

FOR MMD USE ONLY:

PROJECT NAME: _____

PERMIT NUMBER: _____

DATE RECEIVED: _____

DATE APPROVED: _____

LEAD INSPECTOR: _____

FORM REVISION DATE: 02/05/08

**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

Fax: (505) 476-3402

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

**SUBPART 4
EXPLORATION
PERMIT APPLICATION**

The following information is required under the New Mexico Mining Act (Sections 69-36-1 through 69-36-20, NMSA 1978) and associated rules. The Mining and Minerals Division of the Energy, Minerals and Natural Resources Department is the administrative agency through which this application is to be processed. See Subpart 4 Exploration of the New Mexico Mining Act Rules for all regulations associated with Exploration Operations.

The permittee is requested to use this application. If additional space is needed, all information requested in this form must be submitted in this same format.

Permit Application Requirements: (§401 & §402)

- Six copies of the application must be submitted.
- Confidential information shall be **clearly** identified and submitted separately.
- Exploration commencing after 12/31/1994 shall submit an application not less than 120 days prior to the anticipated date of operations.
- Renewal applications shall be filed at least 30 days preceding expiration of the current permit.

IMPORTANT NOTES!!

- ! Obtaining a Mining Act permit does not necessarily satisfy the obligation to obtain other federal, state and local permits.**
- ! All proposed disturbance should be flagged or staked in the field prior to the Mining and Mineral Division's (MMD) initial inspection. Failure to properly mark any proposed drill holes or trenches will delay processing of the permit application.**
- ! All proposed disturbance, including any new proposed access road centerlines, all four (4) corners of any proposed drill pads, and proposed drill hole location(s) within the drill pad area must be staked in the field.**
- ! Any staking of proposed disturbances (access road centerline, drill pad corners, drill hole) should be completed using durable materials such as steel re-bar stakes or T-posts. MMD recommends using rebar stakes of suitable height, and flagging on the rebar at all four (4) corners. Drill holes should be marked by a single T-post driven at the location of proposed drilling.**
- ! The application will be deemed incomplete, and likely be denied, without a proper map included. Provide a 1:24,000 USGS quadrangle map with the application. The map should identify locations of drill holes, pads and any new disturbance anticipated**
- ! If possible, please include with this application for submittal, any other operational plans that may have been submitted, as required, to other land management agencies. Plans of Operations (POO) submitted to the USFS and Notices of Intent (NOI) submitted to the BLM are very helpful in processing this application.**

PLEASE FILL IN ALL APPLICABLE INFORMATION AS COMPLETELY AS POSSIBLE.
PLEASE PRINT OR TYPE ALL INFORMATION.

1. OPERATOR INFORMATION (§402.D.1)

PROJECT NAME:
NAME OF PERMITTEE (or entity obligated under the Mining Act): <u>Freeport-McMoRan Tyrone Inc.</u>
ADDRESS: <u>PO Box 571 Tyrone, NM 88065</u>
PHONE: <u>575-912-5757</u>
FAX: _____
NAME OF OWNER (if different from Permittee's name and address): _____ _____
ADDRESS: _____ _____ _____
PHONE: _____
FAX: _____
NAME OF ON-SITE CONTACT OR OPERATOR'S REPRESENTATIVE: <u>Raechel Roberts</u>
ADDRESS: <u>1 Tyrone Mine Road Tyrone, NM 88065</u>
PHONE: <u>575-956-3290</u>
FAX: _____
EMAIL: <u>rroberts2@fmi.com</u>

2. OPERATION OWNERSHIP INFORMATION (§402.D.2)

- A. List all parties that have an ownership or controlling interest in the proposed exploration operation, or submit the most recent 10K form required by the U.S. Securities and Exchange Commission.

Name	Address	Phone #
<u>Freeport-McMoRan Tyrone Inc.</u>	<u>1 Tyrone Mine Road Tyrone, NM 88065</u>	
<u>Land and Water Resource Analyst: Tyson Bays</u>		
<u>575-313-0913</u>		

- B. List all mining operations located within the U.S. owned, operated or directly controlled by the applicant, owner or operator.

Name	Address	Phone #
<u>Tyrone Mine and Little Rock Mine</u>	<u>1 Tyrone Mine Road Tyrone, NM 88065</u>	
<u>General manager: Randy Ellison</u>		
<u>575-519-8152</u>		

- C. List the names and addresses of regulatory agencies with jurisdiction over the environmental aspects of those operations listed in B above, and that could provide a compliance history for those operations.

<u>Name</u>	<u>Address</u>	<u>Phone Number</u>
New Mexico Environment Department	Harold Runnels Building 1190 St. Francis Dr. Suite N4050 Santa Fe, NM 87505	505-827-2855
U.S. Department of Labor, Mine Safety and Health Administration	201 12th St S Suite 401 Arlington, VA 22202-5450	202-693-9400
New Mexico Office of the State Engineer	130 South Capitol Street Concha Ortiz y Pino Building Santa Fe, NM 87504-5102	505-827-6091
U.S. EPA (Region 6)	1201 Elm Street, Suite 500 Dallas, TX 75270	800-665-2760
U.S. Department of Interior Bureau of Land Management (Mineral rights only)	301 Dinosaur Trail Santa Fe, NM 87508	505-954-2000

RIGHT TO ENTER INFORMATION (§402.D.3 & 4)

- D. Provide copies of mineral leases and/or mineral claim documents upon which the permittee bases the right to enter the property to conduct the exploration and reclamation.

Owner	Parcel Numbers	
Surface Ownership		
Freeport-McMoRan Tyrone Mining LLC	3085114430053	3085113445396
	3085113513467	3085113183396
	3085113478517	3085114312020
	3085113422466	3085114364155
	3085113365490	3085114480261
	3086114330264	3086114132132
	3086114055110	3085114500195
	3086114036169	3085114453110
3085114430053		
Mineral Ownership		
Patented Claims		
Owner Name & Address	Claim Name	Claim Number
Freeport-McMoRan Tyrone Mining LLC	Tarrytown No. 25	MS-1584
	Arkansas	MS-1379
	Surprise	MS-1379
	Dr. Hyde	MS-1582
	Harriman	MS-1582
	Comanche Brave	MS-1377
	Comanche	MS-1377
	Michigan No. 2	MS-1377
	Phantom No. 2	MS-1584
Phantom	MS-1584	
Unpatented Claims		
U.S. Department of Interior Bureau of Land Management	Oak 2 & 3	NMMC 143908 & 143909
	Grace No. 3	NMMC 469119
	Grace No. 5 (overlays Robledal 9)	NMMC 046131
	Robledal 6, 7, 8, & 9	NMMC 46133, 46134, 46135, 46136

- E. Include GPS coordinates for each claim, or show on a map in relation to the project area, any mineral leases and/or mineral claim boundaries upon which the permittee intends to conduct the exploration and reclamation.

Attachment Figures 1 and 2

Note. Patented claims are associated with the surface ownership parcels.

- F. List the names and addresses of surface and mineral ownership within the proposed permit area.

Surface Owner(s):

Name	Address	Phone #
Freeport McMoRan Tyrone Mining, LLC		
PO Box 571 Tyrone, NM 88065		
575-313-0913		

Mineral Owner(s):

Name	Address	Phone #
<u>Freeport McMoRan Tyrone Mining, LLC</u>		
<u>PO Box 571 Tyrone, NM 88065</u>		
<u>575-313-0913</u>		

U.S. Department of Interior Bureau of Land Management
*Unpatented Mineral rights only
301 Dinosaur Trail
Santa Fe, NM 87508
505-954-2000

MAPS AND LOCATION (§402.D.4 & 5)

- G. Provide a legal description of the proposed permit area and each exploration site [i.e. Township(s), Range(s) and Section(s) NM PLSS, as well as GPS coordinates corresponding to each proposed drill hole.]

Proposed Permit Area Legal Description:

Portions of Sections 25, 26, 35, and 36 of Township 19S, Range 15W of the New Mexico Meridian. The project is located within the Burro Mountains just south of the Tyrone Mine. See attached Figure 2-2 for a generalized regional map.

Proposed Drill Hole/Exploration Site GPS Coordinate(s):

1. List drill hole/exploration site name and the GPS Coordinate for each site.
2. Include datum/coordinate system of GPS coordinates (i.e. decimal degrees, UTM Zone 13, UTM Zone 12, NAD 27. NAD 1983, **WGS 1984**, etc.

Attachment A: Table 1

- H. Provide a topographic map(s) of at least 1 inch = 2,000 feet or appropriate scale for the size of disturbance [i.e. a 1:24,000 USGS Quadrangle map]. The map name and at least two edges of the map [i.e. bottom and side edge] clearly showing all areas of land to be disturbed by the proposed exploration and reclamation. If the area to be explored contains the following features, show them on the map(s):

1. **Boundary of the proposed permit area** on a topographic map, and the proposed area of disturbance. This boundary should be labeled.
2. Perennial, intermittent and ephemeral streams, springs, wetlands,

- riparian areas, lakes and reservoirs.
- 3. Residences or other occupied dwelling.
- 4. Proposed and existing roads, and other access routes.
- 5. Pipelines and support facilities.
- 6. Cemeteries, burial grounds and cultural resources.
- 7. Previously disturbed areas.
- 8. Oil, gas, water wells and monitoring wells within the permit area.
- 9. Areas and types of proposed disturbances. Include the anticipated dimensions of each proposed disturbance.
- 10. Identify the location of drill holes, shafts, pits, adits, trenches, ponds, stockpiles, wastes dumps, etc.

Attachment Figures 3 through 6.

Note. Items 2, 3, 5, and 6 are not present within the project area.

- I. Provide detailed written driving directions to access the site.
From Silver City, NM, drive 10 miles south of HWY 90S. Turn west onto Tyrone Thompson Canyon country road. Approximately 1 mile west, turn left onto existing access road. Gate is locked and will require and escort to the area by FMI Tyrone.

EXPLORATION DESCRIPTION (§402.D.6 & 7)

- J. List the proposed exploration dates:

Start Date: April 2025

End Date: April 2026, unless a modification is submitted 30 days prior to expiration of this permit.

- K. List the mineral or minerals to be explored for:

Copper

- L. Check the box beside the proposed method(s) of exploration:

- | | | | |
|---|--|--|---------------------------------|
| <input type="checkbox"/> Cuts | <input type="checkbox"/> Pits | <input type="checkbox"/> Trenches | <input type="checkbox"/> Shafts |
| <input type="checkbox"/> Tunnels/Adits/Declines | | | |
| <input type="checkbox"/> Air drilling | <input checked="" type="checkbox"/> Fluid drilling | <input type="checkbox"/> Drilling & Blasting | |
| <input type="checkbox"/> Other method (describe): _____ | | | |

- M. Information on stockpiles, ponds, drilling mud and water recirculation pits, impoundments and any other structures should be provided:

-No stockpiles, no ponds, no impoundments
-Mud/water recirculation pits/sumps – maximum size – 10 x 20 x 8 ft deep
-Berms will be constructed adjacent to pads or new roads to limit site access

N. List the following proposed disturbance for each:

Drill pads: *(Note. Pad size does not include cut and fill or reclamation disturbance)*

How Many? 33 Width (ft.): 80 Length (ft.) 100

Drill holes:

How Many? 34 Depth (ft.): 2500 Diameter (in.): 5.5

Drill Pad Disturbance: 6 acres

Other Disturbances:

51.8 acres.

Please describe: Other disturbance includes cut and fill disturbances, reclamation/regrading to match original topography, and unforeseen improvements or changes to roads or designs as a disturbance contingency.

Describe the equipment to be used for the exploration operations

4x4 Trucks/Vehicles – 6 total @ 10,000 lbs each

Water truck – 2 total @ 46,000 lbs each (3 axle, 4,000 gallon)

Pipe trucks – 2 total @ 35,000 lbs each (3 axle)

Trailers – 2 total @ 6,000 lbs each (2 axle, flatbed)

Portable toilet – 1 total

Bulldozer – Cat D6

Backhoe – Cat 420

Drill rigs – Schramm 685, BK-45 Super 90

O. Describe the area and size of each type of disturbance for cuts, pits, stockpiles, trenches, shafts, tunnels or other disturbances:

Drill pits/sumps – 10 x 20 x 8 ft each (to exist on already disturbed pad)

No stockpiles, no trenches, no shafts, no tunnels

P. Roads

Roads shall be located to minimize disturbance to land and wildlife and enhance stability. Roads shall be constructed and maintained to control erosion. Roads constructed in or across intermittent or perennial streams require site specific designs. Roads to remain permanent must be

approved by the surface owner and must be stabilized to control erosion.

List for New Road(s) the following:

Road description: <u>road to EM24 01</u>	Length (ft.) <u>798</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 02</u>	Length (ft.) <u>124</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 03</u>	Length (ft.) <u>218</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 04</u>	Length (ft.) <u>40</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 05</u>	Length (ft.) <u>166</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 06</u>	Length (ft.) <u>128</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 07</u>	Length (ft.) <u>1054</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 09</u>	Length (ft.) <u>377</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 10</u>	Length (ft.) <u>125</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 12</u>	Length (ft.) <u>192</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 13</u>	Length (ft.) <u>127</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 14</u>	Length (ft.) <u>167</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 15</u>	Length (ft.) <u>64</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 16</u>	Length (ft.) <u>126</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 17</u>	Length (ft.) <u>332</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 19</u>	Length (ft.) <u>63</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 20</u>	Length (ft.) <u>161</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 24</u>	Length (ft.) <u>570</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 25</u>	Length (ft.) <u>100</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 26</u>	Length (ft.) <u>160</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 28</u>	Length (ft.) <u>181</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 30</u>	Length (ft.) <u>150</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 33</u>	Length (ft.) <u>169</u>	Width (ft.) <u>15</u>

List for Emma-B Road(s) the following:

Road description: <u>road to EM24 06</u>	Length (ft.) <u>166</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 23</u>	Length (ft.) <u>198</u>	Width (ft.) <u>15</u>
Road description: <u>road to EM24 33</u>	Length (ft.) <u>393</u>	Width (ft.) <u>15</u>

*Note: Depending on the slope of the road location and due to the cutting/filling designs, the final disturbance may exceed 15 when the actual surface of the road is still 15 ft. This has been accounted for in the "Other Disturbance" section.

List for Extension or Widening of Existing Road(s) the following:

Road description: _____	Length (ft.) _____	Width (ft.) _____
Road description: _____	Length (ft.) _____	Width (ft.) _____
Road description: _____	Length (ft.) _____	Width (ft.) _____
Road description: _____	Length (ft.) _____	Width (ft.) _____
Road description: _____	Length (ft.) _____	Width (ft.) _____

*Note: See note above in "other disturbances"

Where applicable, describe road or drainage culvert location, size(s), and design:

N/A

Road Disturbance: 2.2 acres

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

Exploration and drilling vehicles will be parked on the pads during drilling activity. Lay down areas will be located at the Tyrone mine. No additional disturbance should be needed.

TOTAL ACREAGE TO BE DISTURBED: 60 acres

Disturbance Breakdown

Source	acres
New Roads	1.9
Emma-B Carryover	0.3
Drill Pads	6.0
Contingency or "other"	51.8

CHEMICAL USE (§402.D.8)

- R. List all chemicals, and include Material Safety Data Sheets (MSDS), for any chemicals proposed to be used by the exploration operation, including but not limited to any drilling mud, polymers, down-hole bit lubricants, lost circulation materials (LCM), or any other drilling additives, fuel and lubricants. Material Safety Data Sheets (MSDS) describing must be included. If any water is to be hauled onsite, please provide source information and intended use.

Name	Use
<u>RC Drilling</u>	
<u>EZ Mud Gold</u>	<u>(35 gal. per) - Drilling mud</u>
<u>Diesel fuel</u>	<u>(6,000 gal.) - Fuel</u>
<u>20 gal. 15/40 grease</u>	<u>(20 tubes) – oil/grease</u>
<u>Hydraulic fluid</u>	<u>(15 gallons) – hydraulic fluid</u>
<u>Portland II</u>	<u>(~800 bags) – cement</u>

Quick Gel	(~100 x 50 lb bags) - bentonite
Soda Ash	(~10 x 50 lb bags) – soda ash
Core Drilling	
Ez Mud Plus	(4-5 gal. jugs) – Drilling mud
Diesel fuel	(90 gal.) - Fuel
15w-40 Oil & Grease	(10-20 gal.) – oil/grease
Quick Trol Gold	(3-50 bags) - mixture
Wd 40, chain lube	(5-20oz cans) - lube
Quick Gel	(48-50 bags) - bentonite
Soda Ash	(5-50 bags) – soda ash

- S. 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 sump with water. Portland II cement is used to abandon/plug holes. Petroleum products will be used for equipment and disposal will be off site. Drill rig refueling will be done on-site via pickup with fuel tank. Fuel and lubricants are not disposed of, but are consumed on site. Rags and absorbents will be disposed of properly at Tyrone waste management stations. Spills will be reported, cleaned up and contaminated materials/soil will be treated/managed at Tyrone mine waste management facilities until final disposal. All water used for exploration activities will be obtained at the Tyrone mine.

3. GROUND WATER INFORMATION (§402.D.9)

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

Depth to ground water (ft.): Variable 80-350 ft (includes regional and perched)
TDS concentration (mg/L): <2290 mg/L

- B. What is the source of this information?

Historical and recent groundwater monitoring data from Discharge Permit 396

- C. Will dewatering activities be conducted:

☐ Yes ☒ No

If yes, please describe:

4.

5. RECLAMATION AND OPERATION PLAN (§402.D.10)

Reclamation of the disturbed area shall be initiated 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 operation.

- A. Provide a description of the native vegetation of the area to be disturbed. Include tree, shrub and grass communities of the area.

Mixture of multiple plant communities including alluvial grasslands primarily composed of tarragon, blue grama, purple three-awn Apache plume, and bricklebush. Also included are Piedmont scrub savannas consisting of grama grasses, beargrass, broom snakeweed and mimosa. Lastly, the area includes some mountain slope mixed evergreen woodlands dominated by oak and juniper species.

- B. Describe the topsoil or topdressing depth and how topsoil or topdressing will be salvaged, stockpiled and distributed for the re-establishment of vegetation.

Mixture of coarse loamy and sandy Haplustolls and Torrifluvents, loamy skeletal, clayey-skeletal, and fine aridic Haplustaffs and Haplustolls ranging from a few inches to a few feet in thickness.

Where practical, topsoil will be stripped and staged near the drill pad for use in reclamation. Depending on the slope of the pad location, the topsoil may be needed for construction of the pad so additional material does not have to be brought in from borrow sources at Tyrone.

- C. Describe in detail the plant species to be used in the re-establishment of vegetation.

Plant name	Seeding Rate (lbs./acre)
<u>Blue grama</u>	1 _____
<u>Sideoats grama</u>	2 _____
<u>Sand dropseed</u>	0.25 _____
<u>Indian ricegrass</u>	2 _____
<u>Purple prairie clover</u>	2 _____
<u>Scarlet globemallow</u>	1 _____

- D. Provide the methods to be used during revegetation operations and provide a schedule of when the operations are to begin and end.

Once the project is fully completed and it is determined that no additional exploration drilling will take place, pads and roads (excluding roads that are

permanently used for well and instrument access) will be regraded to create appropriate transitions to existing topography. During this phase of reclamation, the soil will be spread out to best match the surrounding topography using a dozer, excavator, or backhoe and additional disturbances may take place. During revegetation, the soil will be ripped to a depth of 4-6 prior to seeding. Seed will be planted using a range drill or broadcaster depending on the site conditions and seed shapes. Tyrone will communicate the schedule with the agency as the project progresses. The project may also be left disturbed because the area is to be mined in accordance with Revision 21-1 (Emma Expansion Project) under GR010RE.

E. Proposed Reclamation dates:

Start Date: Agency will be notified

End Date: Agency will be notified

F. If riparian areas and wetlands exist, provide the detailed reclamation plan for the mitigation of the area. Describe the methods to minimize disturbance during exploration.

n/a

G. Describe how drill holes will be plugged and abandoned. What plugging and abandonment methods will be employed where groundwater is encountered versus holes where no groundwater is encountered? (must comply with 19.27.4 NMAC of the State Engineer Office's plugging and abandonment requirements)

In accordance with 19.27.4 NMAC, all drill holes will be plugged by grouting via a tremie line from the bottom up to the surface (less 2 feet) utilizing a pressure grout pump. Said grout is to be mixed on site with 5 gallons of water per 94-lb sack of Portland cement. Each well is plugged prior to the drill rig leaving the site, per FMI policy. The procedure is the same for both wet and dry holes.

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

Mud pits are backfilled with excavator, dozer, or backhoe.

6. CULTURAL RESOURCES (§403.B)

Cemeteries and burial grounds and the disturbance of cultural resources listed on, or eligible for, the National Register of Historic Places or the State Register of

Cultural Properties shall be avoided until clearance has been granted by the Director after consultation with the State Historic Preservation Officer.

Provide information on Cultural Resource Survey(s) performed on the site. Include a copy of the Archeological or Cultural Resource Survey **separately** in the application package. **Please DO NOT display any archaeological site locations upon other project maps submitted under Section 4 of this Application.** Any Archaeological or Cultural Resource Survey and Report information shall be submitted with this Application, but separately as a stand alone component of this Application.

Attachment Confidentially resubmitted to MMD through a shared Microsoft Teams channel. The original report was sent on June 22, 2021.

7. SAFEGUARDING (§403.C)

Provide a description of measures that will be taken to safeguard the public from unauthorized entry into hazardous areas. This description shall address the following:

- A. Closing shafts, adits, and tunnels to prevent entry;
- B. Posting warning signs in locations near hazardous areas (in Spanish, English and/or other languages);
- C. Restricting access to hazardous areas; or other measures to protect human safety. and
- D. Waste disposal

The project area is already fenced, and signage is in place as it is all located on private property owned by Freeport McMoRan. When rigs are operating, an employee is monitoring the entrance point at all times. Each person is required to sign in and review the workplace exam.

Mud pits are completely fenced off with metal panels as well, until they are backfilled. No adits or shafts are present.

8. PROTECTION OF WILDLIFE AND IMPORTANT HABITAT (§403.G)

- A. Describe in detail the measures that will be taken during the exploration and reclamation to minimize impacts on wildlife and important habitat.

Metal panels are placed around pits and temporary plastic tarps are used over mud pits unless in use. Pits will be backfilled upon completion of drilling. Earthen egress ramps are also installed in mud pits as a backup safeguard.

Metal panels stand upright by design and stakes will be used to secure tarps. Vehicle traffic will be restricted to existing access roads and disturbance will be minimized to only what is necessary. If vegetation disturbances must be completed during the migratory bird nesting season, surveys will be completed prior to the work commencing.

OPERATIONS TO MINIMIZE EROSION (§403.E)

B. Describe in detail the measures that will be taken and/or Best Management Practices (BMP's) to be utilized during exploration and reclamation to prevent and minimize erosion. Acceptable practices include:

1. Stabilizing disturbed areas through land shaping, re-contouring, berming or grading to final contour;
2. Minimizing reconstructed slope lengths and gradients;
3. Diverting storm water runoff;
4. Establishing vegetation;
5. Regulating channel velocity of water;
6. Lining drainage channels with rock, vegetation or other geotechnical materials; and
7. Mulching.

Silt fences, straw bales, ditches/swales, or berms/dikes/dams could be used to minimize erosion during operations.

The reclamation procedures described above include regrading to transition to existing topography and plant establishment will also be used. No mulching is proposed for this project.

Attachment B: Habitat and plant clearance verification from the NM Forest Division. Additional biological evaluations were submitted to MMD through the shared Microsoft Teams channel.

BLASTING INFORMATION (§403.L)

C. When blasting is employed during the exploration operations, indicate the following: N/A

Distance to nearest structure or dwelling: _____ feet

Typical number of pounds used per blast: _____ lbs/blast

Type of blasting agent: _____

9. FINANCIAL ASSURANCE, PUBLIC NOTICE AND PERMIT FEES (§402.D.10.c, §402.D.12, & §402.D.13)

- A. Provide an estimate of the proposed financial assurance required by Subpart 12.

Attachment C Table 2

- B. Attach a copy of the proposed form of public notices required under Subpart 9.

Attachment D

- C. Attach the permit fees as determined pursuant to Subpart 2. The application fee for an exploration permit is \$250.00.

Check the method of payment.

☐ Cash

☒ Check

Check Number: 0001040269

Financial institution: Bank of America

10. CERTIFICATION REQUIREMENT (§402.C)

Each application shall be signed by the permittee or an authorized agent of the permittee for the operation with the following certification made

(Certification does not require notarization):

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 (typed or print)

Sherry Burt-Kested

Title/Position:

Manager, Environmental Services

Date

1-21-2025

Table 1. Proposed Drill Hole and Exploration Site Details

Pad #	Drillhole ID	Longitude (WGS 84)	Latitude (WGS 84)	Elevation	Max Depth (ft)	Azimuth	OSE POD #	Comments
1	EM24_01	108° 21' 25.0104" W	32° 37' 02.4632" N	6225	2500	180	143	
2	EM24_02	108° 21' 24.9412" W	32° 37' 06.2215" N	6147	2500	180	144	
3	EM24_03	108° 21' 22.6125" W	32° 37' 05.7259" N	6163	2500	180	145	
4	EM24_04	108° 21' 22.6888" W	32° 37' 01.5818" N	6290	2500	0	146	
5	EM24_05	108° 21' 20.2994" W	32° 37' 04.3796" N	6222	2500	180	147	
6	EM24_06	108° 21' 17.9230" W	32° 37' 06.4752" N	6174	2500	180	148	
7	EM24_07	108° 21' 18.2536" W	32° 36' 48.5243" N	6208	2500	180	174	
8	EM24_08	108° 21' 15.6905" W	32° 37' 00.7575" N	6210	2500	180	149	
9	EM24_09	108° 21' 13.4965" W	32° 36' 52.9528" N	6162	2500	180	175	
10	EM24_10	108° 21' 13.4161" W	32° 36' 57.3144" N	6205	2500	180	150	
11	EM24_11	108° 21' 13.3277" W	32° 37' 02.1113" N	6200	2500	180	151	
12	EM24_12	108° 21' 13.1260" W	32° 37' 13.0500" N	6224	2500	180	176	
13	EM24_13	108° 21' 10.9868" W	32° 37' 02.2782" N	6185	2500	0	152	
14	EM24_14	108° 21' 10.7533" W	32° 37' 14.9378" N	6219	2500	180	177	
15	EM24_15	108° 21' 17.8528" W	32° 37' 10.2830" N	6113	2500	180	153	
16	EM24_16	108° 21' 08.6778" W	32° 37' 00.7143" N	6166	2500	0	154	
17	EM24_17	108° 21' 15.2344" W	32° 37' 09.0119" N	6155	2500	130	155	
16	EM24_18	108° 21' 08.6785" W	32° 37' 00.6748" N	6170	2500	180	156	Located on same pad as EM24-16
18	EM24_19	108° 21' 10.8409" W	32° 37' 10.1905" N	6242	2500	0	157	
19	EM24_20	108° 21' 10.7944" W	32° 37' 12.7125" N	6277	2500	320	178	
20	EM24_21	108° 21' 10.8792" W	32° 37' 08.1135" N	6203	2500	320	158	
21	EM24_22	108° 21' 06.3259" W	32° 37' 01.4747" N	6179	2500	180	159	
22	EM24_23	108° 21' 03.9777" W	32° 37' 02.0372" N	6170	2500	180	160	
23	EM24_24	108° 21' 18.1156" W	32° 36' 56.0162" N	6223	2500	180	179	
24	EM24_25	108° 21' 11.1038" W	32° 36' 55.9286" N	6192	2500	180	161	
25	EM24_26	108° 21' 04.1229" W	32° 36' 54.1744" N	6194	2500	180	180	
26	EM24_27	108° 21' 06.4068" W	32° 36' 57.0932" N	6196	2500	180	181	
27	EM24_28	108° 21' 08.6041" W	32° 37' 04.7100" N	6206	2500	180	162	
28	EM24_29	108° 21' 13.2741" W	32° 37' 05.0190" N	6224	2500	180	163	
29	EM24_30	108° 21' 18.0350" W	32° 37' 00.3927" N	6258	2500	0	164	
30	EM24_31	108° 21' 22.7434" W	32° 36' 58.6147" N	6282	2500	180	165	
31	EM24_32	108° 21' 25.0737" W	32° 36' 59.0213" N	6280	2500	180	166	
32	EM24_33	108° 21' 29.6755" W	32° 37' 03.0391" N	6178	2500	180	167	
33	EM24_34	108° 21' 08.4326" W	32° 37' 14.0069" N	6250	2500	150	168	

Attachment B

From: [Roth, Daniela, EMNRD](#)
To: [Ohori, David, EMNRD](#)
Subject: RE: Request for Comments - Tyrone Mine Emma Expansion Project, Revision 21-1, Permit No. GR010RE
Date: Tuesday, December 21, 2021 3:21:53 PM

Dear David Ohori:

Thank you for giving me the opportunity to review and comment on Revision 21-1 to the Emma Expansion Project, Freeport-McMoRan Tyrone Operations, in Grant County, NM (Permit No. GR010RE). Based on the information provided, I do not anticipate any impacts to state listed endangered plants from the expansion of the Mine Permit and Design Limit boundaries. I have no additional comments on the closeout plan.

Please let me know if I can be of further help.

Sincerely,

Daniela Roth

Botany Program Coordinator
EMNRD – Forestry Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505
505-372-8494 (cell)
<http://www.emnrd.state.nm.us/SFD/>

From: Ohori, David, EMNRD <david.ohori@state.nm.us>
Sent: Tuesday, December 14, 2021 4:13 PM
To: Roth, Daniela, EMNRD <Daniela.Roth@state.nm.us>
Cc: Shepherd, Holland, EMNRD <holland.shepherd@state.nm.us>
Subject: Request for Comments - Tyrone Mine Emma Expansion Project, Revision 21-1, Permit No. GR010RE

Hi Daniela,

Please see the attached Request for Comments letter.

Thanks.

David Ohori

Supervisor, Senior Reclamation Specialist
New Mexico Mining and Minerals Division
1220 So. St. Francis De.
Santa Fe, NM 87050
(505) 216-8945
David.Ohori@state.nm.us

Attachment C

Table 2: 2024 Financial Assurance (FA) Cost Estimate for Exploration Drilling				
New Emma PART 4				
Description	Unit	Quantity	Unit Rate (\$/unit)	Total Cost (\$)
Surface Reclamation Costs (1st acre)	acre	1.00	\$ 8,900	\$ 8,900
Drill Road & Pad Reclamation	acre	59.00	\$ 4,900	\$ 289,100
Plug and Abandon Exploration Drill Holes	ft.	10,000	\$ 14	\$ 140,000
Total FA Required for New Permit				\$ 438,000
Temporary Monitor Wells				
Description	Unit	Quantity	Unit Rate (\$/unit)	Total Cost (\$)
Drill Pad Reclamation	acre	1.09	\$ 4,900	\$ 5,341
Plug and Abandon Monitor Wells	ft.	3,800	\$ 14	\$ 53,200
Total FA Required for Well Reclamation				\$ 58,541
Total Existing FA (LOC: HACH6006910S)				\$ 229,922
Total FA Required				\$ 496,541
Adjustment Needed (Increase)				\$ 266,619
<i>Note. As described in the GR083EM Termination report, the FA required for monitor well reclamation is based on the actual depth of wells and surface disturbances that have not been reclaimed.</i> <i>FA required for the PART 4 borehole abandonment is based on 4 holes at a depth of 2500ft.</i>				

Legal Notice

Pursuant to the New Mexico Mining Act Rules, 19.10.4 and 19.10.9.903A. through H. NMAC, Freeport-McMoRan Tyrone Inc. (Tyrone) applied to the Mining and Minerals Division, New Mexico Energy, Minerals and Natural Resources Department (MMD) for an exploration permit adjacent to and south of the existing mining operation permitted under Tyrone Mine Permit GR010RE. Tyrone proposes to conduct exploration activities including construction of drill pads, access roads, and drilling to explore for copper minerals within an exploration permit area referred to as the Emma Project, Permit No. GR095ER. The exploration disturbance is estimated to be approximately 60 acres (this acreage includes reclamation and other potential adjustments needed as the project progresses). Financial assurance for the full 60 acres will be provided for this permit.

Location of real property affected: The Emma Project is located on private property approximately 10 miles south and 1 mile west of Silver City, Grant County, NM. The Emma Project area is located within portions of Sections 25, 26, 35 and 36 of Township 19 South, Range 15 West of the USGS White Signal New Mexico quadrangle map.

Permittee and mailing address: Freeport-McMoRan Tyrone Inc., Environmental Services Department, P.O. Box 571, Tyrone, New Mexico 88065.

A copy of the updated application is available for viewing during normal business hours at:

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

And also at:

Freeport McMoRan Tyrone Inc.
Environment Services Department
Tyrone Mine Road, Highway 90
Tyrone, New Mexico 88065

This application can also be viewed or downloaded from the New Mexico Energy, Minerals and Natural Resources Department website at:

<https://www.emnrd.nm.gov/mmd/gr095er-emma-project-regular-exploration-project-part-4/>

Written comments or requests for a public hearing with regard to the exploration permit application shall be submitted to: Albert Chang, Director, Mining and Minerals Division, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 or by email at:

emnrd.mmd2@emnrd.nm.gov within 30 days of the date of this public notice. Any interested person may file written comments regarding the application with the Director at the above address and may request a public hearing.

Aviso legal

En conformidad con las Reglas de la Ley de Minería de Nuevo México, 19.10.4 y 19.10.9.903A. a través de H. NMAC, Freeport-McMoRan Tyrone Inc. (Tyrone) solicitó a la División de Minería y Minerales, Departamento de Energía, Minerales y Recursos Naturales de Nuevo México (MMD) un permiso de exploración adyacente y al sur de la operación minera existente permitida según el Permiso de Mina Tyrone GR010RE. Tyrone propone realizar actividades de exploración que incluyen la construcción de plataformas de perforación, caminos de acceso y perforaciones para explorar minerales de cobre dentro de un área de permiso de exploración conocida como Proyecto Emma, Permiso N.º GR095ER. Se estima que la perturbación de exploración es de aproximadamente 60 acres (esta superficie incluye la recuperación y otros posibles ajustes necesarios a medida que avanza el proyecto). Se proporcionará una garantía financiera para la totalidad de los 60 acres para este permiso.

Ubicación de la propiedad afectada: El Proyecto Emma está ubicado en una propiedad privada aproximadamente a 10 millas al sur y 1 milla al oeste de Silver City, condado de Grant, NM. El área del Proyecto Emma está ubicada dentro de partes de las Secciones 25, 26, 35 y 36 del Municipio 19 Sur, Rango 15 Oeste del mapa cuadrangular de Señal Blanca de USGS de Nuevo México.

Titular del permiso y dirección postal: Freeport-McMoRan Tyrone Inc., Departamento de Servicios Ambientales, P.O. Box 571, Tyrone, Nuevo México 88065.

Se puede consultar una copia de la solicitud actualizada durante horas hábiles en:

Departamento de Energía, Minerales y Recursos Naturales de Nuevo México
División de Minería y Minerales
1220 South St. Francis Drive
Santa Fe, Nuevo México 87505

Y también en:

Freeport McMoRan Tyrone Inc.
Departamento de Servicios Ambientales
Tyrone Mine Road, Highway 90
Tyrone, Nuevo México 88065

Esta solicitud también se puede ver o descargar desde el sitio web del Departamento de Energía, Minerales y Recursos Naturales de Nuevo México en:

<https://www.emnrd.nm.gov/mmd/gr095er-emma-project-regular-exploration-project-part-4/>

Los comentarios por escrito y/o las solicitudes de una audiencia pública con respecto a la solicitud de permiso de exploración se deben enviar a: Albert Chang, Director, División de Minería y Minerales, 1220 South St. Francis Drive, Santa Fe, New Mexico 87505 o por correo electrónico a:

emnrd.mmd2@emnrd.nm.gov dentro de los 30 días a partir de la fecha de este aviso público. Cualquier persona interesada puede presentar comentarios por escrito sobre la solicitud al Director en la dirección antes mencionada y puede solicitar una audiencia pública.

Surface Land Ownership - Emma Exploration Project

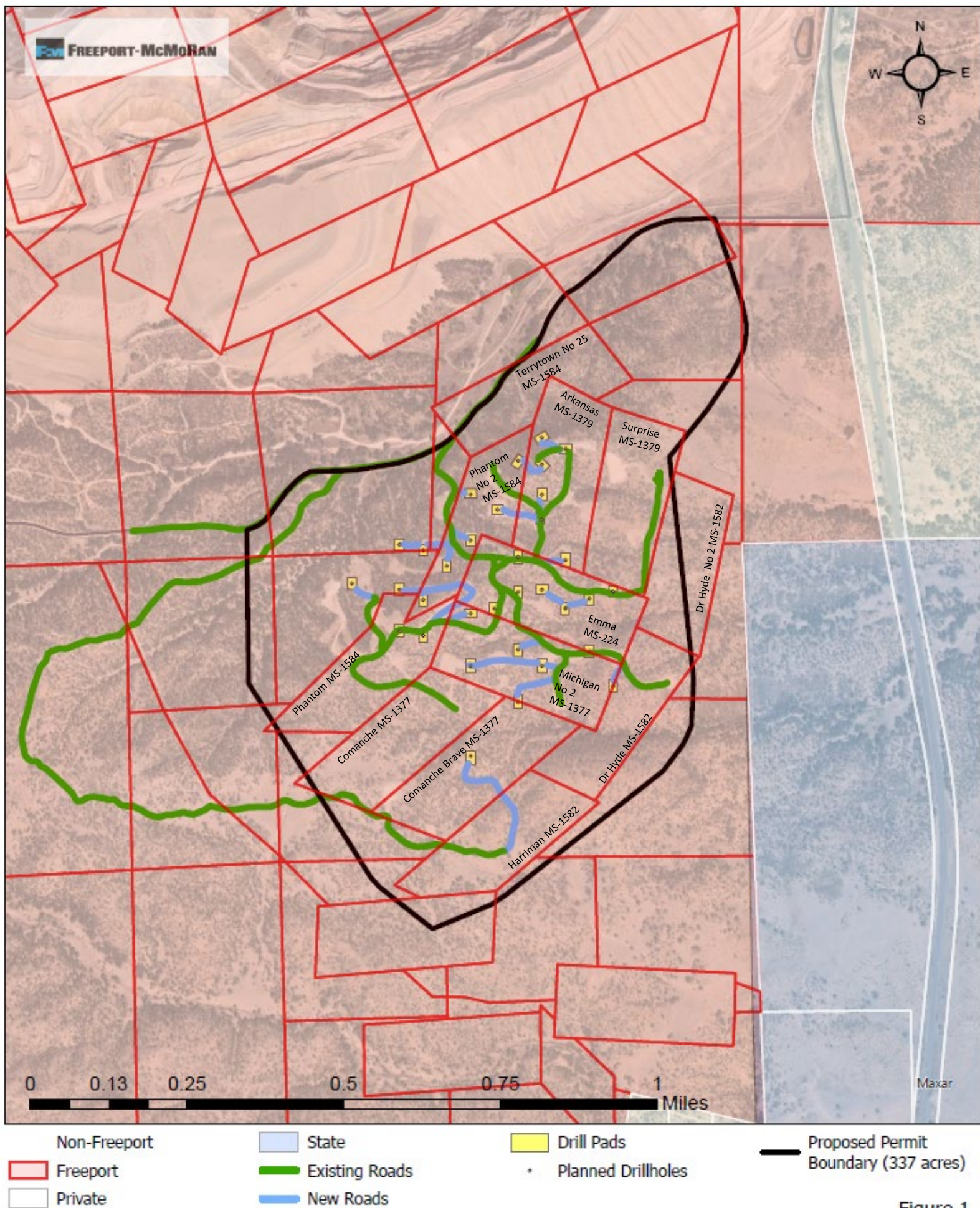


Figure 1

Unpatented Mining Claims - Emma Exploration Project

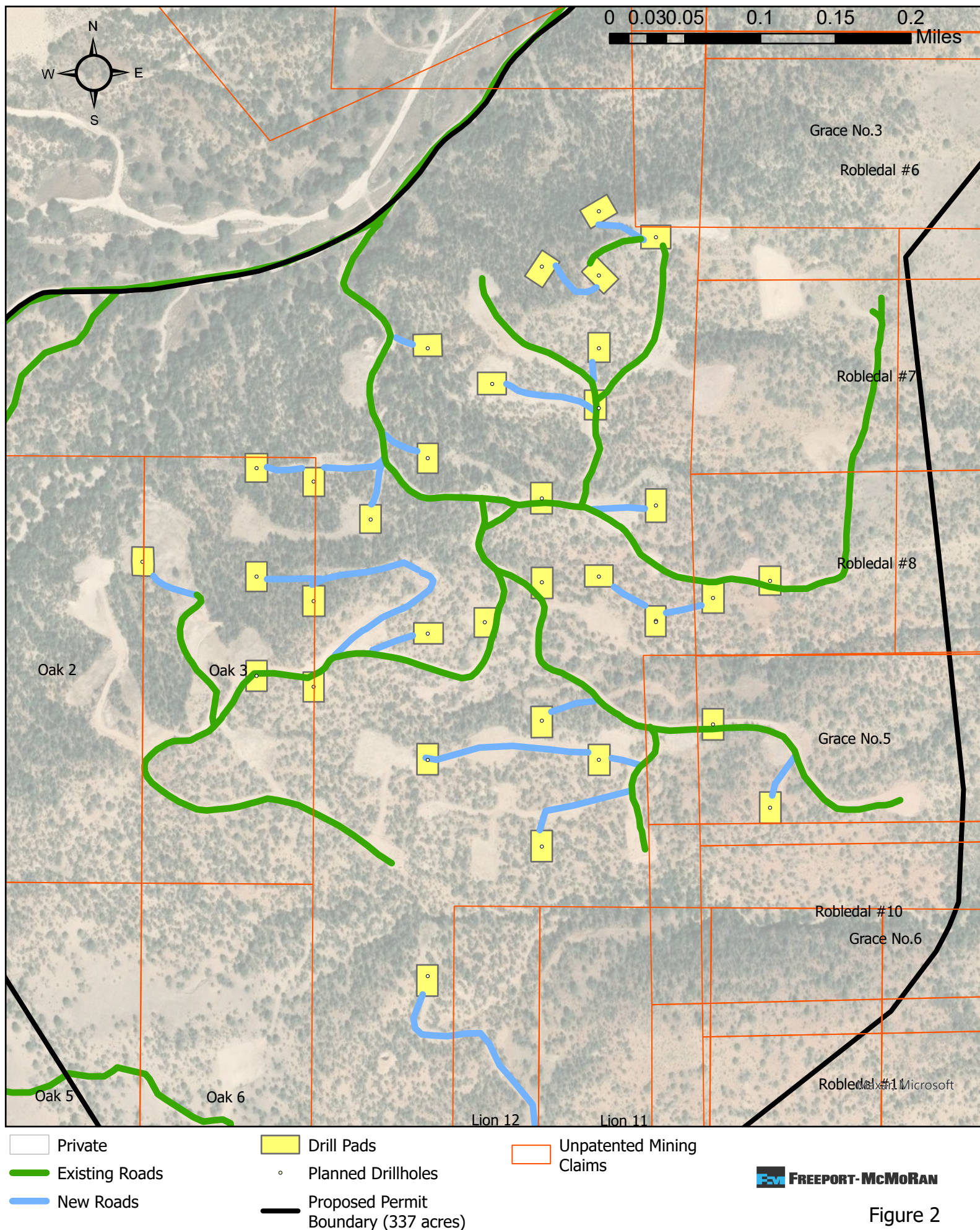
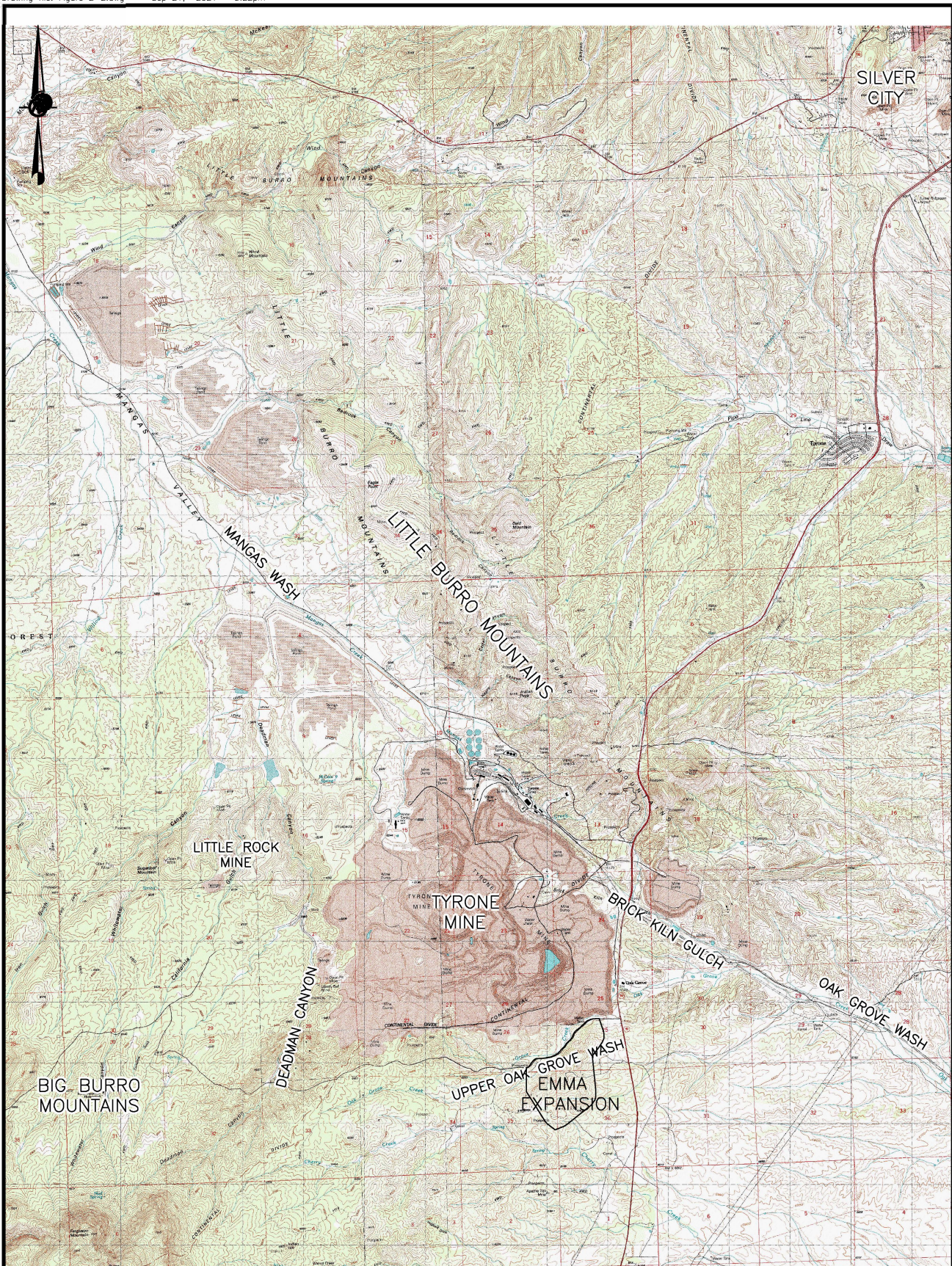



Figure 2



NOTE: TOPOGRAPHIC MAP DETAILS WERE DEVELOPED BETWEEN 1992 AND 1999. SPECIFIC MINE FEATURES MAY VARY FROM THOSE SHOWN ON THIS MAP. FOR SPECIFIC MINE TOPOGRAPHY AND PHYSICAL FEATURES, REFER TO PLATES 1 THROUGH 3 OF THIS CCP.



SOURCE: ALL TOPO MAPS V7 PROFESSIONAL MAP REFERENCE SET, NEW MEXICO RELEASE 3. INCLUDES QUADS: CIRCLE MESA, SILVER CITY, TYRONE, WIND MOUNTAIN, WHITE SIGNAL AND BURRO PEAK.

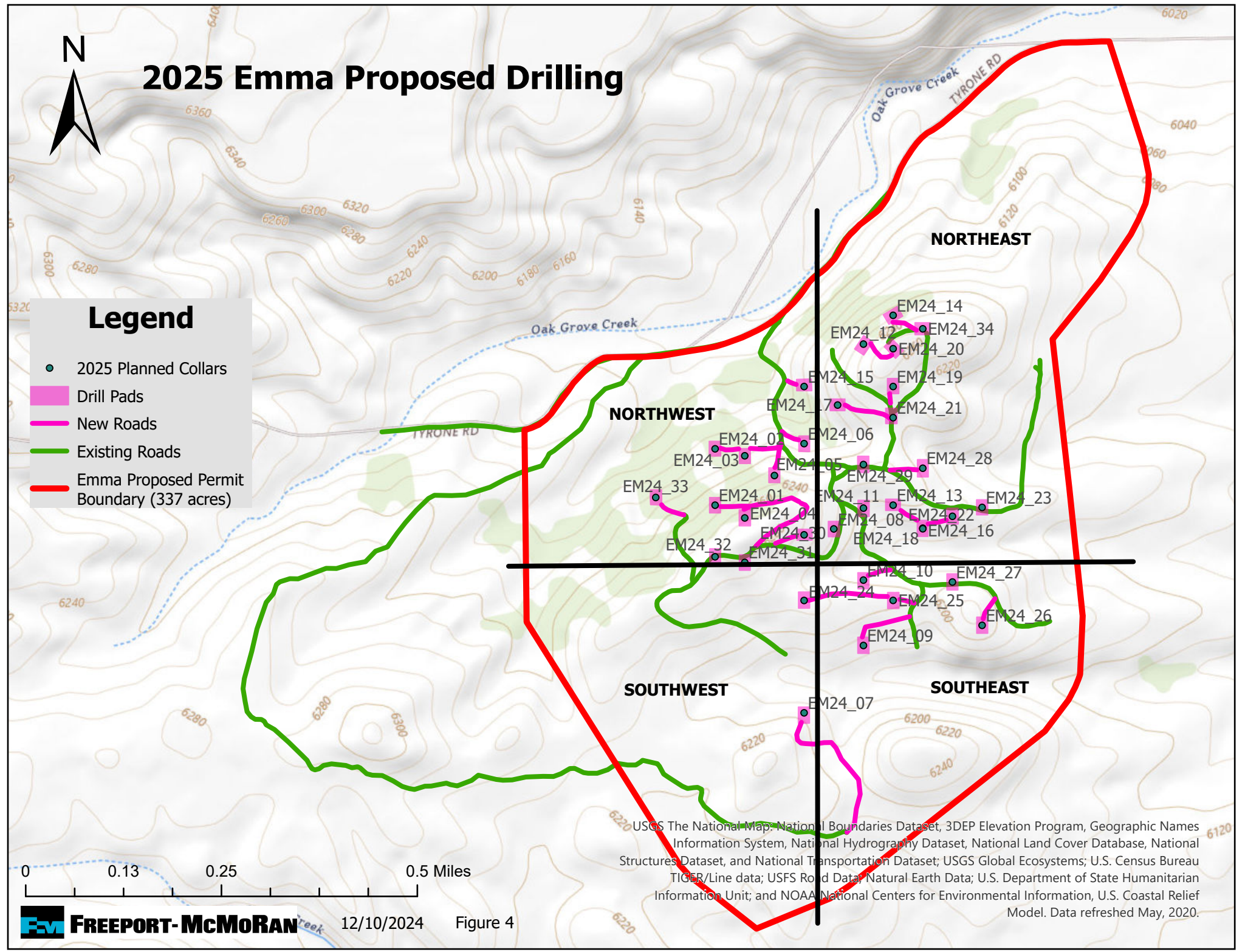
PROJECT		Emma Project Grant County, New Mexico	
TITLE		GENERALIZED REGIONAL TOPOGRAPHIC MAP	
 GOLDER MEMBER OF WSP	PROJECT No.	21476949	FILE No Tyrone Area Topo Map
	DESIGN	TS	09/20/21
	CADD	SB	09/20/21
	CHECK		
REVIEW		SCALE AS SHOWN REV. 1	
		FIGURE 3	

2025 Emma Proposed Drilling



Legend

- 2025 Planned Collars
- Drill Pads
- New Roads
- Existing Roads
- Emma Proposed Permit Boundary (337 acres)



2025 Emma Proposed Drilling



Legend

- 2025 Planned Collars
- Drill Pads
- New Roads
- Existing Roads
- Emma Proposed Permit Boundary (337 acres)

NORTHWEST

NORTHEAST

SOUTHWEST

SOUTHEAST



- EM24_14
- EM24_12
- EM24_34
- EM24_20
- EM24_15
- EM24_19
- EM24_21
- EM24_17
- EM24_06
- EM24_28
- EM24_02
- EM24_03
- EM24_05
- EM24_29
- EM24_33
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- EM24_22
- EM24_30
- EM24_18
- EM24_16
- EM24_32
- EM24_31
- EM24_10
- EM24_27
- EM24_24
- EM24_25
- EM24_09
- EM24_26
- EM24_07

2025 Emma Proposed Drilling Northeastern Quadrant

0 0.03 0.05 0.1 Miles



Legend

- 2025 Planned Collars
- Drill Pads
- New Roads
- Existing Roads
- Emma Proposed Permit Boundary (337 acres)

Figure 4-2 12/10/2024



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

2025 Emma Proposed Drilling Northwestern Quadrant



Legend

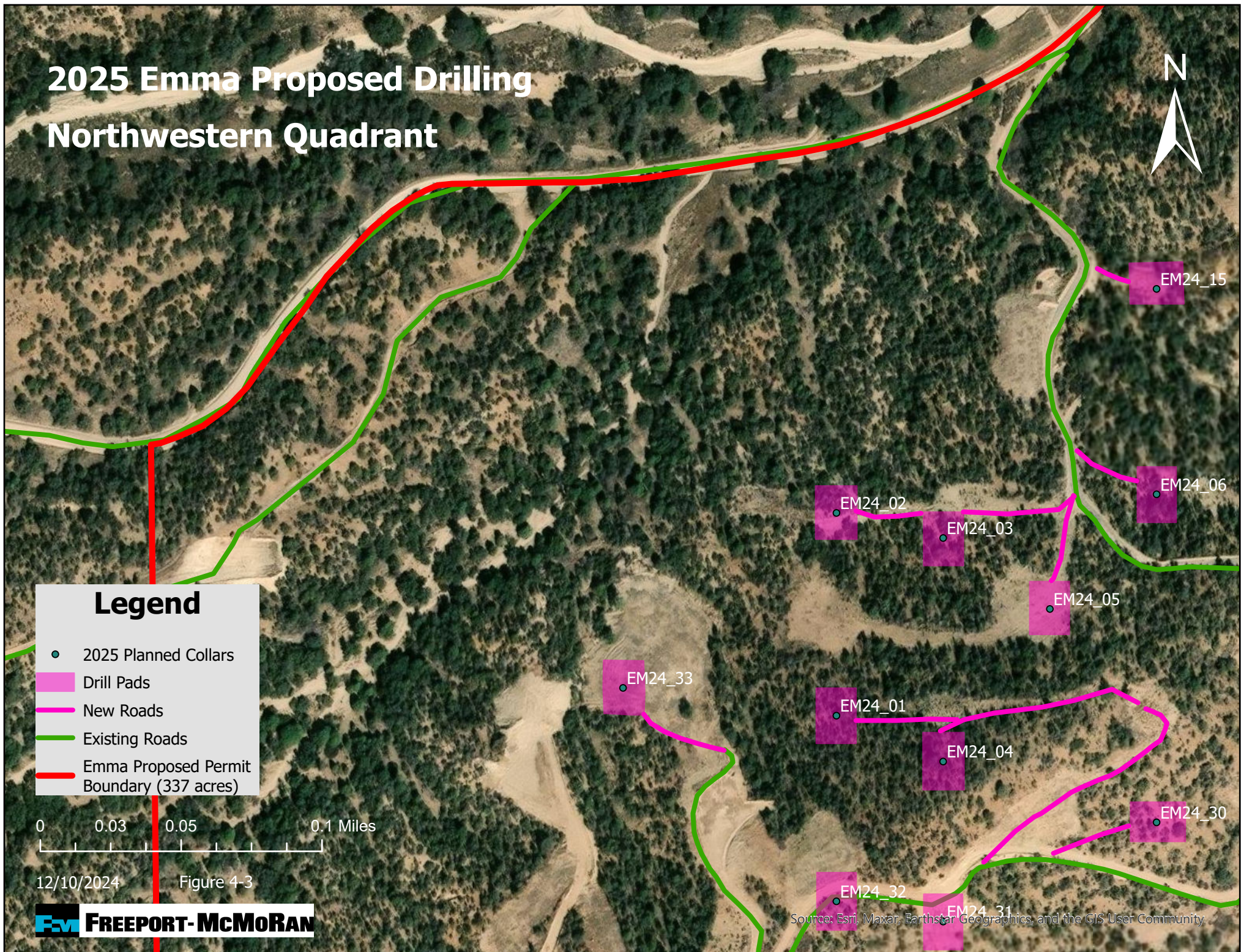
- 2025 Planned Collars
- Drill Pads
- New Roads
- Existing Roads
- Emma Proposed Permit Boundary (337 acres)



12/10/2024 Figure 4-3



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



2025 Emma Proposed Drilling Southeastern Quadrant

0 0.03 0.05 0.1 Miles



Legend

- 2025 Planned Collars
- Drill Pads
- New Roads
- Existing Roads
- Emma Proposed Permit Boundary (337 acres)

Figure 4-4

12/10/2024



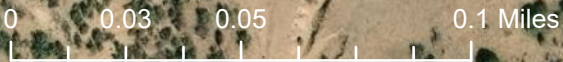
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

2025 Emma Proposed Drilling Southwestern Quadrant



Legend

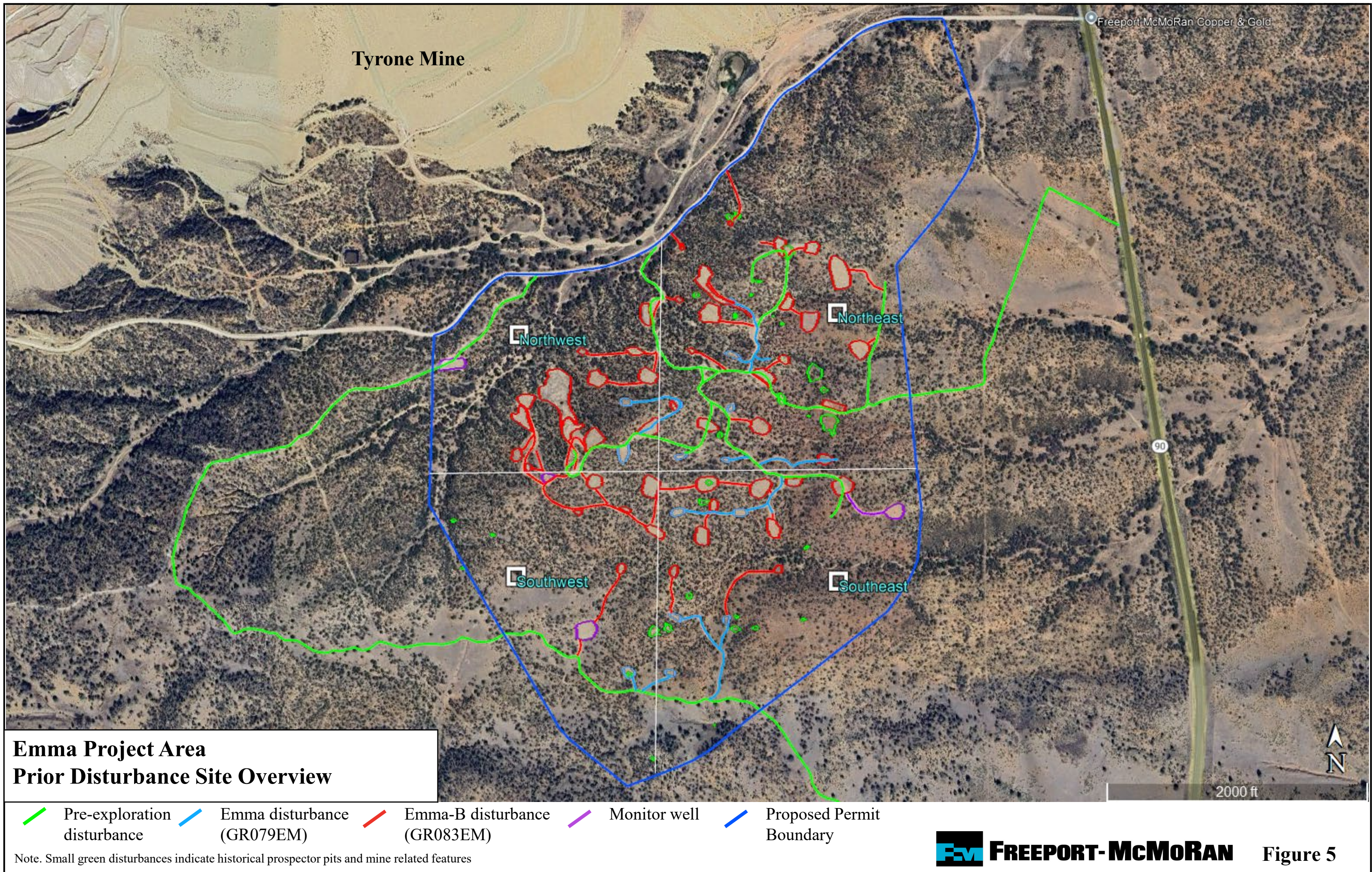
- 2025 Planned Collars
- Drill Pads
- New Roads
- Existing Roads
- Emma Proposed Permit Boundary (337 acres)

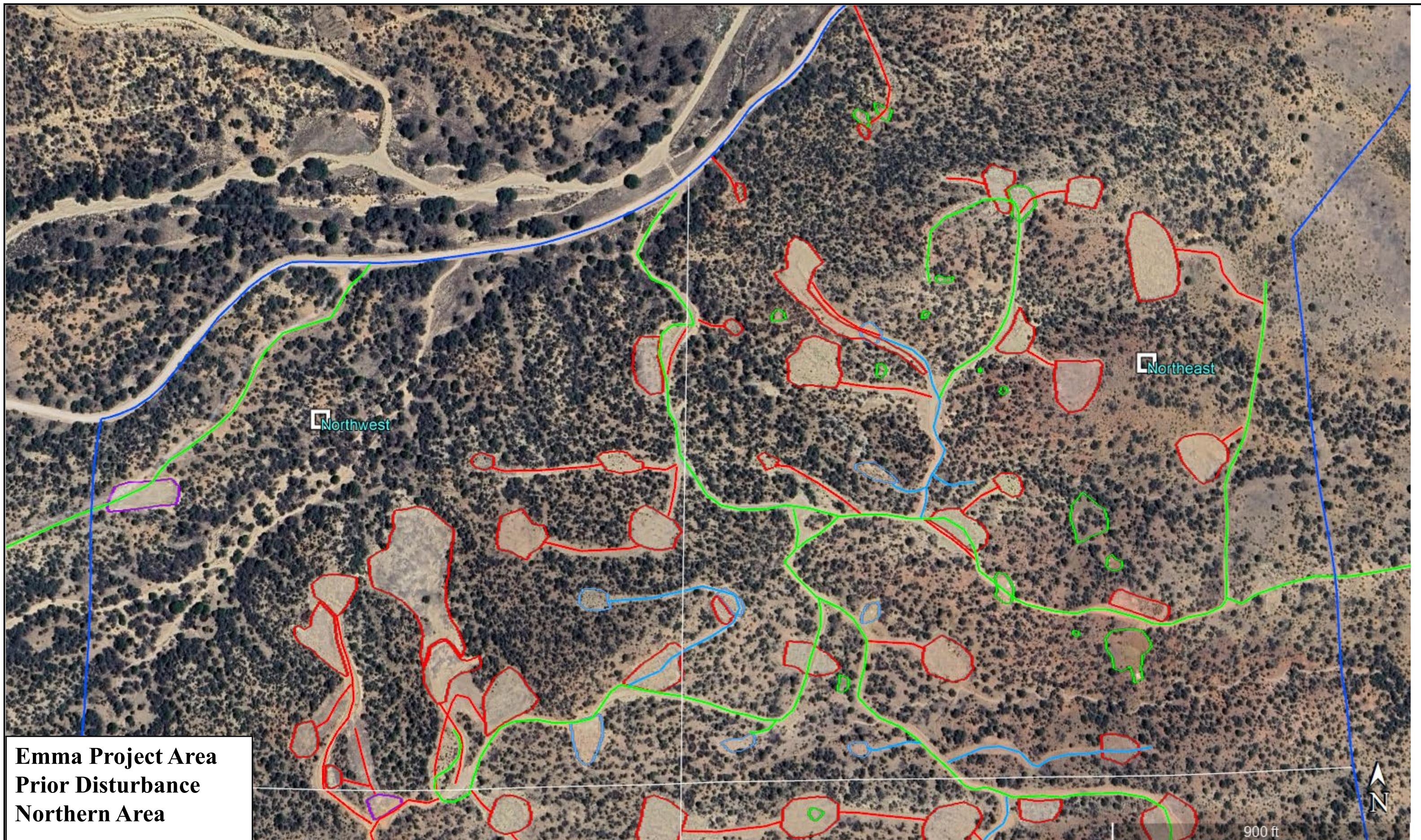


12/10/2024 Figure 4-5

EM24_24

EM24_07

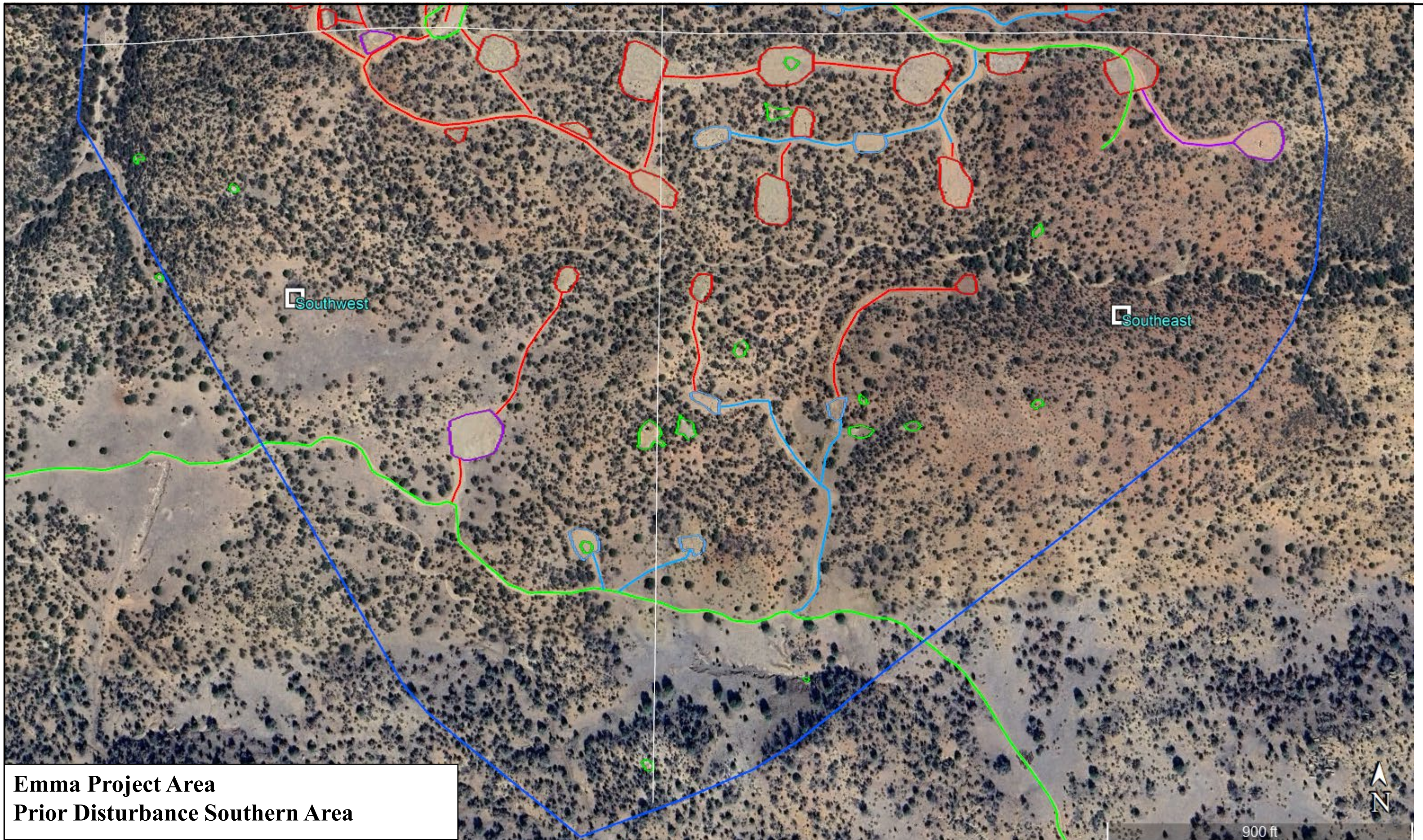




**Emma Project Area
Prior Disturbance
Northern Area**

- Pre-exploration disturbance
- Emma disturbance (GR079EM)
- Emma-B disturbance (GR083EM)
- Monitor well
- Proposed Permit Boundary

Note. Small green disturbances indicate historical prospector pits and mine related features



**Emma Project Area
Prior Disturbance Southern Area**

- Pre-exploration disturbance
- Emma disturbance (GR079EM)
- Emma-B disturbance (GR083EM)
- Monitor well
- Proposed Permit Boundary

Note. Small green disturbances indicate historical prospector pits and mine related features

Figure 6 Emma Project

Current Monitor Well and Instrument Locations

Legend

- Monitor Well
- Piezometer
- Proposed Permit Boundary

