



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

Date Received 05/09/2022
 County Esmeralda
 NDOM Permit Number _____
 FOR DIVISION USE ONLY

DISSOLVED MINERAL RESOURCE EXPLORATION WELL PERMIT APPLICATION

Applicant/Operator Name: GeoXplor Corp.
 Street Address: 8-650 Clyde Avenue
 City: West Vancouver State/Prov.: Vancouver
 Country: Canada Zip Code: V7T1E2

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.)

GeoXplor is a corporation operating in Vancouver Canada. GeoXplor was incorporated with the Secretary of State of Nevada, on November 9, 2004, Business License Number NV 20041646739. Clive Ashworth is the sole director of GeoXplor Corp.

Well Name DH-1

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

Applicant is: Land Owner Lease/Claim Holder

Land Status (choose one):

Federal (BLM, USFS, etc...)
 Mining Claim: NMC# 1142552

Project Name: ACME DH-1 NVN# 101026

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

Groundwater Basin Name and Number Clayton Valley, Basin 143 Area With Limitations? Y N

(Well proposed to be drilled within areas with limitations may require Blowout Prevention Equipment, per NAC 534B)

Location of Well:

County: Esmeralda

NW 1/4 of the NE 1/4 of 6 Sec., Township 2 N S, Range 40 E

UTM East: _____ or Longitude: -117.580231°
 UTM North: _____ Latitude: 37.801483°
 NAD83 WGS84 M.D.B. & M.

Drilling Contractor (if known): Harris Exploration Drilling #2554
Address: P.O. Box 5579
City, State Zip: Fallon, NV 89407

Purpose of Well: Dissolved mineral exploration and groundwater monitoring for future permits.
Drill Rig Type: Maxi Drill 18 Track Mounted Drill
Surface Hole Diameter: 10" Casing Size/Length: 4.5" to 200' and 2" to 1500'
Expected Total Depth: 1,500 Feet Casing Weight/Gauge: 0.25" HWT, 11.58 lbs/ft to 200'
Casing Schedule/Grade: 2" Sch 80. PVC, 1.9 lbs/ft to 1500'

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

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

See Attachment 2

(Describe Here or Attach Additional Pages)

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

See Attachment 2

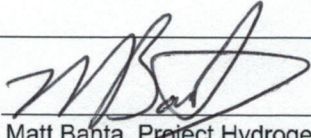
(Describe Here or Attach Additional Pages, must include Well Schematic)

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

See Attachment 2

(Describe Here or Attach Additional Pages)

Drilling will commence approximately on: May 23, 2022

Signature of Applicant/Agent: 
Printed Name/Title: Matt Banta, Project Hydrogeologist
Date: 5/5/2022

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

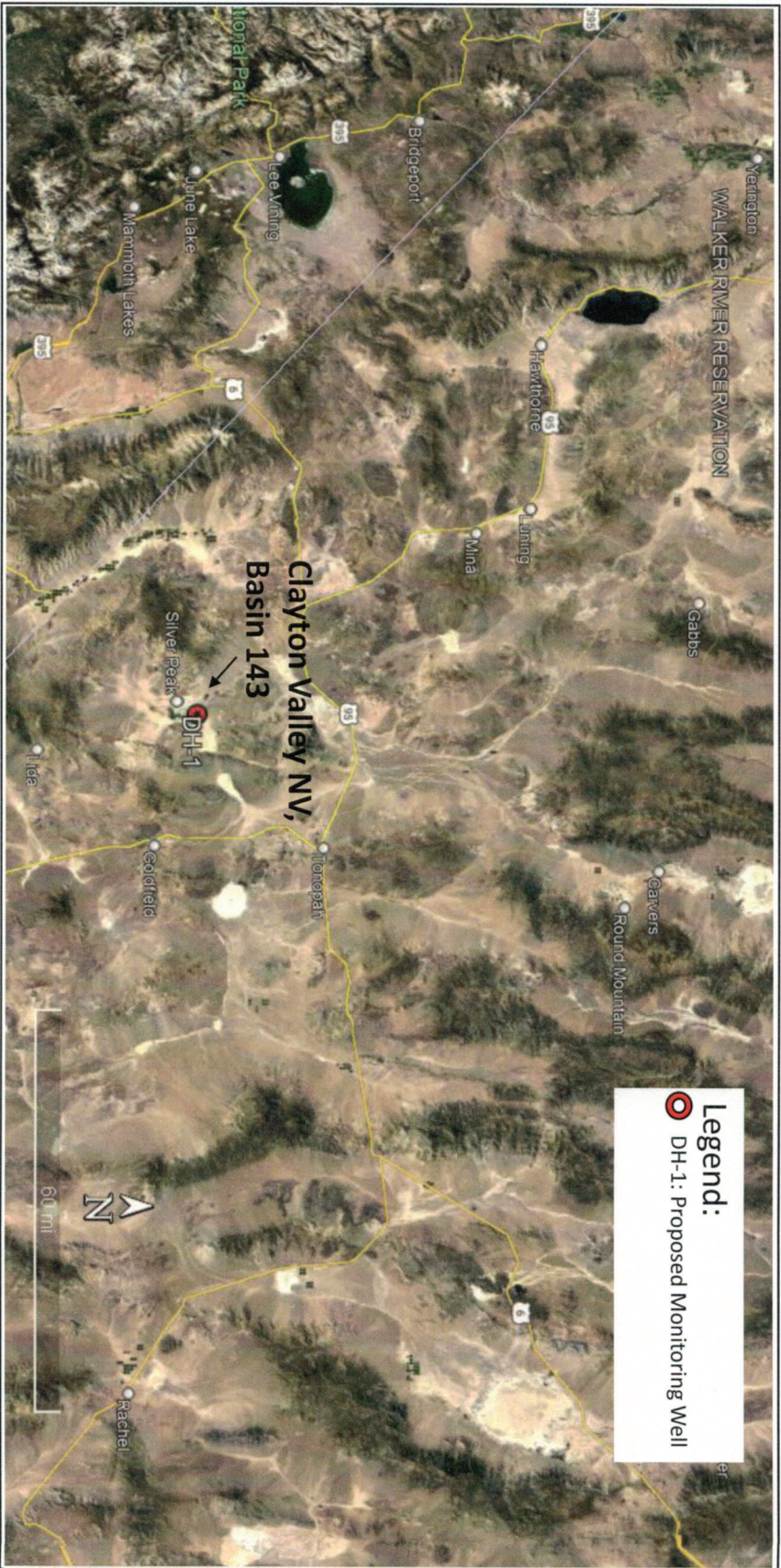
Approved _____ with the conditions noted above.
Date

Permit Number _____

Administrator
Division of Minerals

Attachment 1

Project Location Map, Well Location Map and Well Schematic



GeoXplore
CORP.

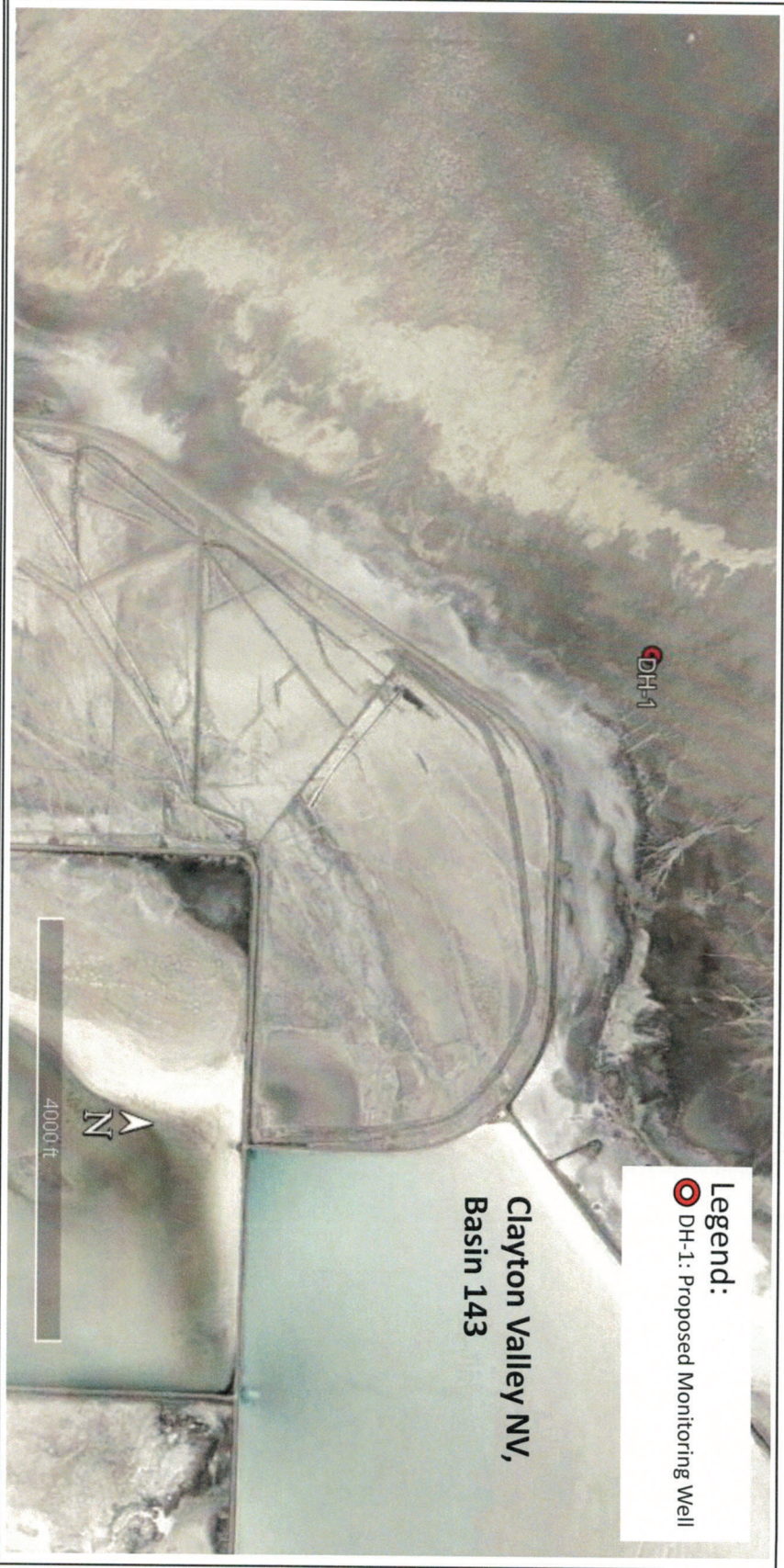
confluence
Water resources LLC
(775) 943-1808
WWW.CONFLUENCERESOURCES.COM

Google Earth Imagery
1" = Miles

Large Scale Location Map

DH-1
Monitoring Well Waiver Application

Figure 1



Small Scale Location Map

Google Earth Imagery
1" = Feet

DH-1
Monitoring Well Waiver Application

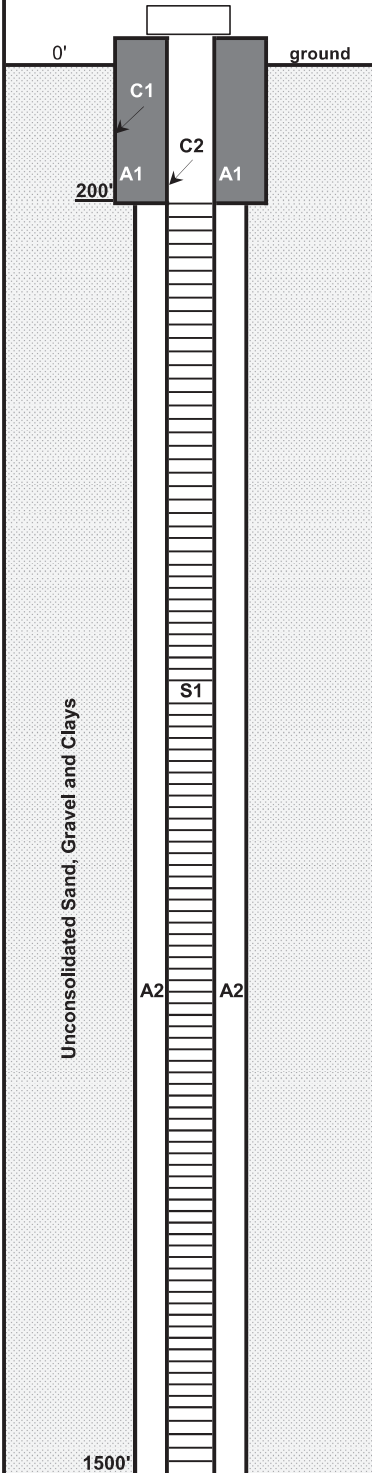
Figure 2

DH-1
Proposed
Temporary Corehole
Completion



GeoXplor Corp.
Clayton Valley - North Project

Depth (ft) Annular ID



Site Location: Esmeralda County, Nevada
Project Number: DH-1
Coordinates: Lat/Long
37.801483° -117.580231°

Well No. DH-1
Boring No. NA
Ground Elv. 4277 Ft amsl
Top of Casing 3 Feet

Drilling Contractor: TBD

Drilling Summary

Total Depth: TBD ±1500 Feet

Borehole Nominal Diameters:	10" From 0-200' 3.8" HQ Core From 200-1500'
Stickup Height:	3 Feet
Depth of Conductor Casing	200 Feet, HWT Monument, 4.5" Dia
Rig:	Diamond Drill
Bits(s):	Tricone to 200' HQ Core Bit to TD
Drilling Fluid:	Polymer and Water
Mud Parameters:	NA
Contractor:	TBD
Drilling License No:	NA

Static WL: EST 15'

Well Details

ID	Depth (ft)
C1	0 to 200'
C2	0 to 200'
S1	200 to ± 1500'

Casing Type:

C1	4.5" Dia. Steel HWT Surface Casing - Cemented In Place
C2	2" Sch. 80 PVC Box Thread-Flush Joint Blank Casing

Screen Type:

S1	2" Sch. 80 PVC, 0.010" Factory Slot Screen, Box Thread-Flush Joint
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Annular Summary

ID	Description	Depth (Ft)
A1	Type II Ready Mix Cement	0-200'
A2	Open Hole (No Gravel Pack - Natural Dev. Well)	200-1500'

1500'

NOT TO SCALE

Notes:

Prepared By:



(775)843-1908 www.confluencewaterresources.com

Attachment 2

Additional Details for Drilling and Sampling

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

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

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

Additional Details for GeoXplor's DH-1 Project, Clayton Valley Nevada

1. Project Description and Planned Operation

The Project is in Clayton Valley, Basin 143. The project includes advancement of an exploration core hole, sampling the hole, then temporarily casing the core hole for collection of brine samples. The proposed exploration core hole will be in the NW ¼, NE ¼ of Section 6, T.2S, R.40E MDBM, Latitude 37.801483°N, Longitude -117.580231°W, located on unpatented mining claims held by GeoXplor Corp. The GeoXplor project has been authorized by the Bureau of Land Management (BLM) under a Notice of Intent and bond for drill site reclamation and plugging and abandonment of the proposed temporary well (BLM case file number N-101026). A copy of the approved notice and project claims maps are enclosed (Attachment 3) for reference.

The volume of water to be extracted from the wellbore will be consistent with extraction rates from typical low flow sampling methods. During sampling, several liters of water may be collected and analyzed for various metals and NV Profile 1 constituents. Sampling is expected to be conducted at intervals through the screen profile of the temporary well casing via HydraSleeve or Snap Sampler.

The primary objectives of the GeoXplor project are as follows:

- Drill HQ core hole to proposed depth of approximately 1,640 feet, collect core samples for mineral assay.
- Backfill hole with drill cuttings to approximately 1,500 feet.
- Temporarily case the core hole with 2" Sch. 80 PVC, with screen to extend from 200-1500 feet.
- Develop the temporary wellbore via airlift.
- Monitor groundwater elevation (depth to static groundwater).
- Monitor chemistry at multiple intervals throughout the well screen profile via HydraSleeve or Snap Sampler.
- Plug and abandon the hole within 60 days from completion of drilling.

The data generated from the core hole and temporary well casing will be used to assess dissolved mineral content, and groundwater quality to support mineral resource assessments and future Operating and Water Pollution Control Permits.

2. Proposed Exploration Disturbance

Disturbance will include existing access routes, drill site, and sump complexes within the drill site disturbance footprint. The provisions of the BLM notice, N-101026 includes reclamation of 2,985 linear feet of road disturbance. Roads will be approximate 10-foot wide. The total road disturbance footprint is approximately 1.21 acres for up-to three (3) drill sites. The DH-1 drill site will be constructed with the approximate dimensions, 150 feet long by 100 feet wide. The notice also include construction of two (2) trench sumps for each drill site. The sumps will be excavated in series, both measuring 2-feet wide, 8-feet deep, and 16-feet long. The total containment volume of each sump complex will be approximately 3,830 gallons. The sumps will be constructed within the corresponding drill site disturbance footprint to contain drill cuttings and manage drilling fluids. The total disturbance footprint for the project, including DH-1 is approximately 2.19 acres.

The location of DH-1 is shown in Attachment 1. Existing access and planned surface disturbance are shown on the figures in Attachment 3. The Standardized Reclamation Cost Estimator, NV_2021 Notice Model Version 3.2 (1) and the 2021 cost data Version 3.2 were used to generate the required reclamation cost estimate (RCE) for DH-1 abandonment, along with other (total) surface disturbance included in the Notice for the Project, as submitted to the Bureau of Land Management, Tonopah Field Office (BLM).

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

Drilling fluid will be maintained within the mud system of the core rig. Multiple sumps will be constructed within the drill site disturbance footprint to manage drilling fluids. The core generated from drilling will be transported and stored in a secure location offsite. Best Management Practices (BMPs) for sediment control will be utilized during construction, operation, and reclamation to minimize sedimentation from disturbed areas.

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

The proposed operation will include drilling a larger diameter surface conductor borehole to 200 feet below ground surface (bgs) for installation and cementing of surface conductor casing. The conductor borehole will be nominal 10-inch diameter. The driller will install 4.5-inch diameter HWT steel surface casing which will be cemented in place from 200 feet bgs to the ground surface. Although, the static water level may be higher, the depth of the proposed surface conductor casing was determined based on drillers experience with ground conditions in other parts of Clayton Valley. The proposed surface conductor casing will address the following stability factors:

- The surface casing will control formation fluids and protect groundwater.
- This plan ensures that casing will be set below all known or reasonably estimated levels of freshwater aquifers.
- Although there are no known freshwater aquifers in the vicinity of the Project, this plan will protect potential freshwater aquifers from contamination and will prevent blowouts or uncontrolled flows at the surface.
- This plan will prevent hole instability issues and near surface washouts which are typical for Clayton Valley.

An HQ size core hole, 3.83-inch diameter will then be advanced through the cemented surface casing to the target depth of the hole using bentonite clay-based drilling muds to isolate any potential zones of different water quality and prevent migration of fluids between potential aquifers.

During drilling, GeoXplor and its contractors will 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. GeoXplor and their consultants will maintain close communication with the Nevada Division of Minerals (NDOM). All data from core and wireline logs or any sort of data analysis will be provided to NDOM as soon as it is available so that NDOM may recommend immediate remedial or corrective measures be taken during the drilling process if required. GeoXplor will abandon the core hole pursuant to Nevada Administrative Code (NAC) 534B.180 if vertical migration of formation fluid does not allow the hole to remain open for more than a brief period. GeoXplor is committed to working closely with the Bureau of Land Management (BLM), NDOM, NDEP, and NDWR in all aspects of the Project and

will follow any guidance from the regulatory authorities with respect to any corrective or remedial measures.

Once the core hole is drilled, a temporary 2" diameter Sch. 80 PVC well casing will be installed in the open core hole with slotted casing extending from 200 feet bgs to the bottom of the hole (200 feet to 1,500 feet bgs). Blank Sch. 80 PVC well casing will extend from 200 feet bgs to the ground surface. Sampling will be conducted through the perforated well casing at intervals.

The temporary well casing and the well bore will be plugged and abandoned in accordance with NAC 534B.180 upon completion of sampling, or within 60 days from completion of drilling.

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

Brine extracted from the core hole as part of the drilling process will be managed and circulated through the sump. The volume of brine loss will be estimated and recorded after completion of the core hole based on the sump volumes.

Upon completion of the core hole, a temporary well casing will be installed. The temporary well casing will be screened from the bottom of the hole to the top of the cemented surface conductor casing (200 feet to 1500 feet). The temporary well casing will be airlift developed, sampled, then will be plugged, and abandoned in accordance with NAC 534B.180. The hole will be abandoned by a Nevada licensed well driller in accordance with the conditions of the permit. Artesian conditions are not anticipated on the Project. The temporary well casing will be abandoned by placing cement/bentonite grout by tremie pipe from the bottom of the perforated well casing in an upward direction to a depth of 200 feet bgs, i.e., top of perforated casing. Neat cement will then be placed by tremie from 200 feet bgs to the ground surface. Finally, the space between the cemented conductor and the temporary well casing will be cemented in by pumping cement through the HQ drill rods, washing the cement overtop the temporary well casing from 200 feet bgs to the ground surface. The remaining casing will be cut flush with the ground surface and the drill pad will be reclaimed in accordance with the conditions of the NOI.

The timeframe for temporary well and borehole abandonment will adhere to the conditions set forth in the permit, 60-days from completion of the core hole, or by waiver with NDWR. 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.

6. Additional Measures to Protect Water and Natural Resources

GeoXplor will conduct exploration operations to minimize ground disturbance and prevent erosion. Operations will be suspended when ground conditions are poor to eliminate potential for undue degradation of the environment during operation of equipment or vehicles. Best Management Practices (BMPs) for sediment control will be used as needed during all aspects of the project through reclamation to minimize sediment loading on 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 down gradient drainage channels to prevent unnecessary or undue degradation to the environment. Sediment traps (sumps), constructed within the drill site footprints, will be used to settle, and contain drill cuttings, and manage drilling fluids. Weed-free straw bales and silt fences will be placed strategically around sumps and drill site footprint, as necessary to capture sediment. The sumps will be constructed

with small animal escapement (egress) devices or structures. The sump area will be barricaded with construction fence or livestock fence panels to prevent entry from larger wildlife.

6.1. Stormwater Controls

While not anticipated due to the flat terrain of the Project, stormwater controls will be constructed or installed if necessary to prevent or minimize erosion and sediment loading. Drainage structures will consist of, but not be limited to, water bars, borrow ditches, and contour furrows sized to handle maximum seasonal water flows. Disturbed areas will be reclaimed in accordance with the reclamation plan to reduce erosion immediately after the Project is completed. Once an area has been revegetated, notices and/or signs may be posted to allow vegetation to establish while reducing or restricting vehicular traffic.

6.2. Effluent Management

Drilling fluid and products used during drilling, well development, or well abandonment 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 limit of the drill site using a backhoe. Anticipated sump dimensions, excluding the material piles, will be 2-feet wide, 8-feet deep, and 16-feet long. There will be two sumps excavated in series per each drill site. The total containment volume of each sump complex will be approximately 3,830 gallons. One end of each sump will be sloped to provide egress 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. In the event additional containment is required to manage discharge, the provisions of the BLM notice, N-101026 includes construction and reclamation of a temporary containment pond. If required, the temporary containment pond will be constructed to be 200 feet by 200 feet by 6 feet deep at the DH-1 drill site.

7. Solid and Hazardous Materials

Non-hazardous Project-related exploration waste will be collected and stored in approved trash bins and/or containers and hauled from the site by GeoXplor or their contractors for disposal at an approved landfill on a regular basis. The trash containers will be equipped with lids to prevent trash from blowing off-site. Waste that may be hazardous, have hazardous residue, or fluids, will not be disposed of in the trash bins. To minimize impacts during precipitation events, trash bins or containers will be regularly inspected for leaks and the lids will remain closed except when depositing debris. The containers will not contain materials that may attract wildlife (food items, etc.) and will be emptied on a regular basis. Hazardous substances required for the Project will include diesel fuel, gasoline, hydraulic fluid and lubricating grease. Approximately 200 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 40 gallons of hydraulic fluid will be stored on the rig or transported by lubrication trucks. Transportation of these materials will be conducted in accordance with applicable transportation permits and guidelines.

8. Reclamation

The duration of drilling will determine the reclamation schedule. Disturbance will be reclaimed at the earliest opportunity unless economically viable resources are identified. GeoXplor estimates that drilling and well sampling activities will be completed in approximately two months. The well will remain open only for the duration of the DMRE permit, 60 days, or by waiver issued through NDWR. Earthwork and revegetation activities will be completed around the drill site as soon as drilling and well installations completed, however the timeframe for completion may be 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.

9. Resource Logging and Reporting

At completion of drilling GeoXplor may complete a suite of wireline logs to assess the geophysical parameters of the lithology drilled. GeoXplor will log the composition and stratigraphy of the drilled core. GeoXplor and their consultants will collect samples from the well screen profile for various dissolved metals and NV Profile 1 constituents. Sampling is expected to be conducted at intervals throughout the screen via HydraSleeve or Snap Sampler. Approximately 50 gallons of brine may be collected for laboratory analysis from DH-1. The temporary well will also be used to measure the static water level. The data generated from the temporary well will be used to assess dissolved mineral content and groundwater quality to support mineral resource assessments and future Operating and Water Pollution Control Permits. GeoXplor will submit the results of the logs and analyses to the relevant regulatory authorities in a timely fashion and in accordance with all regulatory requirements of the DMRE permit.