

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: _____

Nearest Town To Project: _____

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

Name: _____

Address: _____

Office Phone: _____ Cell Phone: _____

Fax Number: _____ Email: _____

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

Name: _____

Address: _____

Office Phone: _____ Cell Phone: _____

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.

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 type="checkbox"/> U.S. BLM	_____	_____

<input type="checkbox"/> U.S. Forest Service	_____	_____

<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 type="checkbox"/> Bureau of Land Management	_____	_____

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

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

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

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

Coordinate system used to collect GPS data points:

- | | |
|--|--|
| <input type="checkbox"/> NAD83 Geographic
<input type="checkbox"/> NAD83 UTM Zone 13 (or 12)
<input type="checkbox"/> WGS 1984 | <input type="checkbox"/> NAD27 Geographic
<input type="checkbox"/> NAD27 UTM Zone 13 (or 12)
<input type="checkbox"/> 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 _____

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 _____

C. Provide detailed driving directions to access the site:

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

A. Anticipated exploration: Start Date: _____ End Date: _____

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

C. Proposed method(s) of exploration:

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

_____ # 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

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

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: _____ License No. _____

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 = _____ 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):

- | | | |
|---|----------------|-------|
| <input type="checkbox"/> 4x4 Trucks/Vehicles | Quantity: | _____ |
| <input type="checkbox"/> Water Truck | Weight (lbs.): | _____ |
| <input type="checkbox"/> Geophysical Truck | Weight (lbs.): | _____ |
| <input type="checkbox"/> Pipe Truck (rig support) | Weight (lbs.): | _____ |
| <input type="checkbox"/> Bulldozer | Type: | _____ |
| <input type="checkbox"/> Backhoe | Type: | _____ |
| <input type="checkbox"/> Trackhoe | Type: | _____ |
| <input type="checkbox"/> Scaper/Grader | Type: | _____ |
| <input type="checkbox"/> Trailers | Quantity/Type: | _____ |
| <input type="checkbox"/> Portable Toilet | Quantity: | _____ |
| <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)
TOTAL ACRES DISTURBED BY NEW ROAD CONSTRUCTION :			

Describe how new roads will be constructed:

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)
TOTAL ACRES DISTURBED BY ROAD IMPROVEMENTS :			

Describe how existing roads will be extended or widened:

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)
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.

H. **TOTAL ACREAGE TO BE DISTURBED BY PROJECT = _____ 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 type="checkbox"/> Drilling Mud (i.e., EZ Mud)	Type/Quantity:	_____
<input type="checkbox"/> Diesel Fuel	Quantity:	_____
<input type="checkbox"/> Down-hole Lubricants	Type/Quantity:	_____
<input type="checkbox"/> Lost Circulation Materials	Type/Quantity:	_____
<input type="checkbox"/> Oils/Grease	Quantity:	_____
<input type="checkbox"/> Gasoline	Quantity:	_____
<input type="checkbox"/> Hydraulic Fluid	Quantity:	_____
<input type="checkbox"/> Ethylene Glycol	Quantity:	_____
<input type="checkbox"/> Cement	Type/Quantity:	_____
<input type="checkbox"/> Water	Source:	_____
<input type="checkbox"/> Bentonite	Quantity:	_____
<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:

C. Describe where equipment fueling/refueling will occur:

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

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.): _____ TDS concentration (mg/L): _____

Describe the source of this information:

- 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 _____ (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:

- Silt fencing Location: _____
- Straw wattles Location: _____
- Straw bales Location: _____
- Ditches/swales Location: _____
- Berms/dikes/dams Location: _____
- 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:

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:

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

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)
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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: _____

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 : _____

Financial Institution: _____

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.

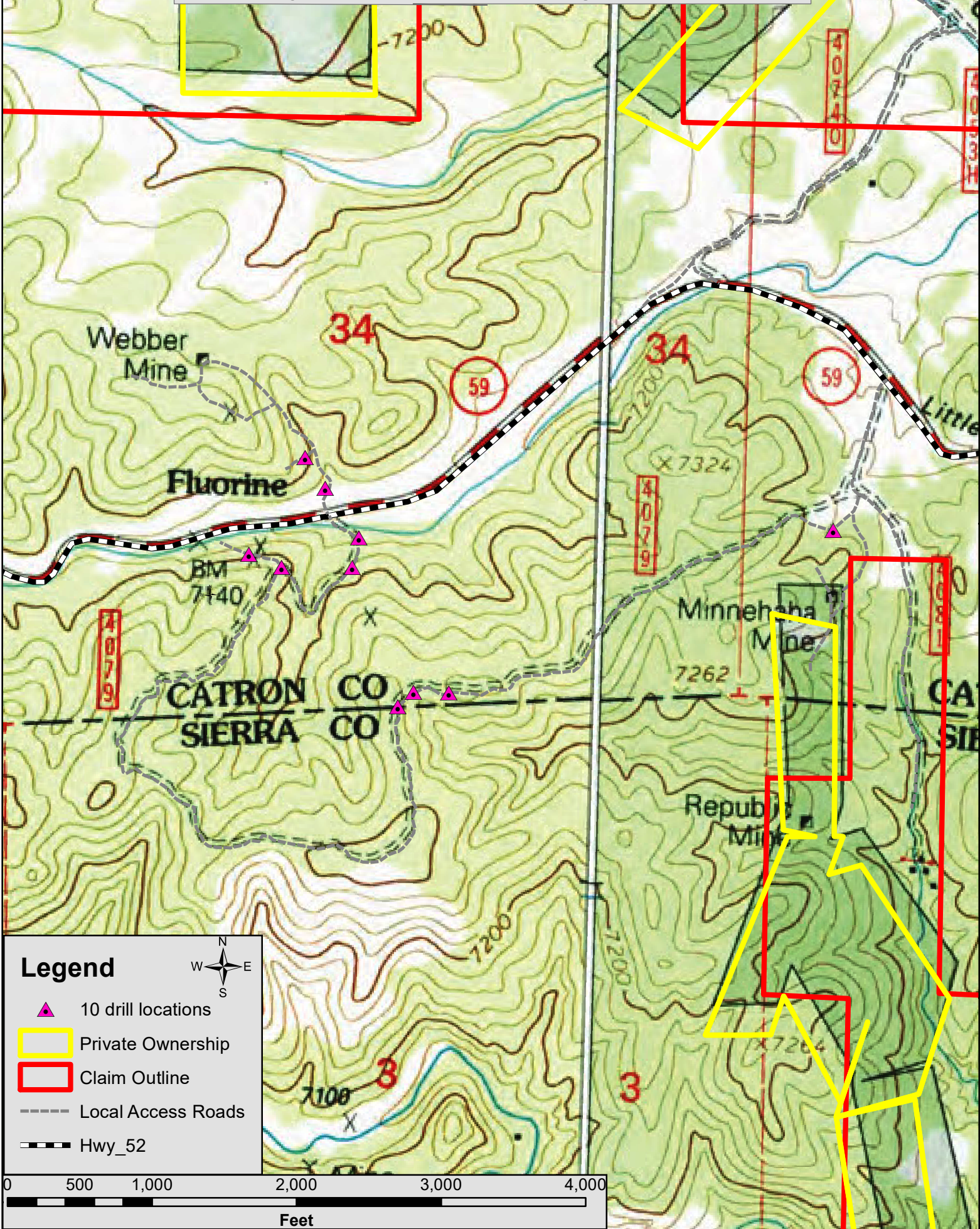
Signature of Permittee or Authorized Agent: _____

Name (type or print): _____

Title/Position: _____

Date: _____

CN Project, Catron County, New Mexico



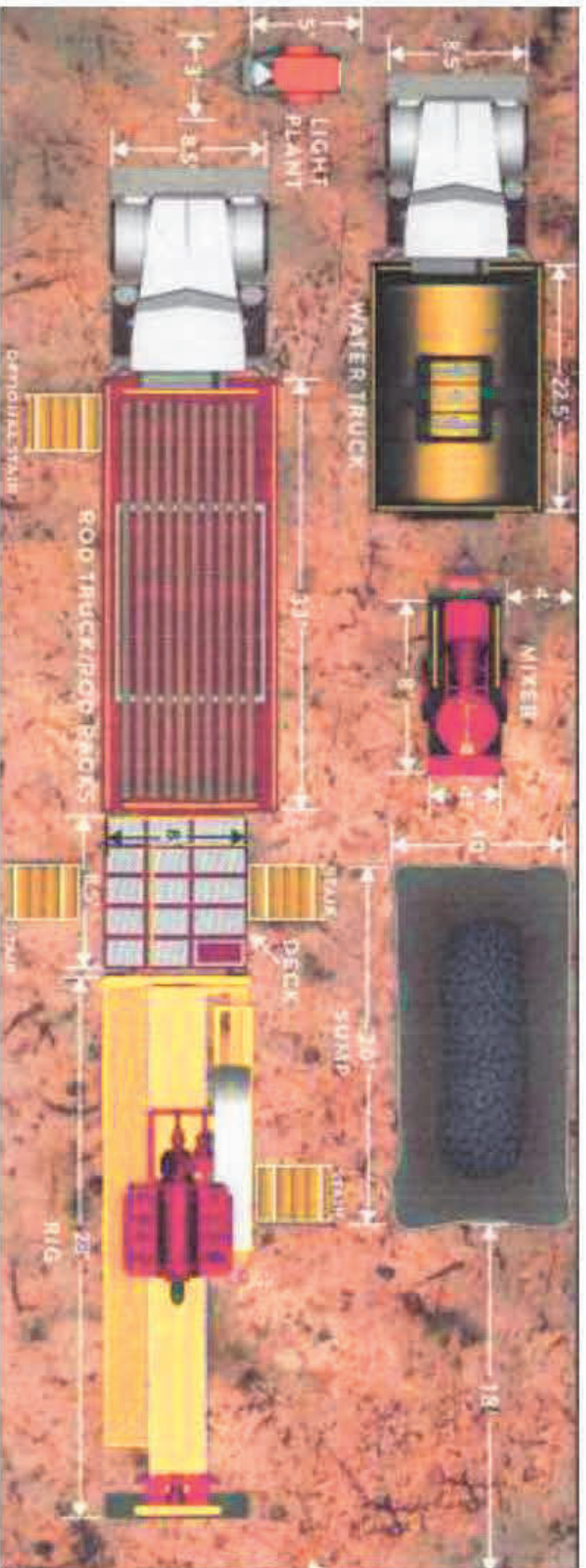


Figure 2. Typical sized, layout for a truck-mounted drill rig.