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 **X** 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 **X** No Surface disturbances for constructed roads, drill pads and mud pits **will exceed 5 acres** total for my project.

☐ Yes **X** 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 **X** 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 **X** 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 **X** No My project is located in a known cemetery or other burial ground.

☐ Yes **X** 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 **X** 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 **X** No My project is expected to use or using cyanide, mercury amalgam, heap leaching or dump leaching in its operations.

☐ Yes **X** 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 **X** 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 **X** 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: **Malone**

Nearest Town To Project: **Lordsburg, New Mexico**

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

Name: **Bronco Creek Exploration**

Address: **1815 E. Winsett St.**

Tucson, Arizona 85719

Office Phone: **(520) 624-4153** Cell Phone:

Fax Number: Email:

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

Name: **Caleb King**

Address: **1815 E. Winsett St.**

Tucson, Arizona 85719

Office Phone: **(520) 624-4153** Cell Phone: **(307) 871-1655**

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.

Bronco Creek Exploration has 253 unpatented lode claims at Malone where the surface ownership and administration are through the Gila National Forest. Exhibit A, which is attached, has the outline of the individual claims along with the individual claim numbers.

Attachment: **Exhibit A – Malone Project Lode Claims**

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		
X U.S. Forest Service	**USDA - Gila National Forest** **3005 E. Camino del Bosque** **Silver City, New Mexico 88061**	**(575) 388-8201**
☐ State of NM		
☐ Private/Corporate Name:		
☐ 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		
X Claim/Lease Holder	**1815 E. Winsett St.**	**(520) 624-4153**
Name: **Bronco Creek Exploration**	**Tucson, Arizona 85719**	
Claim Numbers: **KM 1-193, KM 258-261, KM 274-279, KM 290-295, KM 306-307, KM 314-318, KM 325-334, KM 338-347, KM 353-355, KM 360-370, KM 376-392**		
☐ Claim/Lease Holder		
Name:		
Claim Numbers:		
☐ Other		
Name:		

C. Has a Cultural Resource Survey been performed on the site?

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

This permit is being filed concurrently with the Gila National Forest who will conduct Cultural Resource Surveys for the areas of proposed exploration.

Attachment _____

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

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

This permit is being filed concurrently with the Gila National Forest who will conduct the required biological studies for the areas of proposed exploration.

Attachment _____

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

A. Project Location*:*

Township: **20S**_____ Range: **16W**_____ Section: **18,19, 20, 21, 30**

Township: **21S**_____ Range: **16W**_____ Section: **7**_____

Township:_____ Range:_____ Section:_____

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

I.D. Number	Northing / Latitude	Easting / Longitude
KM-P-1A	32°33'9.622"N	108°31'38.984"W
KM-P-2A	32°33'5.871"N	108°31'52.744"W
KM-P-3A	32°33'38.215"N	108°32'22.806"W
KM-P-4A	32°33'39.691"N	108°32'1.513"W
KM-P-5A	32°32'46.241"N	108°32'35.088"W
KM-P-6A	32°32'43.435"N	108°31'45.135"W
KM-P-7A	32°33'15.671"N	108°32'7.504"W
KM-P-8A	32°33'15.011"N	108°32'25.639"W
KM-P-9A	32°33'34.882"N	108°32'34.946"W
KM-P-10A	32°32"34.688"N	108°31'55.74"W
KM-P-11A	32°33'47.257"N	108°32'24.192"W
KM-P-12A	32°33'29.742"N	108°32'16.39"W
KM-P-13A	32°33'21.68"N	108°30'29.361"W
KM-P-14A	32°33'32.547"N	108°30'53.06"W

I.D. Number	Northing / Latitude	Easting / Longitude
KM-P-1B	32°33'9.622"N	108°31'38.984"W
KM-P-2B	32°33'5.871"N	108°31'52.744"W
KM-P-3B	32°33'38.215"N	108°32'22.806"W
KM-P-4B	32°33'39.691"N	108°32'1.513"W
KM-P-5B	32°32'46.241"N	108°32'35.088"W
KM-P-6B	32°32'43.435"N	108°31'45.135"W
KM-P-7B	32°33'15.671"N	108°32'7.504"W
KM-P-8B	32°33'15.011"N	108°32'25.639"W
KM-P-9B	32°33'34.882"N	108°32'34.946"W
KM-P-10B	32°32"34.688"N	108°31'55.74"W
KM-P-11B	32°33'47.257"N	108°32'24.192"W
KM-P-12B	32°33'29.742"N	108°32'16.39"W
KM-P-13B	32°33'21.68"N	108°30'29.361"W
KM-P-14B	32°33'32.547"N	108°30'53.06"W

Coordinate system used to collect GPS data points:

☐ NAD83 Geographic
☐ NAD83 UTM Zone 13 (or 12)
X 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:

X Yes – The boundary of the proposed exploration project Permit Area

X Yes – The proposed exploration locations (i.e., borehole locations)

X Yes – Existing roads, new roads and overland travel routes

X Yes ☐ N/A – Areas of proposed road improvement

Attachments: **Exhibits B, C and D – Maps of access routes, drill sites, drill hole locations, existing roads, areas of road improvements, and overland travel routes.**_____

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

X Yes – Drill pad dimensions and constructed drill pad locations

Attachments: **Exhibits B, C, and D – Maps of access routes, drill sites, drill hole locations, existing roads, areas, of road improvements, and overland travel routes.** _____

C. Provide detailed driving directions to access the site: **The primary route to the Malone project area is accessible from State Highway 90 that connects Lordsburg and Silver City, New Mexico. Access to the western portion of the property, which will be the primary focus for this exploration program, is made via Mill Canyon Road (FSR 859) which is located on the north side of State Highway 90 approximately 15.6 miles northeast of Lordsburg, New Mexico. The Bronco Creek project area extends from 2.5-5.0 miles north of Highway 90. A second access route, which services the eastern side of the property, is made via Gold Gulch Road which is located 21.4 miles northeast of Lordsburg, New Mexico along State Highway 90. The southernmost drill site is located 1.4 miles north of State Highway 90.**

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

A. Anticipated exploration: Start Date: **4/01/2021**_____ End Date: **8/31/2021**_____

B. List the mineral(s)/element(s) to be explored for: **Exploration will be conducted for base metals (copper, lead, zinc) and precious metals (gold and silver).**_____

_____

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._____

X Mud/Fluid Drilling (Diamond Drilling):

28 # of holes **5000** Depth (ft.) **2.5** Diameter (in.)

14 # of drill pads **~100** Length (ft.) **~100** Width (ft.)

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

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

How will drill pads be constructed? **Drill sites will be cleared mainly with hand tools, clearing the minimum amount of vegetation in order to accomplish safe drilling activities. Heavy equipment may be used (backhoe) to clear some larger vegetation where necessary; however, the drill sites were chosen on flat ground with the least amount of vegetation possible, so that blading or removal of topsoil will NOT be necessary.**

Will a closed loop system be used or will mud/fluid pits be used? **Sumps dug within the permitted drill site disturbance, will be used to contain drilling muds (mostly bentonite) and native rock cuttings. The sumps will be fenced off and contain a ramp for wildlife evacuation.**

If mud/fluid pits are proposed:

14 # of pits **40** Length (ft.) **20** Width (ft.) **10** Depth (ft.)

Anticipated excavating equipment: **Backhoe**_____

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

Equipment will be delivered to the site on a low-boy trailer.

Will mud pits be lined?: ☐ Yes **X** No

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

Approx. Weight of Drill Rig (lbs.): N/A Number of Axles: **Track Mounted Rig**

Anticipated Drilling Contractor: **Ruen Drilling Inc.** License No. **WD-1661**

☐ **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 = 3.038 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 **X** N/A

Will excess drill cuttings be buried at each drill site location or within a single disposal pit?
X 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 = __0__ acres
(to convert to acres, multiply total square footage of disposal pit by 0.0000229)

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

X	4x4 Trucks/Vehicles	Quantity:	**3-5 personnel trucks**
X	Water Truck	Weight (lbs.):	**1,500-3,000-gallon capacity**
☐	Geophysical Truck	Weight (lbs.):	
☐	Pipe Truck (rig support)	Weight (lbs.):	
☐	Bulldozer	Type:	
X	Backhoe	Type:	**Caterpillar or John Deer**
☐	Trackhoe	Type:	
☐	Scaper/Grader	Type:	
X	Trailers	Quantity/Type:	**2-4, 2 box trailers and 2 light duty trailers**
X	Portable Toilet	Quantity:	**2**
X	Other	List:	**1 forklift**

F. Roads and Overland Travel:

List of <u>new</u> roads to be constructed for this exploration project:

Description of *NEW* Roads	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)

TOTAL ACRES DISTURBED BY NEW ROAD CONSTRUCTION:			0

Describe how new roads will be constructed: **No new roads will be constructed for this exploration project.**

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)
Road Repairs	571	10	0.131
TOTAL ACRES DISTURBED BY ROAD IMPROVEMENTS:			**0.131**

Describe how existing roads will be extended or widened: **Existing Forest Roads will be preferentially utilized for drill pad access where possible with only limited maintenance to existing roads that is required to maintain basic safety standards. Road repairs will not exceed the existing prism of the roadway and repairs may include levelling of only severely uneven or rutted ground within the existing road footprint.**

List for routes of overland travel:

Description of *OVERLAND TRAVEL* Routes	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
Route for access to KM-P-02	91	10	0.021

Route for access to KM-P-08	3,052	10	0.701
Route for access to KM-P-09	1,190	10	0.273
TOTAL ACRES DISTURBED BY OVERLAND TRAVEL:			**0.995**

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.

A laydown yard located 0.28 miles north of State Highway 90 on the Mills Canyon Road (FSR 859) will be utilized for equipment staging and for the storage of equipment and materials. The area used for the project will be approximately 70 feet by 150 feet in size with an area of 0.253 acres. The location of the laydown yard can be seen on Exhibit B where it can be found on the southeast corner of the map as a green square.

No permanent structures will be constructed during this operation. However, operations taking place in extreme weather conditions may necessitate use of a tent or other small portable shelter located on the drill site in which drillers may take temporary shelter during their shift. These shelters would however be within the area of permitted disturbance on the drill sites or the laydown yard.

H. **TOTAL ACREAGE TO BE DISTURBED BY PROJECT = 4.164 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.

X	Drilling Mud (i.e., EZ Mud)	Type/Quantity:	Poly Plus RD – 40 Pails
X	Diesel Fuel	Quantity:	7,500 Gallons
X	Down-hole Lubricants	Type/Quantity:	30 Pails
X	Lost Circulation Materials	Type/Quantity:	20 Bags
X	Oils/Grease	Quantity:	25 Pails Rod Grease
X	Gasoline	Quantity:	200 Gallons
X	Hydraulic Fluid	Quantity:	20 Gallons
☐	Ethylene Glycol	Quantity:	
X	Cement	Type/Quantity:	10 Bags
X	Water	Source:	700,000 Gallons
X	Bentonite	Quantity:	650 Bags
☐	Fertilizer	Type/Quantity:	
☐	Other	Type/Quantity:	Platinum Pac – 40 Pails
			Soda Ash – 20 Bags
			Smooth Grout – 150 Bags

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

The drill rig and any other necessary vehicles will contain gasoline or diesel fuel, engine oil and/or hydraulic oil, as well as various other petroleum products in their respective internal tanks of various sizes. Other containers of these substances used for transportation and storage at the project site will be clearly labeled and include steel drums, pails, and vehicle-mounted tanks. Also, the storage of these materials will be limited to containment vessels which isolate the fluids from the ground. All

fuel storage tanks will be double walled and placed in secondary containments. Equipment utilizing hazardous substances will be placed on thick puncture resistant plastic sheeting with environmental hydrocarbon absorbent pads on top to prevent any potential leaks from contaminating the ground. Industry standard materials and additives will be utilized on the project and SDS sheets will be provided prior to the beginning of operations. Additionally, items such as bean pumps, trash pumps etc., will be placed in secondary containments. Fuel storage areas are non-smoking, fenced, signed, and checked daily for leaks and/or damage. All unused petroleum products will be removed from the site upon completion of the project; these will be recycled or disposed of at an approved location. Spill response kits will be available on site for any accidental spills.

All other materials including drilling mud, lost circulation materials, cement and bentonite will be stored in the labeled manufacturer's containers (bags, sealed buckets, etc.) which are stored on covered or plastic wrapped pallets in the laydown yard until they are used at the drill site. All unused materials will be removed from the site upon completion of the project.

The planned water source for the program is from municipal supply in the town of Lordsburg, NM. If the primary source is unavailable, or inadequate, BCE reserves the right to utilize an alternate water source (such as water from a private well). If an additional alternate water source is utilized, BCE agrees to obtain prior permission from the GNF, which may include testing of the alternative waters. It is anticipated that 2-4 loads of water will be trucked daily, between 7am and 7pm; water will only be trucked at night if necessary. The water will be stored in tanks located at the currently active drill site. Potable water may be sprayed on drill sites and any access roads, including overland routes, if necessary, to control dust.

C. Describe where equipment fueling/refueling will occur:
Fuel storage for this program will be at two locations including the active drill site and at the laydown yard. At the laydown yard a fueling station will be utilized as the primary source for diesel on the project and vehicle mounted tanks on trucks will used to transport and ultimately fuel the drill rig. A small fuel storage area at the active drill site will be used for 5-gallon cans of gasoline and diesel that are needed for the fueling of smaller equipment, pumps, and generators.

D. Describe how hazardous material spills/leaks will be handled:
In the unlikely event of an accidental spill or leak, mitigations will be conducted in accordance with state and federal guidelines. Chemical clean-up kits will be kept at the site, and spill buckets or catchment basins will be available to contain any petroleum product leaks, and actions will be taken to mitigate fire, explosion, and vapor hazards. Released materials and any contaminated materials including soils exposed above and below ground will be cleaned up for proper disposal. In the unlikely event a spill equals or exceeds its reportable quantity under CERCLA, we will notify the Forest Service, NM MMD, and NMED immediately.

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

- **X** Bentonite clay or cat litter
- **X** Adsorbent pads, rolls, mats, socks, pillows, dikes, etc.
- **X** Drum or barrel for containing contaminated soil/adsorbent materials
- **X** Other/list: Spill kits
- ☐ 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): **X** 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.): **N/A** TDS concentration (mg/L): **N/A**

Describe the source of this information: **At the time of the writing of this permit, there are no known sources of information that could be used to determine the depth of groundwater or the TDS concentration of the water.**

B. Will dewatering activities be conducted: ☐ Yes **X** No

If yes, please describe:

C. Is groundwater anticipated to be encountered during exploration: **X** 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? **X** Yes

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

Attachment **Copies of the completed WR-07 and WD-08 forms are attached.**

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.

X 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

X 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.

X 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:

Option 1 (wet boreholes) will be used for holes that encounter artesian groundwater. Option 2 (wet boreholes) and Option 4 (dry boreholes) will be used for holes that encounter no groundwater or non-artesian groundwater.

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: **X** Yes ☐ No

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

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

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

X 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

X 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:	
X	Berms/dikes/dams	Location:	**Berms, channels, and windrows may be used to prevent materials from leaving sites.**
☐	Sediment basins	Location:	
X	Other or N/A	Type/Location:	**All fluids and materials will be contained on the drill site and in the sump**

C. Wildlife Protection / Noxious Weed Prevention

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

Proposed pit perimeter fence material: **Sumps will be fenced off using 4-foot-wide safety fence.**

Describe how the pit perimeter fencing will be installed and secured (i.e., T-posts, wooden stakes, etc.):
Safety fence will be installed using T-posts inserted at regular intervals to keep the fencing material tight and secure. The safety fence will be attached to the T-posts using cable ties or baling wire.

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

D. Reclamation Details

Describe in general how re-contouring or re-establishment of the surface topography will be restored:
We have chosen drill sites based on geologic targets, but their exact placement is influenced by the presence of minimal vegetation to minimize the impacts and disturbance on each drill site. Some drill sites may require minor cutting of small trees/vegetation to allow for safe drilling operations. Rocks, stumps, dead and down trees, and other such obstacles may need to be temporarily relocated as well. Agave, pincushion, hedgehog, and saguaro cactus were avoided where possible for drill pad and route selection, however these will be transplanted if necessary, during constructing/clearing of drill pads and overland routes. These disturbances will be

addressed and replaced upon completion of the project. Slash and other tree cuttings will be scattered in such a manner as to evenly distribute them in the area, thereby minimizing the local impacts of such disturbance. Any areas of disturbance will be re-contoured with hand tools or through the use of a drag mat pulled behind a vehicle. In the case of the sumps, they will be allowed to dry and then refilled and recontoured using a backhoe. Stockpiled topsoil will then be put back onto the area of the sump and re-contouring of the area will be finished using hand tools and/or a drag mat. The disturbed areas will then be re-seeded using guidelines from and an approved seed mix from the Gila National Forest.

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

In the process of digging sumps for each drill site, topsoil will be stockpiled for later use in reclamation. Upon completion of the drilling the sumps will be allowed to dry and then refilled using a backhoe. The area will be re-contoured and then the stockpiled topsoil will be placed over the re-contoured area and final reclamation will be completed using hand tools and/or a drag mat pulled behind a vehicle. The area will then be re-seeded using the guidelines and approved seed mix from the Gila National Forest.

Access routes into each of the drill sites will be dealt with according to the type of access. Roads that were used during the drilling will be fixed if necessary and in areas where road repairs were made, they will be left in place for the publics use. If the roads were originally blocked by the USFS, the barricades will be replaced to prevent unauthorized use of the roads. Overland routes will be reclaimed in the same fashion as the drill sites where hand tools and/or drag mats will be used to re-contour the disturbed area and if necessary, a backhoe will be used for reclamation. The areas will then be re-seeded using the guidelines and approved seed mix from the Gila

National Forest.

Pre-existing portals, adits, and shafts will not be reclaimed as a part of this program.

Is seeding of the reclaimed areas proposed: **X** 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:

X 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: **X** 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
X Chain drag or tire drag over seeds in areas used for overland travel
X 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/disced or ripped at a rate of 2 tons per acre, and will be crimped in place

X 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:

X Yes ☐ No

Anticipated Start of Reclamation:

X 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: _____

Or

X 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
X 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.

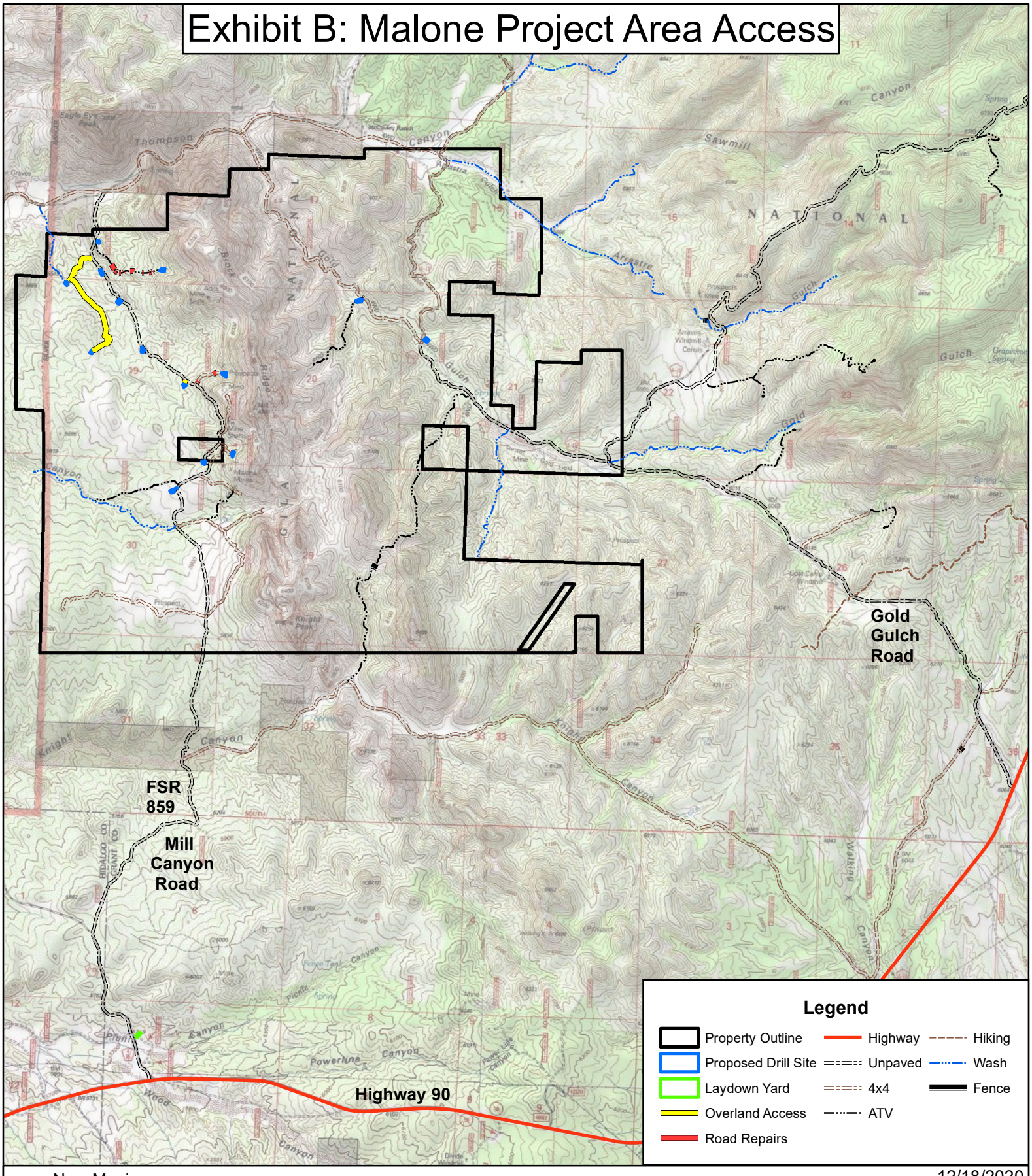
Signature of Permittee or Authorized Agent: _____

Name (type or print): Caleb King_____

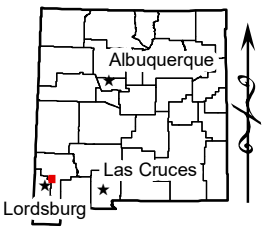
Title/Position: Senior Geologist – Bronco Creek Exploration_____

Date: 02/05/2021_____

Exhibit B: Malone Project Area Access



New Mexico



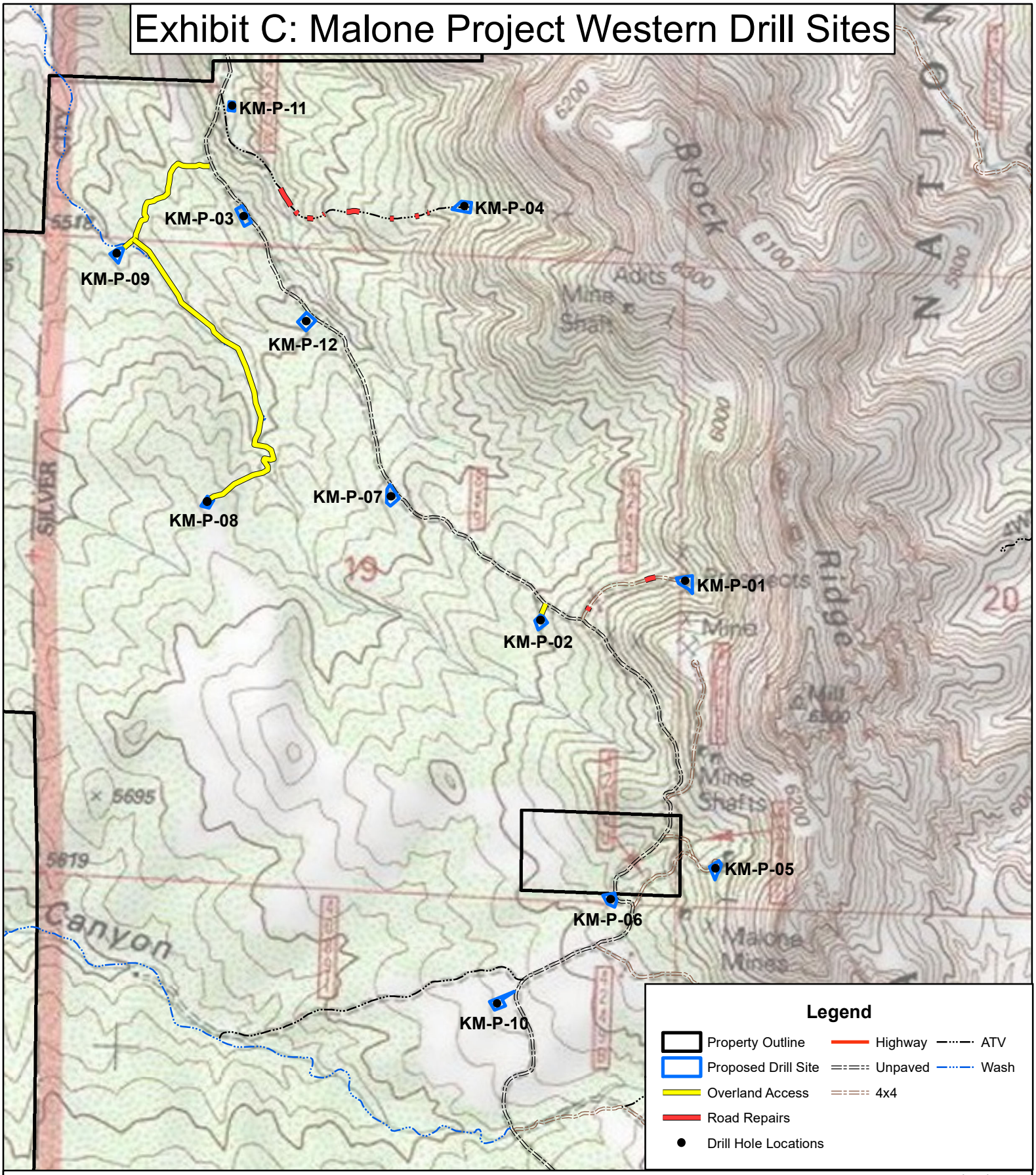
0 500 1,000 2,000
Meters

12/18/2020

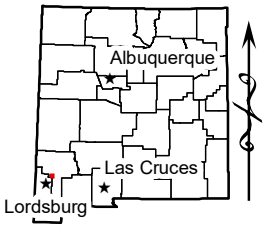
253 federal unpatented lode claims - 4,405.85 acres
Located in Township 20S, Range 16W, Sec. 16-22, 27-34,
New Mexico Base and Meridian, Grant County, New Mexico
Base from USGS Eagle Eye Peak and Burro Peak 7.5 minute 24k quadrangles

Document Path: Z:\Documents\EMX_Malone\Plan of Operations\Malone_Permits.mxd

Exhibit C: Malone Project Western Drill Sites



New Mexico



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Meters

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