white (May), 2-3" diameter, fragrant, nocturnal, opening early evening and closing mid-morning; fruits red, 2-3" long narrowing to a point at top, dotted with small spine clusters (late summer to fall).

Distribution: Plants are known to occur from the east side of the Organ/San Andres/Franklin Mtns south into Texas and Mexico and west to the Bootheel Region and the eastern edge of Arizona.

Habitat: Plants occur primarily in gravelly soils near the bases of hills and on rocky bajadas (rarely in sandy or loamy soils or in cracks in bedrock). Usually found growing within a shrub canopy (creosotebush, mesquite), sometimes in the open. Plants are usually infrequently dotted across the landscape, but occasionally occur in populations of 50-150 individuals.

General Info: Night-blooming cereus is a state endangered and BLM sensitive species. Please notify your local botanist or endangered species specialist of discoveries of this plant – take field notes and accurate GPS positions.

BLM-NM – February 28, 2018

