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APR 08 2022



COMMISSION ON MINERAL RESOURCES DIVISION OF MINERALS

STATE OF NEVADA
COMMISSION ON MINERAL RESOURCES
400 W. King Street, Suite 106
Carson City, Nevada 89703
(775) 684-7040 | Fax (775) 684-7052
http://minerals.nv.gov

Date Received
County
NDOM Permit Number
FOR DIVISION USE ONLY

DISSOLVED MINERAL RESOURCE EXPLORATION WELL PERMIT APPLICATION

Applicant/Operator Name: Lone Mountain Resources, LLC. (LMR)
Street Address: 1700, 20th Street
City: Oakland State/Prov.: California
Country: United States of America Zip Code: 94607

hereby makes application for a dissolved mineral resource exploration well permit.

(if applicant is a corporation, show state and date of incorporation; if a partnership, list names of partners.)

LMR is a wholly owned subsidiary of Gibbs Development Corporation, LLC, which is a Delaware limited liability company formed on April 14, 2020.

Well Name: Alkali Lake 1

This application is for a:
[Checked] New Exploration Well [Checked] Borehole to Well Conversion
[] Permit Extension (NDOM Permit #) (Indicate below any changes to original permit)
Permit Extension Reason:

Applicant is: [Checked] Land Owner [Checked] Lease/Claim Holder

Land Status (choose one):

[Checked] Federal (BLM, USFS, etc...)
Mining Claim: NMC# NV101958829
Project Name: Alkali Lake NVN# 101165

[] Non Federal
APN#: Land Owner:
Bond Type: Issued by:
Amount: Number:

Groundwater Basin Name and Number: Alkali Spring Valley 142
Area With Limitations? [Checked] Y [] N
(Well proposed to be drilled within areas with limitations may require Blowout Prevention Equipment, per NAC 534B)

Location of Well:

County: Esmeralda
SW 1/4 of the NW 1/4 of 8 Sec., Township 1 N S, Range 41 E

UTM East: 464374 or Longitude:
UTM North: 4191467 Latitude:
[Checked] NAD83 [] WGS84 M.D.B. & M.

Drilling Contractor (if known): Harris Exploration Drilling & Associates, Inc.

Address: 19 Sheckler Cutoff

City, State Zip: Fallon, Nevada 89406

Purpose of Well: Dissolved mineral resource exploration

Drill Rig Type: Maxi drill core rig, or equivalent drill setup

Surface Hole Diameter: 20", then 10 3/4", 6 1/4 " Casing Size/Length: 16" for 50', 7 5/8" for 150'

Expected Total Depth: 1,800 feet Casing Weight/Gauge: Weight: 26.4lbs/ft

Casing Schedule/Grade: Grade: J-55

Blowout Prevention Equipment Rating: None 2000 psi 3000 psi 5000 psi

Fluid Management Plan - NAC 534B.140(1)(C):

Please see specifications included in Attachment 2.

(Describe Here or Attach Additional Pages)

Contamination Prevention/Cementing Plan - NAC 534B.140(1)(D):

Please see specifications included in Attachment 2.

(Describe Here or Attach Additional Pages, must include Well Schematic)

Flow Monitoring and Plugging Plan - NAC 534B.140(1)(E):

Please see specifications included in Attachment 2.

(Describe Here or Attach Additional Pages)

Drilling will commence approximately on: mid April through late May 2022

Signature of Applicant/Agent: 

Printed Name/Title: Thomas Wilson

Date: March 29, 2022

An application submitted without a signature and date will not be considered for approval.

-----Attach \$1,000.00 Application Fee Per NAC 534B-----

----- TO BE COMPLETED BY DIVISION -----

CONDITIONS OF PERMIT

1. All permittees must comply with appropriate sections of the Dissolved Mineral Resource Regulations of the Division of Minerals and with applicable rules and regulations of state and federal agencies.
2. For a well located on non-federal land, a bond in an amount determined by the Division to be necessary to properly plug the well in accordance with NAC 534B must be included.
3. Well Permit Expires two (2) years from date of approval.
4. See attached Conditions of Approval.
5. Send any required reports to: ndom@minerals.nv.gov
6. Additional Conditions/Comments

A.	
B.	
C.	

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal, and local agencies.

PERMIT APPROVAL

Approved _____ with the conditions noted above.
Date

Permit Number _____

Administrator
Division of Minerals



March 30, 2022

via Federal Express (7764 4468 5363)

Mr. Cortney Luxford
Fluid Minerals Program Manager
Nevada Division of Minerals
400 West King Street, Suite 106
Carson City, Nevada 89703

RE: Dissolved Mineral Resource Exploration Well Permit Application for Lone Mountain Resources, LLC.'s Alkali Lake Exploration Project, Esmeralda County, Nevada

Dear Mr. Luxford:

Enclosed please find the \$1,000.00 application fee (per Nevada Administrative Code 534B) and Dissolved Mineral Resource Exploration Well Permit Application (Application) prepared by EM Strategies, a Westland Resources Inc. Company (EMS) for Lone Mountain Resources, LLC. (LMR's) Alkali Lake Exploration Project (Project). Please provide EMS with a courtesy copy of all correspondence for the Project. If you have any questions or need additional information, please contact our office at (775) 826-8822 or via email at ksweet@westlandresources.com.

Sincerely,

EM Strategies, Inc.

A handwritten signature in blue ink that reads 'K Sweet'.

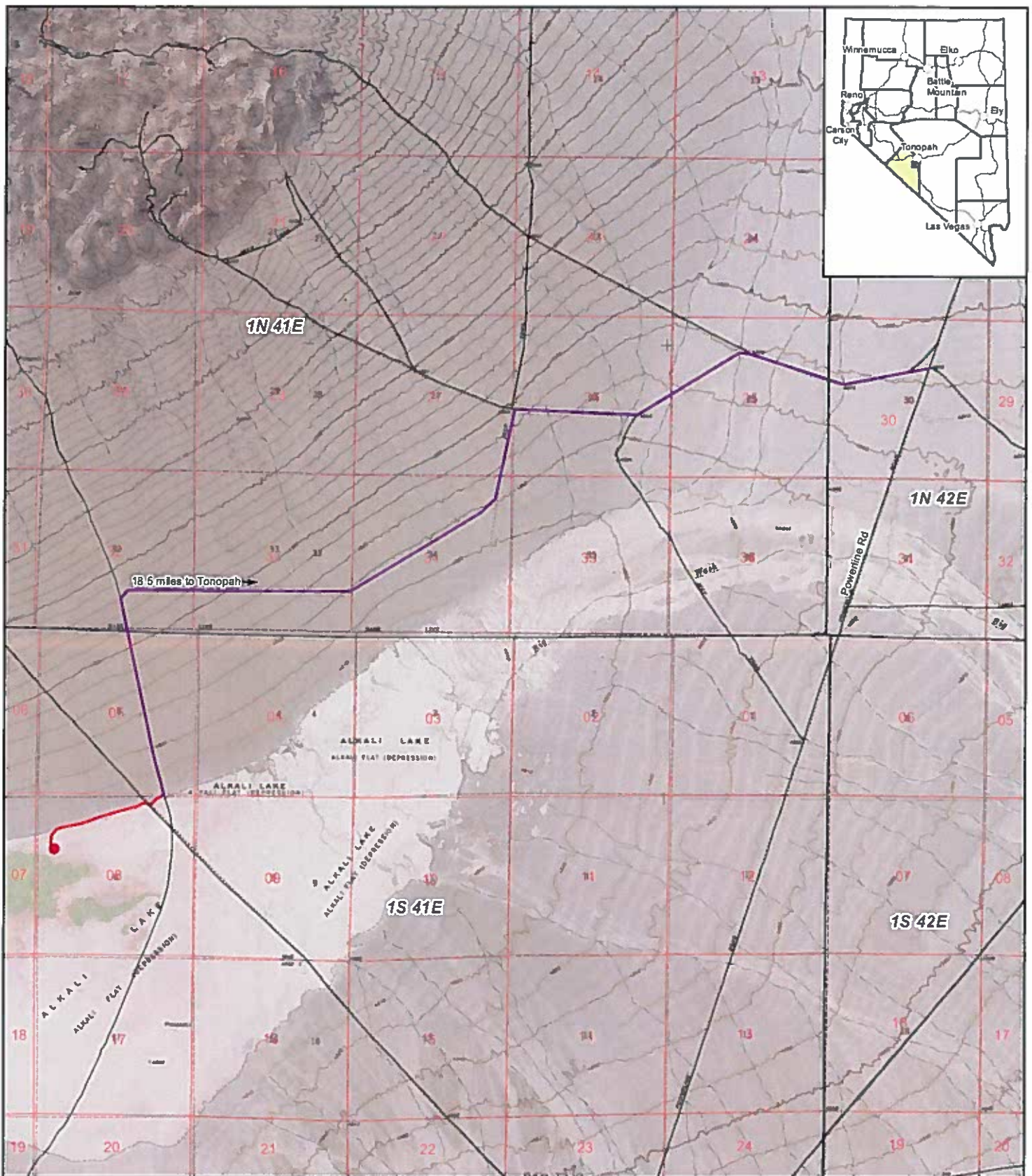
Kaitlin C. Sweet
Senior Environmental Specialist

Enclosure: Check No. 18329

cc: Mr. Michael Winter - LMR w/enclosure via email: michael.winter.22@gmail.com



Attachment 1
Location Figure and Well Design



- Explanation**
- Existing Road
 - Existing Access
- Planned Activities**
- Drill Site (1)
 - Constructed Road (4,615 feet)

Land Status: All BLM

LONE MOUNTAIN RESOURCES, LLC

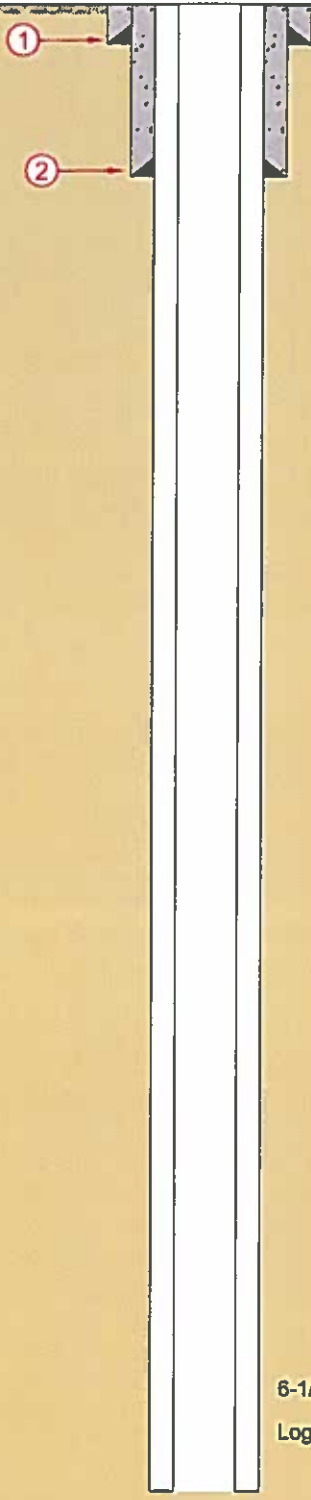
**ALKALI LAKE 1
EXPLORATION PROJECT**

Project Location, Access,
Planned Activities and Land Status



Label: Figure 1
 Date: 02/25/2022
 Base Map: USGS 100k quad: Goldfield
 File Name: 4606T AlkaliValley Fig 1 Notice.mxd





Casing Information		
Label	1	2
Type	Conductor	Surface
Hole Size	20"	10-3/4"
Casing Size	16"	7-5/8"
Weight	-	26.4 lb/ft
Grade	-	J-55
Depth	50'	150'
Top of Cement	Surface	Surface

6-1/4" Hole from 150' to 1,800'
 Log Interval from 150' to 1,800'

TD @ 1,800'

LONQUIST FIELD SERVICE	Uncompahgre Ventures	Lithium Test Well - Well Design	
	Country: USA	State: Nevada	County/Parish: Esmeralda
	Serial: N/A	API (Status): N/A (Proposed)	RKB to GL: N/A
	Field: N/A	Location: Alkali Lake - 1	Lat/Long: N/A
TX License F-9147	Section: N/A	Township: N/A	Range: N/A
12912 Hill Country Blvd. Ste F-200 Austin, Texas 78738 Tel: 512 732 9812 Fax: 512 732 9816	Spud Date: N/A	Completion Date: N/A	Revision Date: 2/21/2022
	Drawn: ELR (2/21/2022)	Reviewed/Approved: RSC (2/21/2022)	Notes:

Attachment 2
Additional Details for the Drilling of
Lone Mountain Resources, LLC
Alkali Flat 1

Additional Details for the Drilling of Lone Mountain Resources, LLC – Alkali Lake 1

Project Description:

Lone Mountain Resources, LLC (LMR) is proposing to conduct mineral exploration activities at the Alkali Lake Project (Project) located in Section 8, Township 1 South (T1S), Range 41 East (R41E), Mount Diablo Base and Meridian, Esmeralda County, Nevada (Project Area). LMR plans to conduct exploration drilling and groundwater chemistry characterization from one aquifer Exploration Test Well (ETW), which will be accessed almost entirely from an existing road network as shown in the attached area map. The ETW is proposed to be drilled to a Total Depth (TD) of 1,800 feet. The total planned surface disturbance associated with the Project will be approximately 2.0 acres.

Proposed Exploration Disturbance:

Disturbance will include existing access roads, one drill pad and sump complex, and approximately 4,615 linear feet of newly constructed road. The drill pad will be constructed with the approximate disturbance dimensions of 150 feet long by 100 feet wide and will be covered in gravel. Up to three sumps may be constructed in sequence with the individual dimensions (including the material piles) of 50 feet long by 20 feet wide, with total sump volume of 150 cubic yards, and will be constructed next to the disturbance footprint of the drill site to contain drill cuttings and manage drilling fluids.

Approximately 4,615 linear feet of new road will be constructed to access the proposed drill site location. The location of the ETW, existing access and total planned surface disturbance are shown on the figure in Attachment 1 of this Application.

The Standardized Reclamation Cost Estimator, Version 1.4.1 Build 17b, and including 2021 cost data was used to generate the required reclamation cost estimate (RCE) included in the Notice.

Description of Planned Operations:

Limitations on Location of Well; Application for Exception (Nevada Administrative Code [NAC] 534B.145):

The ETW is located in the Alkali Spring Valley Basin 142, which is “within a boundary designated by the Division as an ‘area with limitations,’ as delineated on the map maintained by the Division and titled, “Oil, Gas, and Geothermal Resources and Groundwater Basins with High Temperature Gradients” available on the Internet website of the Division, per NAC 534B.145.2”. The proposed depth of the ETW is 1,800 feet and is therefore not subject to the blowout prevention requirements for wells proposed to depths of 3,000 feet and deeper. As consistent with these regulations, LMR will implement the following stipulations and mitigation measures during the Project:

- Temperature of the mud that is returned up the hole will be monitored continuously by the operator during the drilling of the well whenever temperatures of the drilling fluids at the surface reach 125 degrees Fahrenheit. The temperature of the mud will be recorded by the well driller after each string of casing is installed.

Fluid Management Plan (NAC 534B):

Water will be purchased from a nearby, privately-owned water well or from the town of Tonopah. Drill cuttings and mud will be maintained within the mud system of the rig. Multiple sumps will be constructed next to the disturbance footprint of the drill site to contain drill cuttings and manage drilling fluids. See

Attachment 1 of this Application for a general depiction of the well design. Best Management Practices (BMPs) for sediment control will be utilized during construction, operation, and reclamation to minimize sedimentation from disturbed areas. Sediment control structures are outlined under Section 8 of the Notice.

Contamination Prevention/Cementing Plan (NAC 534B.160):

The first 50 feet of the borehole will have a diameter of 20 inches with a 16-inch diameter conductor casing set 18 inches above the ground surface. Between 50 to 150 feet below ground surface (bgs) the borehole will have a diameter of 10 ¾ inches with a 7 ½-inch diameter surface casing. The surface casing will control formation fluids and protect groundwater. This casing plan ensures that casing will be set below all known or reasonably estimated levels of good quality water, protect freshwater aquifers and prevent blowouts or uncontrolled flows. A surface seal with a minimum length of 50 feet will be set using neat cement. The liner of the intermediate string of casing will overlap the bottom of the surface casing string by a minimum of 100 feet. The depth to fresh water in the vicinity of LMR's proposed drilling is reviewed in *Open-File Report 81-962: Lithology and Lithium Content of Sediments in Basin Surrounding Clayton Valley, Esmeralda and Nye Counties, Nevada*, completed by the United States Geological Survey in 1981. The report includes results from two test wells drilled in Alkali Valley where no fresh water was referenced, and lithium brine was noted to be analyzed at depths of 100 feet. Therefore, LMR believes the cased length of 150 feet is a conservative measure for preventing potential freshwater aquifer contamination. The proposed well design is included in Attachment 1 in this Application.

From 150 feet bgs to the maximum TD of 1,800 feet, the borehole will be open. In order to isolate zones of varying water quality and prevent migration of formation fluids between disparate aquifers, LMR will take a number of preventative measures including utilizing bentonite clay-based drilling mud. LMR and its contractors will also consistently monitor the flow of fluid to ensure no remedial measures are required after drilling operations have begun to prevent unwanted vertical migration of formation fluid. In the event the envisioned open hole design construct is not able to adequately control/mitigate the migration of formation fluid between discrete water quality/aquifer zones, LMR will coordinate with the Nevada Division of Minerals (NDOM) to incorporate different methods or abandon the ETW in an expedited fashion per pursuant to NAC 534B.180.

LMR will maintain open communication with the NDOM in real-time regarding results from drill cuttings and wireline logging analysis and will be cooperative in the event NDOM recommends any immediate remedial or corrective measures be taken during the drilling process. LMR is committed to working closely with the relevant regulatory authorities in all respects and will heed the advice of the authorities with respect to any corrective/remedial measures and/or expedited abandonment timelines ultimately required by the authorities before the ETW is drilled.

Flow Monitoring and Plugging Plan (NAC 534B.180):

Water extracted during the drilling process will be managed in the sump and/or frac tanks; the volume will be estimated and recorded. After completion of the ETW, water volume will be recorded using a flow meter. The ETW will be abandoned pursuant to NAC 534B.180. All necessary reports and documentation will be provided to the relevant regulatory authorities as soon as practicable and, in all cases, within the permissible timeline.

Surface & Groundwater – Erosion Prevention and Control

LMR will conduct exploration operations in a manner that minimizes soil erosion. Equipment will not be operated when ground conditions are such that excessive resource damage or increased sediment transport will occur. BMPs will be utilized to control erosion and sedimentation.

BMPs for sediment control will be employed as needed during construction, operation, and reclamation to minimize sedimentation of disturbed areas. Sediment control structures will include, but not be limited to, fabric and/or certified weed free straw bale filter fences, siltation or filter berms, mud sumps and downgradient drainage channels to prevent unnecessary or undue degradation to the environment. Sediment traps (sumps), constructed as necessary adjacent to drill sites, will be used to settle drill cuttings and prevent uncontrolled release of drill cuttings. To control erosion from roads and drill sites, and from the unlikely event of drill cuttings being released, weed-free straw bales and silt fences will be placed in drainages to capture sediment, where required.

Surface & Groundwater – Stormwater and Control

Sediment controls such as straw or hay bales, filter fences, or other controls, will be implemented as necessary. Where straw or hay bales are required, only certified, weed-free product will be used.

While not anticipated due to the environment and generally flat terrain, stormwater controls will be constructed or installed where necessary to prevent or minimize erosion and sedimentation. Drainage structures will consist of, but not be limited to, water bars, borrow ditches, contour furrows, and/or culverts sized to handle maximum seasonal water flows. Disturbed areas will be broadcast-seeded with an approved weed-free seed mix to reduce erosion immediately after construction. Once an area has been revegetated, notices and/or signs may be posted to reduce or restrict vehicular traffic to allow vegetation to establish.

Drilling Effluent Management

Drilling fluid products used during drilling and abandonment operations will be contained and deposited in tanks with overflow to sumps to ensure environmental protection.

Overflow and mud sumps for drill water, fluids and cuttings will be excavated within the footprint of the drill site using a backhoe. Anticipated sump dimensions, including the material piles, will be up to 50 feet long by 20 feet wide with a total sump volume of 150 cubic yards. One end of each sump will be sloped to provide escape routes for wildlife and/or other animals.

Sumps will be backfilled after completion of drilling. If mud tanks are cleaned at the site, the contents will be contained in the sump and covered with backfilled soil materials.

Solid and Hazardous Substances

Non-hazardous Project-related exploration refuse will be collected in approved trash bins and/or containers and hauled from the site by LMR or their contractors for disposal at an approved landfill on a regular basis. The bins and/or containers will be equipped with lids. Debris that may have a hazardous characteristic, residue, or fluids, will not be disposed of in the trash bins. To minimize impacts during precipitation events, trash bins will be regularly inspected for leaks, and the lids will remain closed except when depositing debris. The trash bins will not contain materials that may attract wildlife (food items, etc.) and will be emptied on a regular basis.

Hazardous substances employed for the Project will include diesel fuel, gasoline, hydraulic fluid and lubricating grease. Approximately 300 gallons of diesel fuel and gasoline will be stored in fuel delivery systems on drill rigs and support vehicles. Approximately 50 pounds of lubricating grease and 35 gallons of hydraulic fluid will be stored on the drill rig or transported by drill trucks. Transportation of these materials will be conducted in accordance with applicable regulatory guidelines.

Schedule for the Project and Reclamation

Drilling success will determine the reclamation schedule. Disturbance will be reclaimed at the earliest opportunity unless economically viable resources are identified.

Earthwork and revegetation activities are limited by the time of year during which such activities can be effectively implemented. Site conditions and/or yearly climatic variations may require that this schedule be modified to achieve revegetation success. Reclamation activities will be coordinated with the BLM as necessary. Monitoring of revegetation success will be conducted annually for a minimum of three years or until revegetation standards have been met.

Drill Hole or Well Abandonment

The exploration drill hole will be plugged in accordance with Nevada regulations as described in NAC 534B.180. A drill rig with appropriate support equipment will be used to abandon the drill holes before the drill rig leaves the drill site. The abandonment costs included in the Notice RCE are for the single ETW.

Resource Logging Plan

During the drilling process, LMR will deploy a suite of wireline logging tools to effectively analyze and record the depth, thickness and character of the different strata penetrated and the location of the water-bearing strata. LMR will submit the results of these analyses to the relevant regulatory authorities in a timely fashion and in accordance with all regulatory requirements.