Part 3 MINIMAL IMPACT EXPLORATION OPERATION

PERMIT APPLICATION

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

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

🗌 Yes	x No	My project <u>will exceed 1000 cubic yards of excavation</u> , 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 <u>will</u> <u>exceed 5 acres</u> 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 <u>yes</u> to any of the above questions, your project <u>does not</u> qualify as a minimal impact exploration operation.

- X Yes 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."
 - 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: Lordsburg Playa Lithium in Brine Exploration Drilling				
Nearest Town To Project: <u>Lordsburg, NM</u>				
Applicant Name and Contact Information (entity	obligated under the Mining Act):			
Name: Frank Bain				
Address: 2425 Chof Trail , Flagstaff, AZ 8600	5			
Office Phone:	Cell Phone: 307-231-1404			
Fax Number:	Email: frankbain7@aol.com			
Name of On-Site Contact, Representative, or Consultant:				
Name: Robert Consoni				
Address: 29638 N 46 th Street, Cave Creek, Arizona 85331				
Office Phone:	Cell Phone: 602-478-2733			
Fax Number: Email: reconsoni2252@gmail.com				

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

- A. Describe or attach copies of documents that give the applicant the right to enter the property to conduct the exploration and reclamation, include: lease agreements, access agreements, right of way agreements, surface owner agreements, and claim numbers, if applicable.
 - 1. LBP 1 to LBP 238 are Federal Lode Mining Claims all located on BLM managed land

that includes both surface and mineral estate.

- 2. New Mexico State Land Office Right of Access Permit Number: 6531 Lordsburg Playa
- 3. Kinder Morgan ROW Agreement

4. BLM Statement authorizing use of KM ROW

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 #				
X Bureau of Land Management	Frank Bain - Claim Owner	307-231-1404				
U.S. Forest Service						
State of NM						
Private/Corporate						
Name:						
Lease Holder(s) of Surface Estate (if applicable):						
Name	Address	Phone #				
Mineral Estate Owner(s):						
Name	Address	Phone #				
X Bureau of Land Management	Frank Bain, Claim Owner	307-231-1404				

US Forest Service		
☐ State of NM		
□ Claim/Lease Holder		
Name: Frank Bain		
Claim Numbers: LBP 1 to LBP 238 -	Pending	
 C. Has a Cultural Resource Survey D. X Yes. If yes, please provide the the survey with this application, Cultural Affairs, Historic Preservation 	been performed on the site? author, title, date and report number, if possible: Bob Estes PhD, Archaeo ation Division, November 2, 2017	and include a copy of logist, Department of

Attachment <u>1</u>

- E. Has a wildlife survey or vegetation survey been performed for the permit area?
- F. X Yes. If yes, please provide the author, title, date and report number, and include a copy of the survey with this application, if possible: Chuck Hayes, Assistant Chief, Ecological and Environmental Planning Division, State of New Mexico Department of Game and Fish, November 20, 2017

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

Township 23 S 17, 18, 19, 20, 21, 22	Range <u>20W</u>	Sections: 7, 8, 9, 10, 15,
Township	Range	Section
Township	Range	Section

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

I.D.		Easting /	I.D.		Easting /
Number	Northing / Latitude	Longitude	Number	Northing / Latitude	Longitude
			1	3577525	694625
			2	3575990	693243
			3	3577575	695800
			4	3576210	695525
			5	3574425	695400
			6	3577860	696920

Coordinate system used to collect GPS data points:

NAD83 Geographic
NAD83 UTM Zone 13 (or 12)
WGS 1984

NAD27 Geographic X 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
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x	Yes – The proposed exploration locations (i.e., borehole locations)
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x Yes – Existing roads, new roads and overland travel routes

x Yes N/A – Areas of proposed road improvement

Attachments Map 1

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 <u>Map 1</u>

C. Provide detailed driving directions to access the site: <u>Begin at the West Motel Drive</u> <u>Interchange in Lordsburg, NM, proceed west for 17 miles to the Steins Exit, mile marker 2.</u> <u>Turn north onto the County Road, cross the railroad tracks and proceed for 6 miles to the</u> <u>Kinder Morgan Pipeline ROW Road, then turn east.</u> Follow the two track road to the BLM <u>gate and entrance to the project area.</u> Please refer to the attached map.

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

A. Anticipated exploration: Start Date: Fall 2023 or Winter 2024_End Date: Spring 2024_____

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

C. Proposed method(s) of exploration:

x Air drilling (air rotary, coring, etc.): Hole will be started with air and probably completed with foam or mud

6	# of holes	<u>500</u> De	epth (ft.)	6	Diam	eter (in.)		
6	# of drill pads	75	_Length	(ft.)	<u>40 </u> W	/idth (ft.)		
Will drill pa	Will drill pads be graded/bladed or overland: \Box Graded/bladed x \Box Overland							
Will drill pads need some mechanical leveling (grading/blading): \Box Yes $x\Box$ No								
Approx. Weight of Drill Rig (lbs.) Number of Axles: 3								
Total length of drill stem that can be carried on the rig:								
ls a suppo	ort pipe truck anticip	oated? X Ye	es 🗌	No		Weight (lbs.)		

Weight of support of	Weight of support compressor (lbs.):Trailer mounted? Yes						
Anticipated Drilling	Contractor:		License I	No			
—							
Mud/fluid drillin	g:						
<u> </u>	es	<u>500</u> Depth (ft.)	6 inch	Diameter (in.)			
<u> </u>	l pads	<u>75</u> Length (fi	<u>) 40 </u> Width	ו (ft.)			
Will drill pads be gr	aded/bladed or ove	erland? Ove	rland				
Will drill pads need	some mechanical	leveling (grading	/blading)? No				
Will a closed loop s	ystem be used or	will mud/fluid pits	be used? <u>Mud</u>	pits			
If mud/fluid pits are	proposed:						
<u>6</u> # of pits	s <u>10</u> Leng	th (ft.) <u>6</u>	Width (ft.) 8	Depth (ft.)			
Anticipated exc	cavating equipmen	t: <u>Backho</u>	е				
How will excav	ating equipment b	e transported to t	he site (i.e., driver	ı, low-boy, etc.):			
<u>Flatbed</u> trailer driven to the d	to where county i ill site	oad intersects K	inder Morgan Pip	eline ROW, then			
Will mud pits b	e lined? No						
lf yes, p	proposed material	to line the mud pi	ts:				
Approx. Weight of [Drill Rig (Ibs. <u>)</u>		Number of A	xles: <u>3</u>			
Anticipated Drilling	Contractor:		License l	No			
Test pits / explo	ratory trenches	:					
<u>0</u> # of pits	Length	(ft.)	_Width (ft.)	Depth (ft.)			
Anticipated excavat	ing 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: <u>None</u>

TOTAL ACREAGE	TO BE [DISTURBE	D DUE TO	D DRIL	L PADS	S = _	.41	a	icres
(to convert to acres,	, multiply	total squar	e footage	of drill	pads by	0.0	000229)		

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. \Box Yes \Box 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 locationX Within a single disposal pit

If a <u>single disposal pit</u> 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):

<u>10</u> Length (ft.) <u>6</u> Width (ft.) <u>8</u> Depth (ft.)

TOTAL ACREAGE TO BE DISTURBED DUE TO DISPOSAL PIT = <u>.065</u> acres (to convert to acres, multiply total square footage of disposal pit by 0.0000229)

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

х	4x4 Trucks/Vehicles	Quantity:	3
x	Water Truck	Weight (lbs.):	1
х	Geophysical Truck	Weight (lbs.):	1
х	Pipe Truck (rig support)	Weight (lbs.):	1
	Bulldozer	Туре:	
х	Backhoe	Туре:	1
	Trackhoe	Туре:	

х	Scraper/Grader	Туре:	1
	Trailers	Quantity/Type:	
Х	Portable Toilet	Quantity:	1
	Other	List:	

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 C			

Describe how new roads will be constructed: <u>Roads will be 2 track overland; no construction is</u> anticipated.

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)
			0
TOTAL ACRES DISTURBED BY ROAD I	0		

Describe how existing roads will be extended or widened: N/A

List for routes of <u>overland travel</u>:

Description of OVERLAND TRAVEL Routes	Length (ft.)	Width (ft.)	Total Acres (length x width x 0.0000229)
Cross country travel to the drill sites 3 to 6 from the nearest point off of the existing 2 track road.	10,000	12	2.75
TOTAL ACRES DISTURBED BY OVERLAND TRAVEL :			2.75

G. Support Facilities

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

None

H. **TOTAL ACREAGE TO BE DISTURBED BY PROJECT =** <u>3.225</u> 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.

v		T (0)''	
Х	Drilling Mud (I.e., EZ Mud)	Type/Quantity:	
Х	Diesel Fuel	Quantity:	
	Down-hole Lubricants	Type/Quantity:	
Х	Lost Circulation Materials	Type/Quantity:	
Х	Oils/Grease	Quantity:	
Х	Gasoline	Quantity:	
Х	Hydraulic Fluid	Quantity:	
	Ethylene Glycol	Quantity:	
Х	Cement	Type/Quantity:	
Х	Water	Source:	
Х	Bentonite	Quantity:	
	Fertilizer	Type/Quantity:	
	Other	Type/Quantity:	

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

Chemicals will only be present in small amounts and will be stored in a safe area in leak proof containers. Chemicals will be used as per the manufacturers' instructions. No

used oil or other fluids will be disposed of onsite.

C. Describe where equipment fueling/refueling will occur: <u>Refueling will occur onsite for the drill rig, water truck, and backhoe.</u>

D. Describe how hazardous material spills/leaks will be handled: <u>Spill mats will be present on site</u>. In the event of a spill contaminated soil will be removed and

taken to an appropriate landfill or disposal facility.

- 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
 - 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.): 150' ?_____ TDS concentration (mg/L): <u>High > 10,000</u>

Describe the source of this information: Well head sign that says "150 FEET DEEP TOO

SALTY FOR HUMAN OR LIVESTOCK USE" and a State Engineers Office Report

Β.	Will dewatering activities be conducted:	🗌 Yes	X No
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If yes, please describe:			

C. Is groundwater anticipated to be encountered during exploration: X Yes 🗌 No

If <u>YES</u>: Non potable

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 <u>2 and 3</u> (copies of the completed WR-07 and WD-08 forms)

D. Exploration Borehole Abandonment

Dry Boreholes

- Dry hole abandonment (option 1): 100% bentonite pellets/chips (i.e. HOLEPLUG® manufactured by Baroid Industrial Products), dropped from surface then hydrated in place according to the manufacturer's recommendations, emplaced from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.
- Dry hole abandonment (option 2): Neat cement slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- Dry hole abandonment (option 3): Cement + 6% bentonite slurry, mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 2 feet of the original ground surface, followed by 2 feet of topsoil/topdressing.
- □ Dry hole abandonment (option 4): High-density bentonite clay (≥ 20% active solids; i.e. QUIK-GROUT® manufactured by Baroid Industrial Products), mixed according to the manufacturer's recommendations, emplaced with a tremie pipe from total depth to within 12 feet of the original ground surface, followed by 10 feet of neat cement, followed by 2 feet of topsoil/topdressing.

Dry hole abandonment (option 5): Other materials / describe and justify use:

Wet Boreholes

X <u>Wet hole abandonment (option 1)</u>: 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.

<u>Wet hole abandonment (option 2):</u> 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.

<u>Wet hole abandonment (option 3):</u> Other sealing material approved by the Office of the State Engineer. Describe and include well plugging plan approval by the State Engineer:
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
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- D. Is any drilling proposed to occur <u>within the channel</u> of any perennial, intermittent, or ephemeral streams? X No
- E. Is any drilling anticipated to occur <u>within 100 feet</u> of any perennial, intermittent, or ephemeral streams? X No

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

A. Salvage/Preservation of Topsoil

Before any grading/bladii	ng or similar activities occur in relation to this project, operator
agrees to salvage and pr	eserve all topsoil and topdressing for use in future reclamation of
this project 🛛 Yes	X 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 pa

- Excavated from road improvements/construction and stored adjacent to road
- Excavated from mud/fluid pits and storage at each pit

Other, describe:	No top soil is	present, only	y dry lake pla	aya sediments	that does not
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sup	opo	rt ve	geta	tion.
_	_		_	

B. Erosion Control

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

	Silt fencing	Location:	
	Straw waddles	Location:	
	Straw bales	Location:	
	Ditches/swales	Location:	
	Berms/dikes/dams	Location:	
	Sediment basins	Location:	
х	Other or N/A	Type/Location:	No erosion is possible at drill locations because of flat topography

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: <u>Plastic fencing</u>
	Describe how the pit perimeter fencing will be installed and secured (i.e., T-posts, wooden stakes, etc.): T- posts
	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 \Box No
	Applicant/Owner/Operator commits to pressure-washing or steam-clean all equipment prior to entering the permit area: X Yes INO
D.	Reclamation Details
	Describe in general how re-contouring or re-establishment of the surface topography will be restored: Drill sumps and sites will be flattened and recontoured if necessary.

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: If no, provide a justification as to why no revegetation is needed: Activities will take place on an essentially barren or sparsely vegetated salty playa lakebed surfaces, alluvial gravels and sand dunes. 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:	roadcast Drill-seeded
Scarification Methods (check all that app Primary tillage to greater than 6-inche Secondary tillage of all constructed dr Chain drag or tire drag over seeds in a Light raking of soil over seeds in area	ly): es depth of all constructed drill pads and roads rill pads and roads, and/or overland travel routes areas used for overland travel s used for overland travel

	Other/	/descr	ibe:
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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

X Cash Account / Certificate of Deposit

Estimated amount of financial assurance:

Or

Applicant will provide the amount of financia	al assurance calculated by MMD.
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B. Attach the permit fees as determined pursuant to Subpart 2. The application fee for a minimal impact exploration permit is \$500.00.

X Money Order/Cashier's Check

Check Number : _____

Financial Institution: Bank of America

SECTION 9 – CERTIFICATION REQUIREMENT (§302.1.3 & 4)

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

Signature of Permittee or Authorized Agent: Frank Bain - Electronic signature

Name (type or print): Frank Bain

Title/Position: Registered Professional Geologist – Lordsburg Project Manager

Date: July 6, 2023