FREEPORT-McMoRan

Tyrone Operations
P.O. Box 571
Tyrone, NM 88065

September 7, 2018

Certified Mail #91719999917035800625 35
Return Receipt Requested

Mr. David Ohori
Senior Reclamation Specialist
State of New Mexico Energy, Minerals and Natural Resources Department
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Dear Mr. Ohori:

Re: Minimal Impact Exploration Permit Application Part 3

Attached is the permit application for an area west of our existing Little Rock Mine. Please let me know if you have any questions or comments regarding this application. Our hope is to begin this project in mid-October of this year. This project consist of only four holes and the impact of this project will be minimal and all disturbance will occur on our private land, which consists of patented mining claims where we own both the surface and mineral estate.

Tyrone disagrees with MMD's cost estimate, but in the essence of time, Tyrone will put a bond in place using the Emma project unit rates for the plugging and abandoning of the holes and surface reclamation.

Also included are the well permits, which have been submitted to the OSE office in Deming. We do expect them back in a couple of weeks, and if needed, I can provide the approved permits once we receive them. Thank you in advance for your cooperation in this matter.

Sincerely,

Ty Bays
Senior Land and Water Resource Analyst

TRB
Attachments
20180907-100

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/MARPApplicationandReportingForms.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 (drill pads, mud pits, and roads will not be counted in excavated materials).

☐ 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: West Little Rock

Nearest Town To Project: Tyrone, NM 88065

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

Name: Freeport McMoRan-Tyrone Mining, LLC.

Address: P.O. Box 571 Tyrone, NM 88065

Office Phone: 575-912-5757 Cell Phone: 575-313-0913

Fax Number: Email: tbays@fmi.com

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

Name: Ty Bays

Address: Same as above

Office Phone: Same as above Cell Phone: Same as above

Fax Number: Email:

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.

Applicant owns all property.

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 #
☐ U.S. BLM		
☐ U.S. Forest Service		
☐ State of NM		
☒ Private/Corporate		
Name: Freeport McMoRan Tyrone Mining, LLC P.O. Box 571 Tyrone, NM 889065		575-912-5757
☐ Other		
Name: _____		

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

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

Mineral Estate Owner(s):

Name	Address	Phone #
☐ Bureau of Land Management	_____	_____
	_____	
☐ US Forest Service	_____	_____
	_____	
☐ State of NM	_____	_____
	_____	
☐ Claim/Lease Holder	_____	_____
Name: _____	_____	
Claim Numbers: _____		
☐ Claim/Lease Holder	_____	_____
Name: _____	_____	
Claim Numbers: _____		

☒ Other All Private surface and mineral owned by Freeport McMoRan- Tyrone Mining, LLC____ _____

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:

A review of the files and data show no known burial sites or cultural sites on this land.

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:

Surveys of soil, vegetation and wildlife for the Tyrone Mine area are summarized in Sections 2.6 and 2.9 of the Revised Closure/Closeout Plan Tyrone Mine dated April 30, 1999 and are applicable to the proposed exploration area.

Attachment _____

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

A. Project Location:

Township 19S Range 15W Section 17

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
1	32' 39' 0.52	108'25' 28.38
2	32'39' 2.28	108'25' 25.88
4	32'39' 4.46	108'25' 23.83
5	32'39' 2.27	108'25' 21.39

I.D. Number	Northing / Latitude	Easting / Longitude

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 4

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

C. Provide detailed driving directions to access the site: From Silver City, drive 10 miles south on Hwy 90S. Turn East onto Mangas Valley County maintained road. Approximately 1/2 mile turn onto existing Tyrone Mine access road. Gate is locked and will require an escort to the area by permittee.

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

A. Anticipated exploration: Start Date: 10-1-18 End Date: 2-31-19

B. List the mineral(s)/element(s) to be explored for: Copper

C. Proposed method(s) of exploration:

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

4 # of holes 1300 Depth (ft.) 6" Diameter (in.)

4 # of drill pads 70 Length (ft.) 40 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.) 65,000 lbs Number of Axles: Track mounted

Total length of drill stem that can be carried on the rig: 400' (20' pipe) 8800 lbs.

Is a support pipe truck anticipated? ☒ Yes ☐ No 65,000 Weight (lbs.)

Weight of support compressor (lbs.): N/A Trailer mounted? N/A

Anticipated Drilling Contractor: Layne Christensen License No.WD -1728

☐ **Mud/fluid drilling:**

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

_____ # of drill pads _____ Length (ft.) _____ 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? _____

If mud/fluid pits are proposed:

_____# 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.):

_____

Will mud pits be lined?: ☐ Yes ☐ No

If yes, proposed material to line the mud pits:_____

Approx. Weight of Drill Rig (lbs.)_____ Number of Axles: _____

Anticipated Drilling Contractor:_____ License No._____

☐ **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: _____

_____

_____

TOTAL ACREAGE TO BE DISTURBED DUE TO DRILL PADS = 0.92 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 = _____acres
(to convert to acres, multiply total square footage of disposal pit by 0.0000229)

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

☒	4x4 Trucks/Vehicles	Quantity:	4 4X4 trucks
☒	Water Truck	Weight (lbs.):	25,000
☐	Geophysical Truck	Weight (lbs.):	
☒	Pipe Truck (rig support)	Weight (lbs.):	65,000
☒	Bulldozer	Type:	Cat D6
☒	Backhoe	Type:	Cat 420
☐	Trackhoe	Type:	
☐	Scaper/Grader	Type:	

☐ Trailers Quantity/Type:

☒ Portable Toilet Quantity: 1

☐ Other List:

F. Roads and Overland Travel:

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

Description of *NEW* Roads	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
15-foot wide bladed road	145	15	0.0000229
TOTAL ACRES DISTURBED BY NEW ROAD CONSTRUCTION :			0.05

Describe how new roads will be constructed: Bulldozer will push them in following GPS staked points from map.

List for extension or widening of existing roads:

Description of Modification to *EXISTING* Roads	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
None			
TOTAL ACRES DISTURBED BY ROAD IMPROVEMENTS :			**0**

Describe how existing roads will be extended or widened: Existing roads will be bladed of rocks and fallen debris as need to for safe passage.

List for routes of overland travel:

Description of *OVERLAND TRAVEL* Routes	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
TOTAL ACRES DISTURBED BY OVERLAND TRAVEL :			

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.

None on site

H. **TOTAL ACREAGE TO BE DISTURBED BY PROJECT = 0.97 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.

☒	Drilling Mud (i.e., EZ Mud)	Type/Quantity:	EZ Mud Gold 3 5-gallon buckets
☒	Diesel Fuel	Quantity:	1,500 gallons
☐	Down-hole Lubricants	Type/Quantity:	
☐	Lost Circulation Materials	Type/Quantity:	
☒	Oils/Grease	Quantity:	4 tubes of grease/ 6 gal 15/40 oil
☒	Gasoline	Quantity:	5 gallons
☒	Hydraulic Fluid	Quantity:	3 gallons
☐	Ethylene Glycol	Quantity:	
☒	Cement	Type/Quantity:	Portland II / 140 50lb bags
☒	Water	Source:	Tyrone Mine
☒	Bentonite	Quantity:	Quick Gel / 20 50lb bags
☐	Fertilizer	Type/Quantity:	
☒	Other	Type/Quantity:	Soda Ash/ 1 50lb bags
			Con Det

B. Describe, in detail, a plan for the containment, use and disposal of all chemicals listed above:
Drilling products are used down-hole with excess going into the sump with water. Portland II cement is used to abandon/plug the hole. Petroleum products will be used to equipment and all disposal will be offsite.

C. Describe where equipment fueling/refueling will occur:
Drill rig refueling will be done on-site via pickup with fuel tank. Soils will be cleaned up and contaminated soil will be disposed of at Tyrone Mine until final disposal.

D. Describe how hazardous material spills/leaks will be handled:
Removed and disposed of with licensed PCS containment 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.): 500 TDS concentration (mg/L): _____

Describe the source of this information: Area well logs

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 1 (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 (≥ 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 (≥ 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): Stockpiled in place and used for reclamation.

☐ 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:

☐ Silt fencing Location: _____

☐ Straw waddles Location: _____

☐ Straw bales Location: _____

☐ Ditches/swales Location: _____

☒ Berms/dikes/dams Location: Drill pads, roads and mud pits.

☐ Sediment basins Location: _____

☐ 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: Temporary plastic tarps. Pits will be backfilled upon completion of drilling.

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

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:

Back fill pits regrade drill sites and ripping if necessary. Roads will be regraded and ripped to prevent erosion. All sites will be re-seeded.

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

Same as roads and drill pads- regrading and seeding.

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

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

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)
Blue Grama	1
Sideoats Grama	2
Sand Dropseed	.25
Indian Ricegrass	2
Purple Prairie Clover	2
Scarlet Globemallow	1
Winter Cover Crop of Triticale	10

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: Rip with blade 4-6 inches prior to seeding.

Mulch Use:

☐ Certified weed-free straw mulch will be placed over areas that have been tilled/disced 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.I.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: See attached

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 : 0000903645

Financial Institution: Bank of America, N.A.

SECTION 9 – CERTIFICATION REQUIREMENT (§302.I.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: Ty Bays

Name (type or print): Ty Bays

Title/Position: Sr. Land & Water Resource Analyst

Date: 9/7/18

2018 Financial Assurance Cost Estimate for Exploration Drilling				
Decription	**Unit**	**Quantity**	**Unit Rate ($/unit)**	**Total Cost ($)**
Drill Pad Reclamation	acre	0.05	$ 8,900	$ 443
Drill Road Reclamation	acre	0.92	$ 8,900	$ 8,152
Plug and Abandon Exploration Drill Holes	ft	5,200	$ 14	$ 72,800
Total				**$ 81,396**

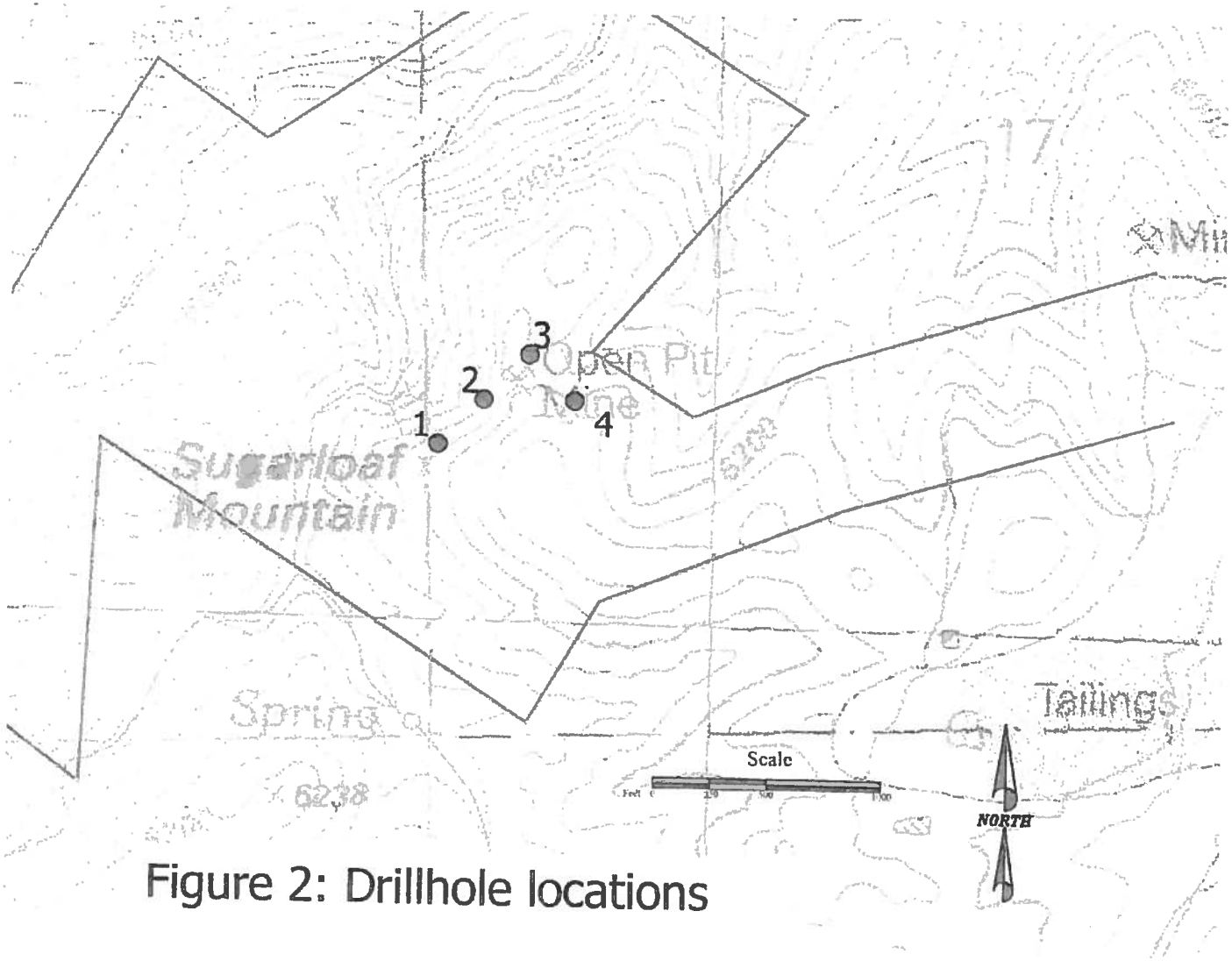


Figure 2: Drillhole locations

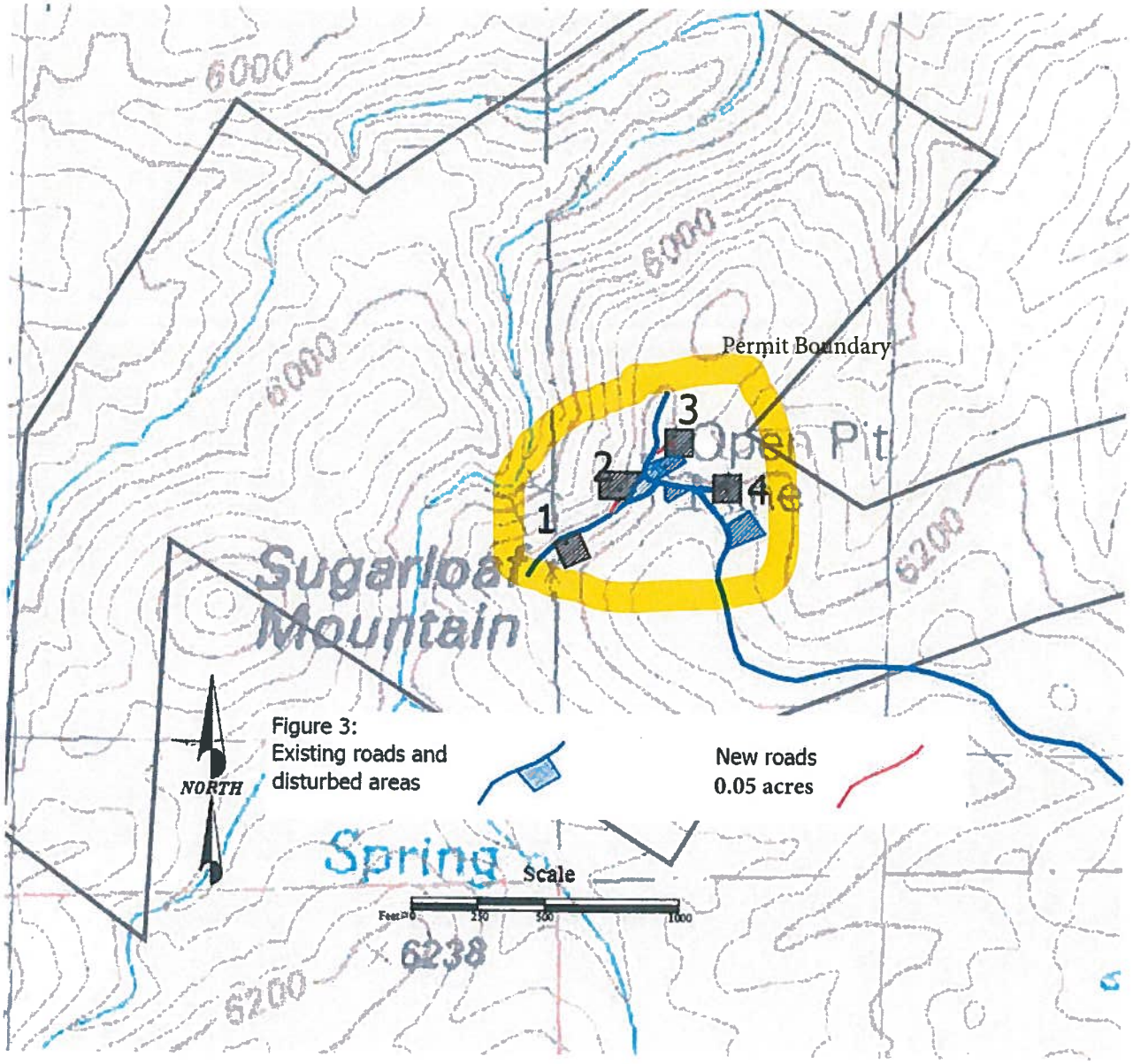


Table 1: Drill Pad Sizes

Drill Pad 1: 0.23 acres	Drill Pad 3: 0.23 acres
Drill Pad 2: 0.23 acres	Drill Pad 4: 0.23 acres

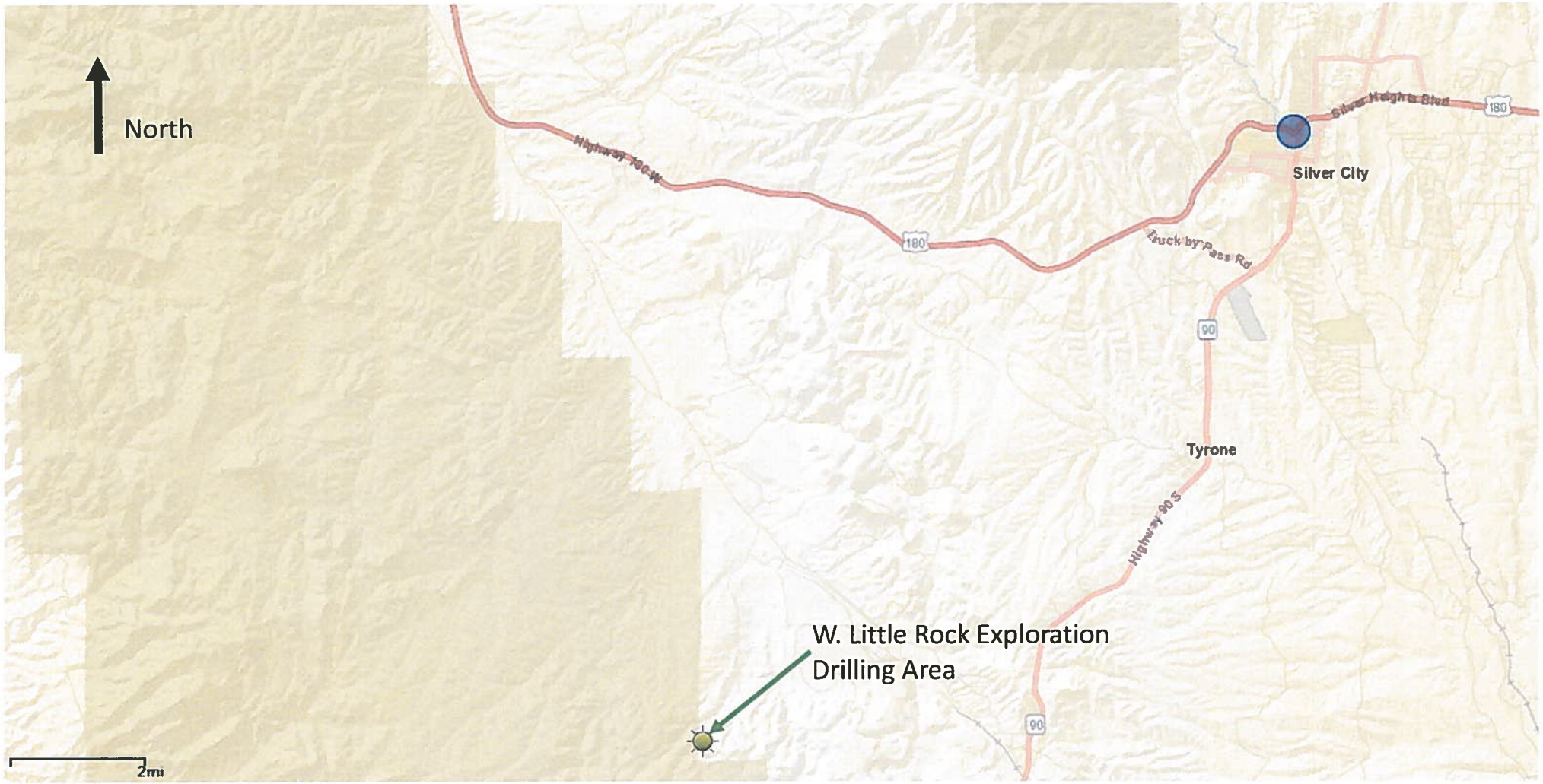


Figure 4: General Area Map

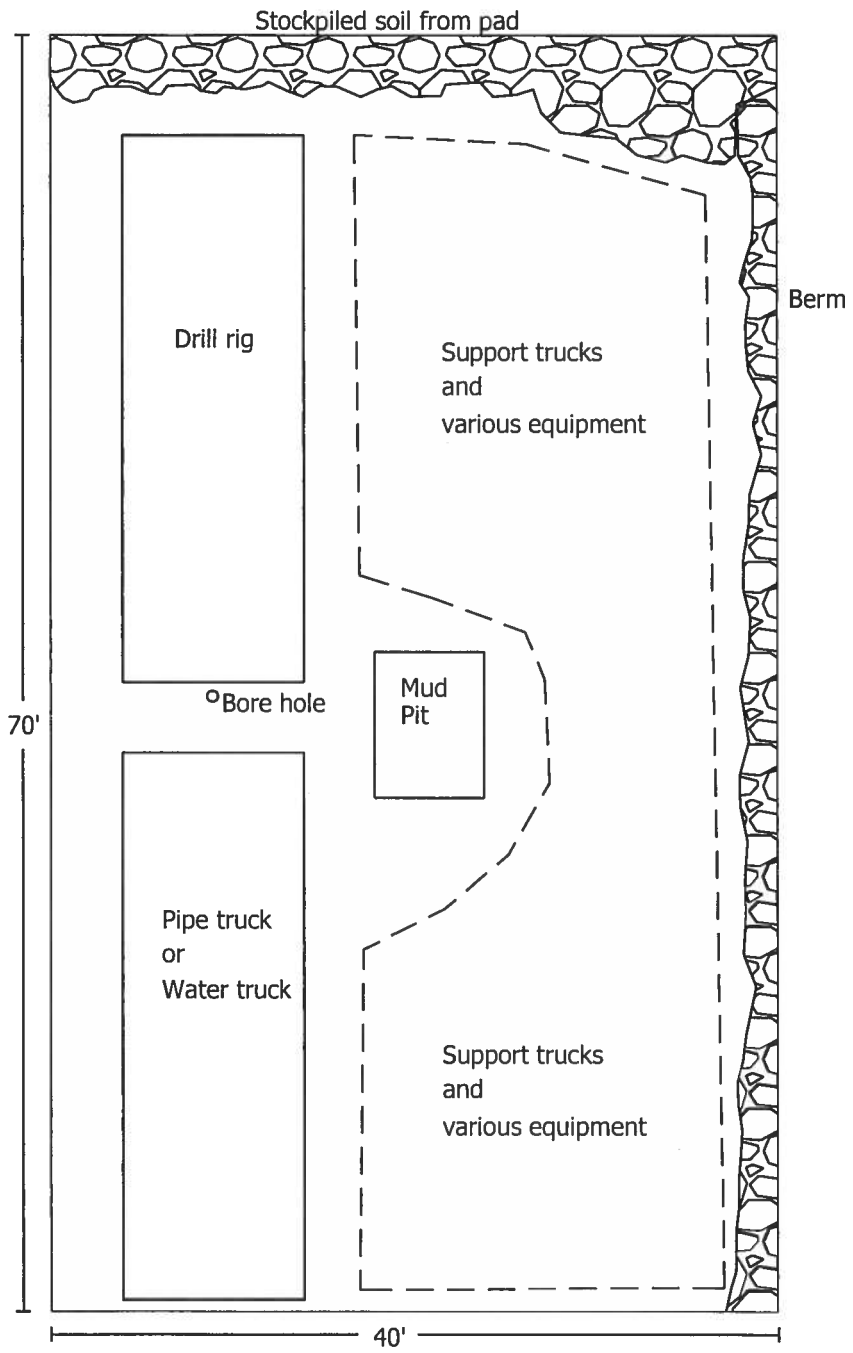
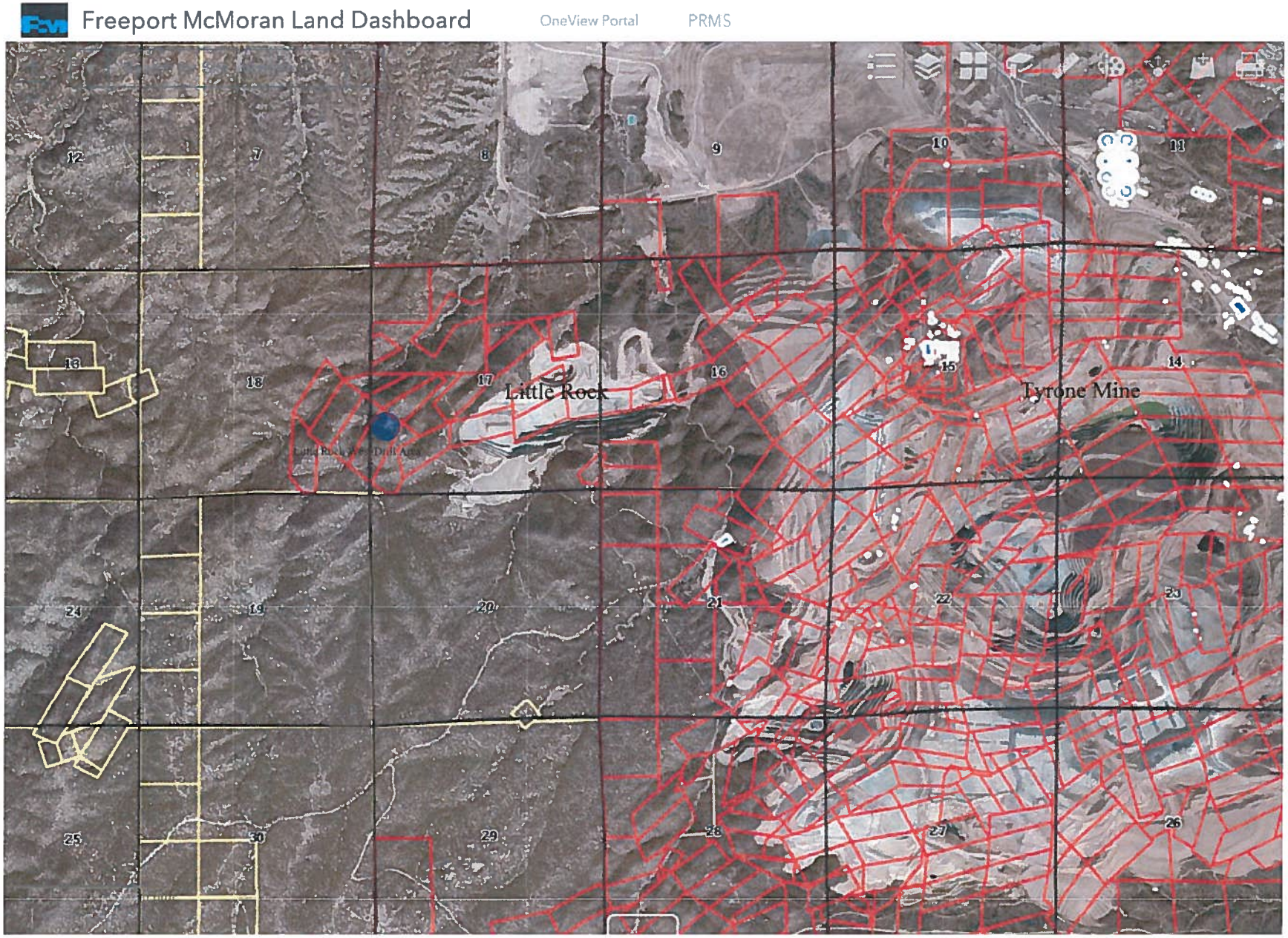


Figure 5: Typical drill pad layout. Drill pads will be constructed for all boreholes in this project


Freeport McMoran Land Dashboard
OneView Portal
PRMS
Little Rock
Tyrone Mine

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER
District 3 Office, Deming, NM

Tom Blaine, P.E.,
State Engineer

321 W. Spruce Street
Deming, New Mexico 88030
PHONE: (575) 546-2851
FAX: (575) 546-2290

September 17, 2018

FILE: GSF-4656

Freeport Mineral Corporation
c/o Ty Bays
P.O. Box 571
Tyrone, NM 88065

RECEIVED
SEP 25 2018
BY: .....

Greetings:

Enclosed is your copy of Exploratory Well Permit GSF-4656-POD1-EXPL thru GSF-4656-POD4-EXPL, which has been approved.

Your attention is called to the Conditions of Approval under exploratory permit GSF-4656-POD1-EXPL thru GSF-4656-POD4-EXPL, which states as follows:

This application is approved provided it is not exercised to the impairment of any others having existing rights prior to this application for permit for a exploratory well; further provided that all rules and regulations of the State Engineer pertaining to the drilling of shallow wells be complied with; and is not detrimental to the public welfare or contrary to the conservation of water within the state, subject to the following conditions:

1. Wells GSF-4656-POD1 thru GSF-4656-POD4 shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.

2. Wells GSF-4656-POD1 thru GSF-4656-POD4 shall be drilled to a depth not to exceed 1,300 feet and shall be constructed with casing not to exceed 6 inch outside diameter.

3. The well driller must file the well records with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record. The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.

4. Wells GSF-4656-POD1 thru GSF-4656-POD4 shall be plugged on or before September 30, 2019, unless the applicant has received an approved permit from the State Engineer for additional use.

5. The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement

methods may be acceptable and approved by the state engineer. The well shall be plugged with an office of the state engineer approved sealant for use in the plugging of non-artesian wells. The well driller shall cut the casing off at least four (4) feet below ground surface and fill the open hole with at least two vertical feet of approved sealant. The driller must fill or cover any open annulus with sealant. Once the sealant has cured, the well driller or well owner may cover the seal with soil. A Plugging Report for said well shall be filed with the Office of the State Engineer in a District Office within 30 days of completion of the plugging, but no later than September 30, 2019.

The well authorized by this permit shall be plugged on or before September 30, 2019, unless the applicant has received an approved permit from the State Engineer for additional use.

6. The State Engineer retains jurisdiction over this permit.

7. Pursuant to Section 72-8-1 NMSA 1978, the permittee shall allow the State Engineer and OSE representatives entry upon private property for the performance of their respective duties, including access to the ditch or acequia to measure flow and also to the well for meter reading and water level measurement.

8. Pursuant to Section 72-2-16, NMSA 1978, if you are aggrieved by this decision you may submit a request to this office asking for a hearing to be held. The request must be in writing and must be submitted no later than 30 days after receipt of this permit. Failure to request a hearing by such time will waive your right to request a hearing on this decision. In accordance with Subsection B of 19.25.2.10 NMAC, you will be required to pay a hearing fee when the hearing is announced by the OSE Hearings Unit. Aggrieval of the permit or any of the conditions of approval suspends the permit. **No water may be diverted** under an aggrieved permit until final resolution of the aggrieval with the Office of the State Engineer. Any water diverted while the aggrieval is pending will have to be repaid.

9. Well record shall be filed in the District 3 office on or before September 30, 2019.

10. This permit shall automatically expire on September 30, 2019.

Sincerely,

Lloyd R. Valentine III
District 3 Manager

By:
Jack Barragan
Water Resource Professional
Gila-San Francisco Basin

JB:jb
cc: State Engineer

File No. GSF-4656

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/

3-22458 . 5 - X 4 - 20

Purpose:	☐ Pollution Control And/Or Recovery	☐ Ground Source Heat Pump
☐ Exploratory Well (Pump test)	☐ Construction Site/Public Works Dewatering	☒ Other(Describe): Mineral Exploration
☐ Monitoring Well	☐ 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: Freeport-McMoRan Tyrone Mining LLC	Name:
Contact or Agent: Ty BAys — check here if Agent ☒	Contact or Agent: — check here if Agent ☐
Mailing Address: P.O. Box 571	Mailing Address:
City: Tyrone	City:
State: NM — Zip Code: 88065	State: — Zip Code:
Phone: (575) 912-5757 — ☒ Home ☐ Cell; Phone (Work):	Phone: — ☐ Home ☐ Cell; Phone (Work):
E-mail (optional): tbays@fmi.com	E-mail (optional):

2018 AUG 30 PM 5:55 STATE ENGINEER'S OFFICE

FOR OSE INTERNAL USE — Application for Permit, Form WR-07, Rev 11/17/16

File No.: GSF-4656	Trn. No.:	Receipt No.:
Trans Description (optional):		
Sub-Basin: RS Ch	PCW/LOG Due Date: 9-30-19	

JS

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.

☒ NM State Plane (NAD83) (Feet)
☒ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☐ Lat/Long (WGS84) (to the nearest 1/10th 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
GSF 4658-POD1	108° 25' 28.38"	32° 39' 0.52"	SW Sec 17. T19S., R.15W.
GSF 4658-POD2	108° 25' 25.88"	32° 39' 2.28"	SW Sec 17. T19S., R.15W.
GSF 4658-POD3	108° 25' 23.83"	32° 39' 4.46"	SW Sec 17. T19S., R.15W.
GSF-4658-POD4	108° 25' 21.39"	32° 39' 2.27"	SW Sec 17. T19S., R15W.

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ☒ No **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:
West of Little Rock Mine

Well is on land owned by: Freeport-McMoRan Tyrone Mining LLC

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. **Attached?** ☐ Yes ☒ No
If yes, how many_____

Approximate depth of well (feet): 1300	Outside diameter of well casing (inches): 6 Inches
Driller Name: Layne Christensen	Driller License Number: WD-1728

3. **ADDITIONAL STATEMENTS OR EXPLANATIONS**

Mineral exploration

STATE ENGINEERS OFFICE
2018 AUG 30 PM 5:56

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.:	Trn No.:

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: ☐ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge. ☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ 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.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☐ Include the reason for the monitoring well, and, ☐ The duration of the planned monitoring.		**Ground Source Heat Pump:** ☐ Include a description of the geothermal heat exchange project, ☐ The number of boreholes for the completed project and required depths. ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)) Ty Bays for Freeport-McMoRan Tyrone Mining LLC
Print Name(s)

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

Applicant Signature

Applicant Signature

STATE ENGINEER'S OFFICE
2018 AUG 30 PM 5:56

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 17th day of September 20 18, for the State Engineer.

Tom Blaine, P.E., State Engineer

By: Signature — Lloyd R. Valentine III, Print

Title: District 3 Manager
Print

FOR OSE INTERNAL USE — Application for Permit, Form WR-07

File No.:	Trn No.:

ATTACHMENT
STATE ENGINEER CONDITIONS OF APPROVAL

FILE: GSF-4656

APPLICATION: GSF-4656-POD1-EXPL thru GSF-4656-POD4-EXPL

APPLICANTS: Freeport McMoRan-Tyrone Mining LLC. c/o Ty Bays

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10. This permit shall automatically expire on September 30, 2019.

Witness my hand and seal this 17th day of September, 2018.

Tom Blaine, P.E., State Engineer

Lloyd R. Valentine III
District 3 Manager

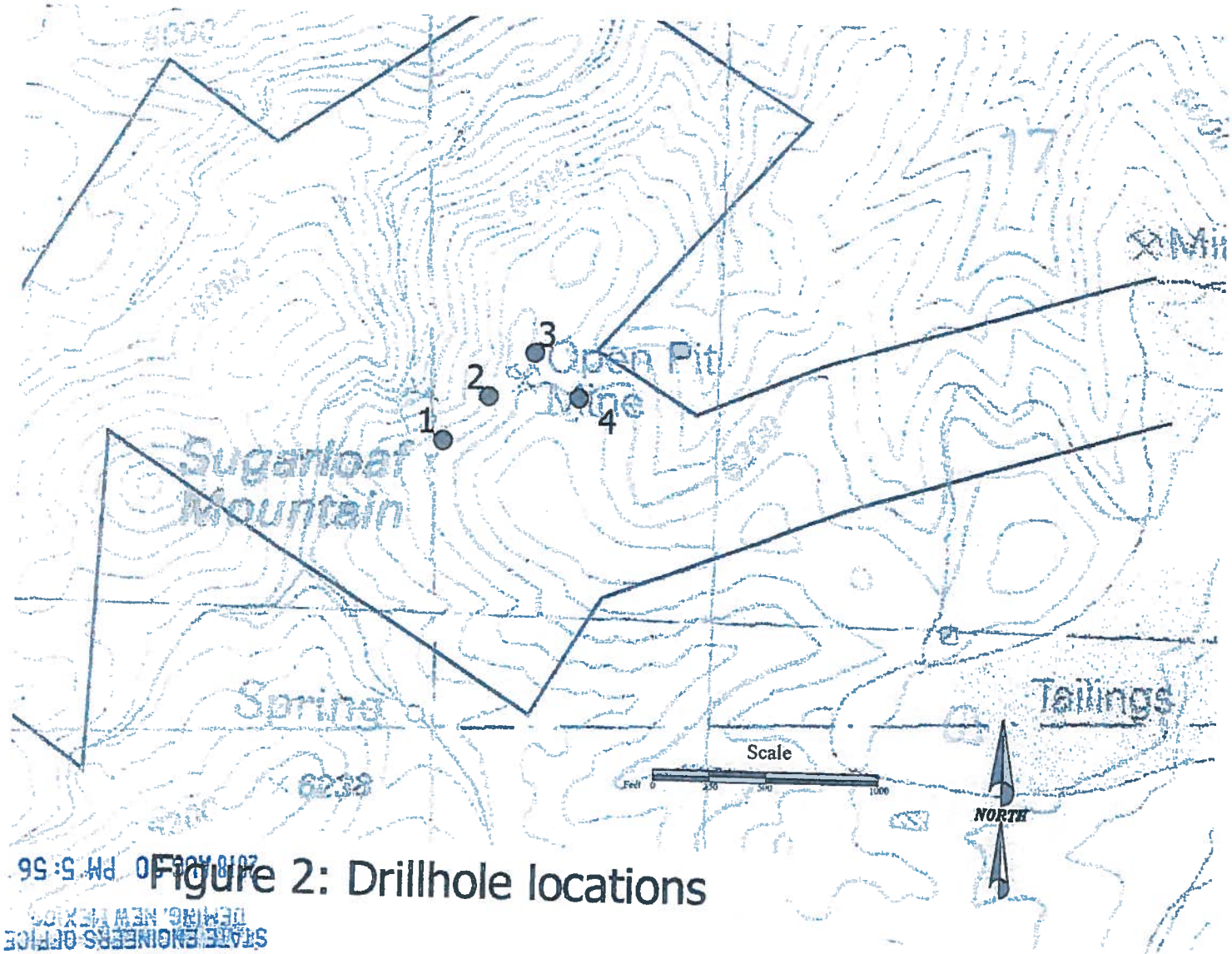

Figure 2: Drillhole locations

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – DEMING OFFICE

OFFICIAL RECEIPT NUMBER: 3 - 22458 DATE: August 30, 2018 FILE NO.: ~~XX~~

TOTAL: 20.00 RECEIVED: TWENTY & NO/100********** DOLLARS CHECK NO.: money order 7665 CASH: _____

PAYOR: Freeport McMoRan Tyrone Mining ADDRESS: PO Box 571 CITY: Tyrone STATE: NM

ZIP: 88065 RECEIVED BY: _____

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; and **yellow** copy for Water Rights. If a mistake is made, void the original and all copies and submit to Program Support/ASD as part of your daily deposit.

A. Ground Water Filing Fees

___	1.	Change of Ownership of Water Right	$ 2.00
___	2.	Application to Appropriate or Supplement Domestic 72-12-1 Well	$ 125.00
___	3.	Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	4.	Application for Replacement 72-12-1 Well	$ 75.00
___	5.	Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	6.	Application for Stock Well	$ 5.00
___	7.	Application to Appropriate Irrigation, Municipal, or Commercial Use	$ 25.00
___	8.	Declaration of Water Right	$ 1.00
___	9.	Application for Supplemental Non 72-12-1 Well	$ 25.00
___	10.	Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11.	Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
___	12.	Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Ground Water	$ 50.00
___	13.	Application to Change Point of Diversion of Non 72-12-1 Well	$ 25.00
___	14.	Application to Repair or Deepen Non 72-12-1 Well	$ 5.00
4	15.	Application for Test, Expl. Observ. Well	$ 5.00
___	16.	Application for Extension of Time	$ 25.00
___	17.	Proof of Application to Beneficial Use	$ 25.00
___	18.	Notice of Intent to Appropriate	$ 25.00

B. Surface Water Filing Fees

___	1.	Change of Ownership of a Water Right	$ 5.00
___	2.	Declaration of Water Right	$ 10.00
___	3.	Amended Declaration	$ 25.00
___	4.	Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Surface Water	$ 200.00
___	5.	Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$ 200.00
___	6.	Application to Change Point of Diversion	$ 100.00
___	7.	Application to Change Place and/or Purpose of Use	$ 100.00
___	8.	Application to Appropriate	$ 25.00
___	9.	Notice of Intent to Appropriate	$ 25.00
___	10.	Application for Extension of Time	$ 50.00
___	11.	Supplemental Well to a Surface Right	$ 100.00
___	12.	Return Flow Credit	$ 100.00
___	13.	Proof of Completion of Works	$ 25.00
___	14.	Proof of Application of Water to Beneficial Use	$ 25.00
___	15.	Water Development Plan	$ 100.00
___	16.	Declaration of Livestock Water Impoundment	$ 10.00
___	17.	Application for Livestock Water Impoundment	$ 10.00

C. Well Driller Fees

___	1.	Application for Well Driller's License	$ 50.00
___	2.	Application for Renewal of Well Driller's License	$ 50.00
___	3.	Application to Amend Well Driller's License	$ 50.00

D. Reproduction of Documents

___ @ 0.25¢ $_____

___ Map(s) $_____

E. Certification $_____

F. Other $_____

G. Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

All fees are non-refundable.

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT **EEE0007268**

Date: 9/11/2017 **OFFICIAL RECEIPT**

Received From: Freeport McMoRan

Five hundred dollars & no/100 Dollars

Center Code	Revenue Code	Amount	Work Order No.
0640	416902	500.00	

Center Code	Revenue Code	Amount	Work Order No.

State Treasurer Deposit Number _____

Total $ 500.00

Description: Application Fee for Permit No. GR080EM West Little Rock

CR# 0000903645

Signed: [signature]

ASD-White Copy / Customer-Yellow Copy / Retained in Book-Pink Copy

WARNING: THIS DOCUMENT CONTAINS SEVERAL DOCUMENT SECURITY FEATURES

FREEPORT-McMoRan
Freeport-McMoRan Inc.
333 North Central Ave
Phoenix AZ 85004

CHECK NO. 0000903645

64-1278/611 GA

DATE OF CHECK
08/30/18

PAY: FIVE HUNDRED AND 00/100 DOLLARS

CHECK AMOUNT
$500.00

TO THE ORDER OF STATE OF NEW MEXICO
NM ENRGY MNRLS & NAT RES DPT
1220 S SAINT FRANCIS DR
SANTA FE NM 87505-4225

Bank of America, N.A.

Authorized Signature

DO NOT CASH IF THE WORD VOID IS VISIBLE. SEE REVERSE SIDE FOR LIST OF SECURITY FEATURES

⑈0000903645⑈ ⑆061111788⑆ 329999844 5⑈