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MAR 12 2018



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 March 12, 2018
County NYE
NDOM Permit Number W0003
FOR DIVISION USE ONLY

DISSOLVED MINERAL RESOURCE EXPLORATION WELL PERMIT APPLICATION

Applicant/Operator Name: 3PL Operating Inc.
Street Address: 1802 N. Carson Street, Suite 206
City: Carson City State/Prov.: NV
Country: USA Zip Code: 89701

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.)

Nevada
October 4, 2017

Well Name LD #1-32

This application is for a: [X] 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 [X] Lease/Claim Holder

Land Status (choose one):

[X] Federal (BLM, USFS, etc...)

Mining Claim: NMC# 1151056

Project Name: 3PL RRV I NVN# N-96489

[] Non Federal

APN#: Land Owner:
Bond Type: Issued by:
Amount: Number:

Groundwater Basin Name and Number

Area With Limitations?

Railroad Valley North, 173B [X] Y [] N

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

Location of Well:

County: Nye

NE 1/4 of the NE 1/4 of 32 Sec., Township 7 N S, Range 56 E

UTM East: 614102.33 or Longitude: -115.692934
UTM North: 4253198.78 Latitude: 38.419758
[X] NAD83 [] WGS84 M.D.B. & M.

Drilling Contractor (if known): TBD
Address: _____
City, State Zip: _____

Purpose of Well: Lithium Brine Exploration
Drill Rig Type: Rotary
Surface Hole Diameter: 14" Casing Size/Length: 10" to 600', 4-1/2" to 2300'
Expected Total Depth: 2300' Casing Weight/Gauge: 29.3# & 9.5#
Casing Schedule/Grade: Schedule 40

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

Fluid Management Plan (NAC 534B):

Water will be purchased from the nearest source possible. Drilling fluids will be mixed and maintained within the mud system of the drilling rig. Drill cuttings will be discarded into the drilling pit. Excess water recovered during testing will be discarded into the drilling pit.

(Describe Here or Attach Additional Pages)

Contamination Prevention/Cementing Plan (NAC 534B):

Conductor pipe will be cemented at 50'. The surface hole will be drilled to a depth below the fresh water, surface casing will be cemented the entire length to protect the fresh water. A seal will be placed between the production and surface casing. See well schematic.

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

Flow Monitoring and Plugging Plan (NAC 534B):

Any water extracted while drilling will be flowed to the drilling pit and the volume will be estimated by the best means possible and recorded. After completion, any water extracted from the well will be ran through a flowmeter.

When the well is no longer of service, the well will be plugged according to NAC 534B by plugging the entire 4-1/2" casing string with cement and returning the surface to its original condition.

(Describe Here or Attach Additional Pages)

Drilling will commence approximately on: April 1, 2018

Signature of Applicant/Agent: 
Printed Name/Title: CEO
Date: March 12, 2018

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.	All actions related to the drilling of this exploratory well must abide by the statutes set forth in Assembly Bill 52 of the 2017 legislative session: https://www.leg.state.nv.us/Session/79th2017/Bills/AB/AB52_EN.pdf .
B.	Drilling activities cannot commence until approved bonding for this well is put in place with the Bureau of Land Management.
C.	Surface well location of the LD 1-32 well is to be located as far as possible from the plugged and abandoned oil well on the existing drill pad, where all drilling operations remain on the pad so as to not create new disturbance.

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 3/22/18 with the conditions noted above.
Date

Permit Number W-0003



 Administrator
 Division of Minerals

Notice to Conduct Mineral Exploration

Applicant Information

Operator Information

Name of Operator 3PL Operating Inc.

Mailing Address of Operator 1802 N. Carson Street, Suite 206, Carson City, NV 89701-1238

Phone Number (775) 434-7333

Point of contact, (when operator is a corporation)

James Melland, 620-755-4862, jamesm@3ploperating.com

Tax Payer Identification Number of the Operator(s) 82-2986226

Claimant Information

Name of Claimant Same as above

Mailing Address of Claimant Same as above

Claim Names and BLM Serial Number of Mining Claim(s) where disturbance would occur

3PL Claim: RV 0894

BLM#: NMC 1151056

Nye Co.#: 880133

Sec 32, 7N 56E

Activity Description, Map and Schedule of Activities.

Project Details

Project Name 3PL RRV I

Location Railroad Valley, Nye County, Nevada

Legal Description

Please include ¼ ¼ section for all areas where surface disturbance would occur.

NE/4 SE/4 Section 32, Township 7 North, Range 56 East

Attach a map of adequate scale for BLM to identify the project location and locate all proposed disturbance.

See attached maps. Project Location Map 1 shows a portion of the Railroad Valley, roads, land grid, claim grid, and proposed well location. Project Location Map 2 shows the existing gravel pad, road, claim grid, and proposed well location.

Please provide the UTM coordinates of all drill holes and trenches in NAD 83 CONUS. You may also submit a GIS shapefile in NAD 83 CONUS.

NAD 83 Coordinates

Lat: 38.419758
Long: -115.692934

UTM 11N

Easting: 614102.33
Northing: 4253198.78

Proposed Operation

Period of Operations/ Schedule of Activities

Expect to drill in March of 2018. The time to drill and core will be 20 +/- days. Time to test will be zero to 6 months. If proper concentrations of lithium are not detected, well will be plugged prior to drill rig moving off location.

Access Routes

From the north (Ely), Highway 6 to Railroad Valley Road, which is gravel road running along the east side of the valley, go south on Railroad Valley Road for approximately 22 miles, then west on gravel road for approximately 6 miles.

From the south (Tonopah), Highway 6 to Highway 375, east on Highway 375 to Railroad Valley Road, North on Railroad Valley Road for 32 miles, then west on gravel road for approximately 6 miles.

Existing Disturbance

There are existing roads and gravel pads in the area from previous oil and gas drilling. There is existing disturbance in the area from farming and small gravel pit operations.

Proposed Operations

Preferred Plan: Move in portable water well drilling rig by utilizing existing roads to vacant gravel drilling pad. Drill 12 1/4" borehole to a depth 100' below base of fresh water, cement 8-5/8" surface casing, core to 2000' +/- . Rotary drill over same hole with ~7-3/4" drill bit for installation of 5-1/2" liner. Surface casing depth to be around 700' +/- and slotted liner would run from 600' (100' above surface casing shoe) to 2000'. Test pump well using portable pumping equipment, measuring discharge, and analyzing samples for Lithium concentration before and after the liner is placed in the well. Dispose of produced water in surface pit.

Alternate Plan: Move in coring rig, core hole to 100' below fresh water, set 4-1/2" casing. Continue to core well to 2000', taking water samples and performing inflow test while coring.

Abandon core hole. Move in water well rig, drill hole described in Preferred Plan, except with no coring.

Type of operation

- Exploration drilling
- Trenching
- Other (please identify)

Brief summary of the proposed notice level activity

Same as "Proposed Operations"

Type, size and quantity of equipment to be used

Mobile drilling rig, several accessory trucks, fork lift, water tank(s).

Measures to be Taken to Prevent Unnecessary or Undue Degradation

All equipment will stay on existing gravel roads and pads.

Calculation of Disturbance

(Describe the dimensions of the proposed surface disturbance. Please ensure that all drill sites, new road, overland travel and trenches are included.)

Drilling and test water pit: ~20'l x 5'w x 4'd (100 sq ft). The drilling pit will be located directly off the existing gravel pad. A second pit of same size may be added when rotary drilling for another 100 sq ft of disturbance. Total disturbance will be between 100 and 200 sq ft.

Reclamation Plan

Regrading and reshaping

Backfill drilling/testing pit. Plug core hole.

Drill Hole Plugging (see Instruction Memorandum No. [NV-2005-021](#))

- All drill holes will be plugged in accordance with Nevada Administrative Code (NAC) 534.4369 and 534.4373.
- If ground water is encountered, the hole will be plugged pursuant to NAC 534.420.
- In addition, drill holes will be plugged prior to the drill rig moving away from the drill site.
- Not all** drill holes will be plugged in accordance with Nevada Administrative Code (NAC) 534.4369 and 534.4373.
- If ground water is encountered, **not all** drill holes will be plugged pursuant to NAC 534.420.
- Drill holes will **not** be plugged prior to the drill rig moving away from the drill site.

****If proper concentrations of Lithium are not present, well will be abandoned prior to drill rig moving off location.**

Revegetation

Should not be needed.

Removal or stabilization of buildings, structures and support facilities

Not applicable

Other

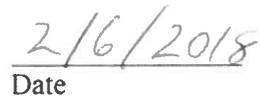
This is close to a Zero Disturbance project.

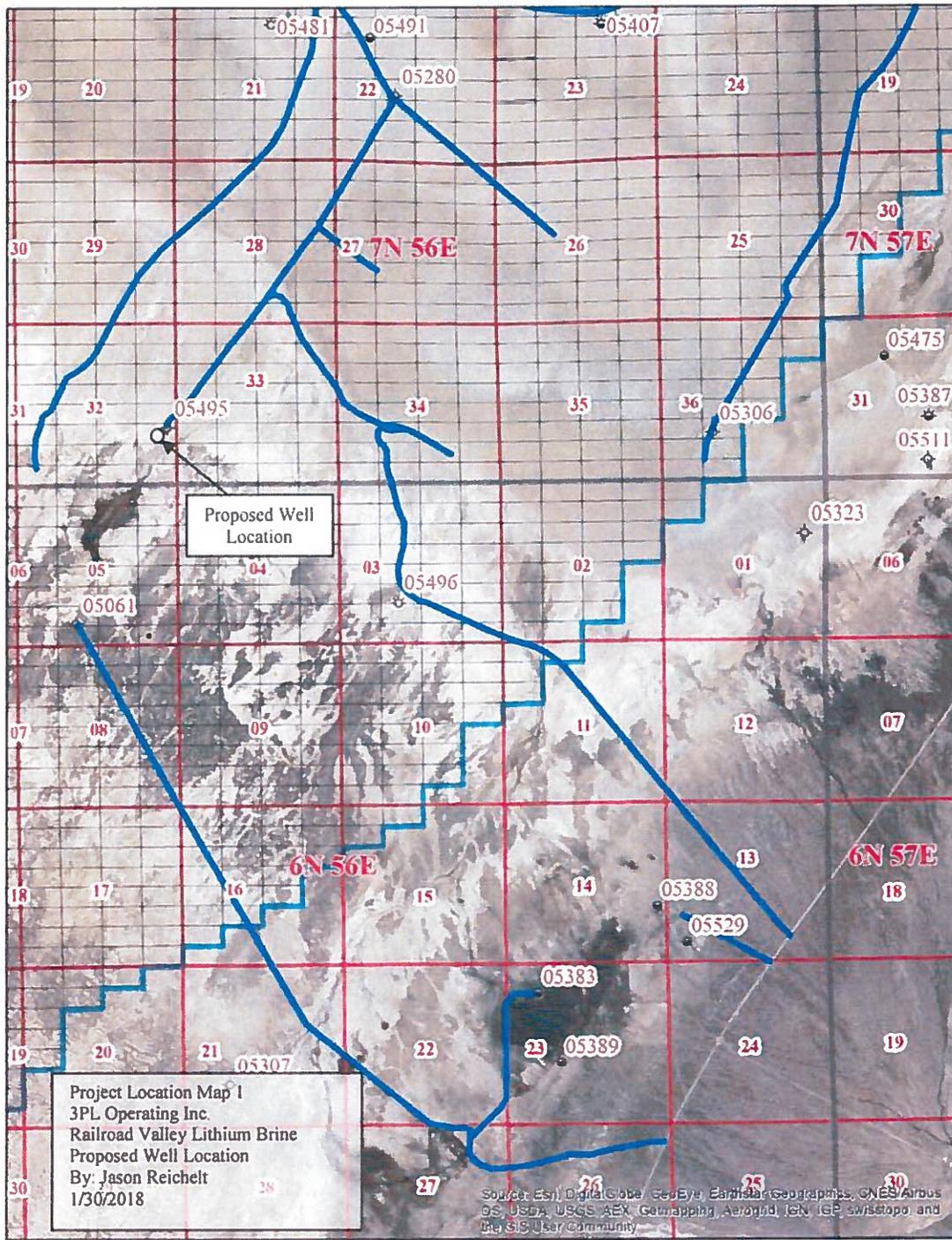
Reclamation Cost Estimate

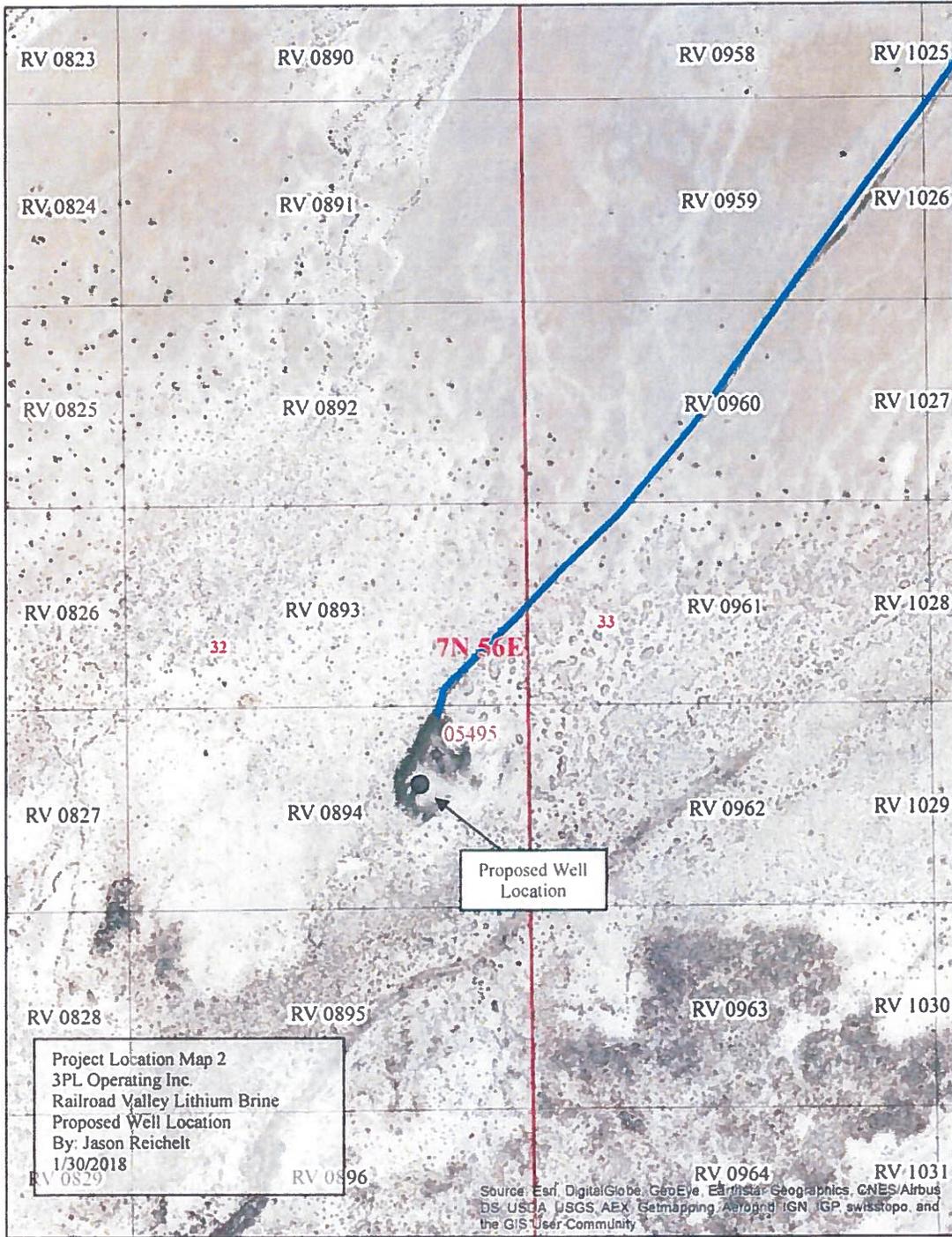
Use Notice Cost Model

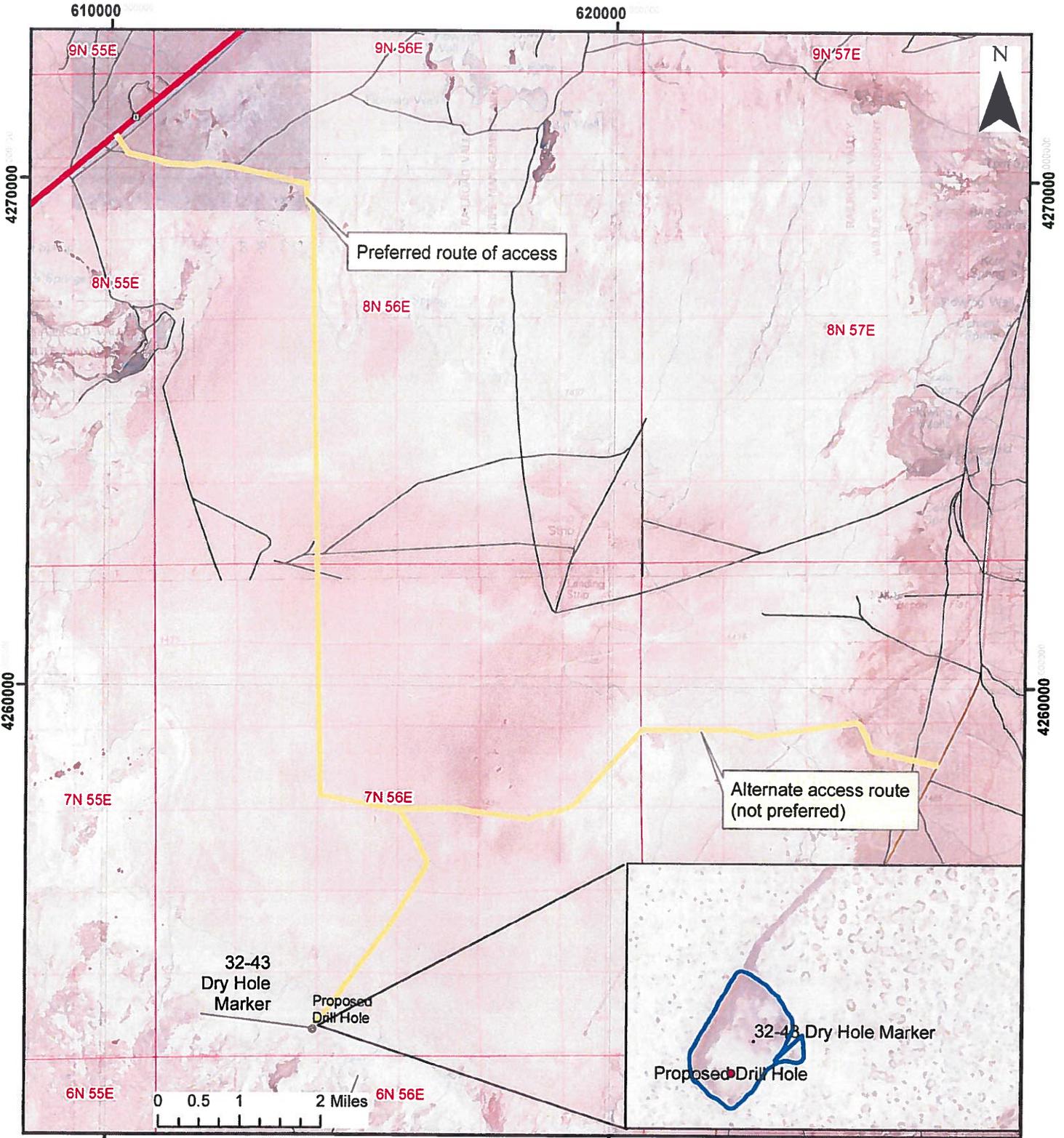
\$34,667 Per 2017 SRCE Version 1.4.1 (long form)


Operator Signature


Date







610000 **N-96489 3 PL RRV 1** 620000
Notice Map
 1:100,000

- N-96489_Well_32-43
- N-96489_DisturbanceArea
- N-96489_DrillHole
- N-96489_AccessRoads



United States Department Of The Interior

Bureau of Land Management
 Tonopah Field Office
 1553 S. Main Street/P.O. Box 911
 Tonopah, NV 89049



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

3PL Operating Inc.
 Project: 3PL RRV I
 Well: LD #1-32
 32-7N-56E MD B&M
 Nye County, NV

Drilling Prognosis Summary

1. Depending on drilling contractor, set rig on platform or construct 6' diameter x 4' deep cellar to accommodate annular BOP.
2. Drill 12-1/4" pilot hole to 50', open hole to 20" to 50' bgs.
3. Run 16" nominal, 1/4" wall conductor pipe to 50' and cement annular space.
4. Drill 15" surface hole to 600'. Base of fresh water estimated at 500'.
5. Run 10" nominal casing to 600', cement casing by pumping cement down casing and up around annulus or by tremie pipe.
6. Drill 8.75" hole to 2300'.
7. Run 4" nominal casing from 2300' to 18" ags, with 1/8" slots from approx. 1300' to 2300'.
8. Gravel pack slotted liner with 3/8" gravel.
9. Place a bentonite seal above the gravel pack.
10. Install cap on top of 4" nominal casing.

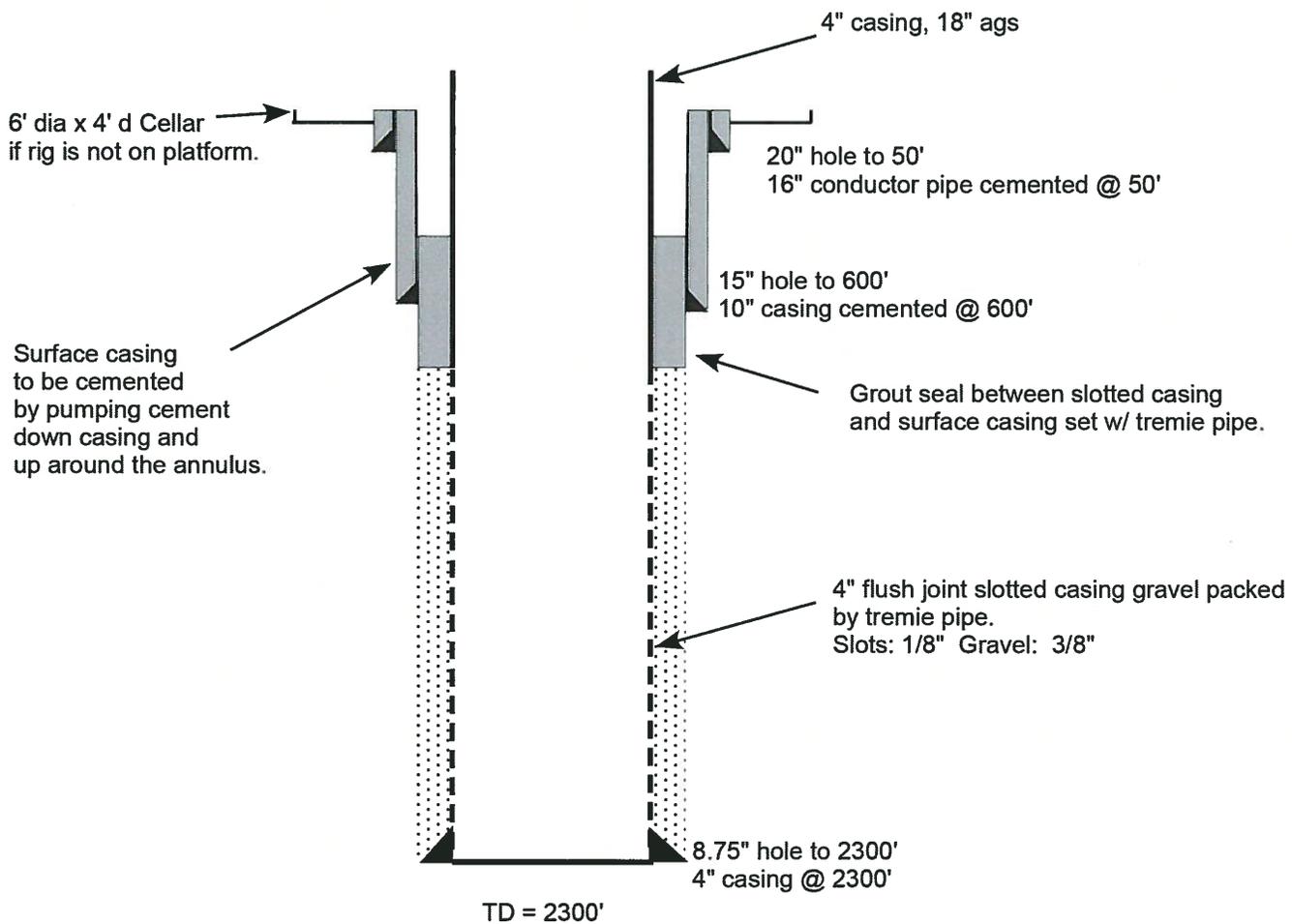
General Pipe Specifications							
Type	Nominal Size	OD "	ID	Wall	Wt #/ft	Collapse	Burst
Conductor	16	16	15.5	.25*	42.05	172**	
Surface	10	10.75	10.25	.25*	28.04	461**	
Production	4	4.5	4.026	.237	10.8	4010***	4790***
* AWWA Section 4.4.5 A100-15							
** AWWA Table K.1 A100-15							
*** Estimated from similar pipe listed in Halliburton Cementing Tables							

Ph at Depth				
Depth, '	Fluid	Density, ppg	Ph, psi	Ph (SF = 1.125)
50'	Cement	12.5	32.5	36.6
600'	Cement	12.5	390	439
2300'	Mud	9.6	1148	1292
2300'	Cement	12.5	1495	1682

Cement & Gravel Volumes

Conductor Pipe 16" pipe x 20" hole: .7854 ft³/ft x 50ft = 39.27 ft³ plus xs
 Surface Casing 10.75" pipe x 15.5" ID: .6800 ft³/ft x 50' = 34.00 ft³
 10.75" pipe x 15" hole: .5969 ft³/ft x 550' = 328.30 ft³
 Total = 362.30 ft³ plus xs
 Production Casing 4.5" pipe in 10.25 csg id: .4626 ft³/ft x 600 ft = 277.56 ft³
 Seal Volume .4626 ft³/ft x 50' + .3071 ft³/ft x 50' = 38.49 ft³
 Gravel Volume 4.5" pipe in 8.75" hole: .3071 ft³/ft x 1300 ft = 397.13 ft³ (gravel volume)

Well Schematic
 3PL Operating Inc.
 3PL RRV I
 LD #1-32
 32-7N-56E, MD B&M, Nye Co, NV

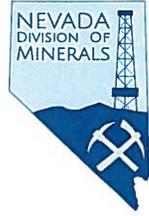


NOTES:
 1. All casing sizes are nominal.



BRIAN SANDOVAL
Governor

STATE OF NEVADA
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RICHARD PERRY
Administrator

Las Vegas Office: 2030 E. Flamingo Rd. #220, Las Vegas, NV 89119
Phone: (702) 486-4343; Fax: (702) 486-4345

**DISSOLVED MINERALS RESOURCE
EXPLORATION WELL
3PL OPERATING INC. LD 1-32
CONDITIONS OF APPROVAL**

Submit forms and correspondence to: Nevada Division of Minerals
400 West King Street
Suite 106
Carson City, NV 89703

Communications with the Division shall be directed to:

Lowell Price, Fluid Minerals Program Manager

Office 775-684-7045 Email lprice@minerals.nv.gov
Cell 775-721-1774
Fax 775-684-7052

Courtney Brailo, Field Specialist

Office 775-684-7046 Email cbrailo@minerals.nv.gov
Cell 775-721-2726
Fax 775-684-7052

Rich Perry, Division Administrator

Office 775-684-7047 Email ryperry@minerals.nv.gov
Cell 775-721-0282
Fax 775-684-7052

Voicemail is available on all cell phones and office phones. Please leave a message if you are unable to speak to someone and we will return your call as quickly as possible.

YOUR APPLICATION TO DRILL THE **DMRE 3PL OPERATING INC. LD 1-32**
EXPLORATION WELL IS APPROVED SUBJECT TO THE FOLLOWING PERMIT
CONDITIONS

1. All actions related to the drilling of this exploratory well must abide by the statutes set forth in Assembly Bill 52 of the 2017 legislative session:
https://www.leg.state.nv.us/Session/79th2017/Bills/AB/AB52_EN.pdf.
2. Drilling activities cannot commence until approved bonding for this well is put in place with the Bureau of Land Management.
3. Surface well location of the LD 1-32 well is to be located as far as possible from the plugged and abandoned oil well on the existing drill pad, where all drilling operations still remain on the pad so as to not create new disturbance.
4. A licensed water well driller must be on location during the drilling operations of this well.
5. When drilling a dissolved mineral resource exploration well, a well driller shall:
 - (a) Isolate zones of varying water quality to prevent the migration of fluids between aquifers;
 - (b) Prevent the contamination or waste of groundwater; and
 - (c) Minimize damage to the environment, ground and surface waters, property and any known oil, gas or geothermal resources.
6. The following standards apply to the construction of a dissolved mineral resource exploration well:
 - (a) The top of the casing must be at least 18 inches above the surface of the ground;
 - (b) The surface casing must:
 - (1) Provide for the control of formation fluids and protection of groundwater, including, without limitation, setting sufficient casing to reach a depth below all known or reasonably estimated levels of good quality water to protect the aquifer and prevent blowouts or uncontrolled flows; and
 - (2) Provide a minimum 2-inch annular space;
 - (c) There must be a minimum 50-foot surface seal using neat cement;
 - (d) If an intermediate string of casing is used which does not extend to the surface, the top of the liner must overlap the bottom of the surface casing by at least 100 feet.
7. The operator shall ensure that blowout prevention equipment is installed on any dissolved mineral resource exploration well where temperatures may exceed 200 degrees Fahrenheit.
8. An operator and well driller shall take all necessary precautions to keep a dissolved mineral resource exploration well under control and operating safely at all times. Well

control and wellhead assemblies used in any dissolved mineral resource exploration well must meet the minimum specifications for assemblies prescribed by the American Petroleum Institute, or its successor organization, in Standard 53, "Blowout Prevention Equipment Systems for Drilling Wells," Fourth Edition, which is available by mail from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112-5776, by telephone at (800) 854-7179 or at the Internet address <http://global.ihc.com>, for the price of \$155, or such specifications as may be prescribed by the Administrator.

9. Blowout prevention equipment capable of shutting in a dissolved mineral resource exploration well during any operation must be installed on the surface casing and be maintained in good operating condition at all times. Such equipment must have a rating for pressure greater than the maximum anticipated pressure at the wellhead.
10. An operator shall:
 - (a) Test the blowout prevention equipment under pressure. The results of each test must be recorded by the well driller in the well log.
 - (b) Submit, on a form designated by the Division, the pressure data and supporting information for the blowout prevention equipment as soon as practicable after the conclusion of the test conducted pursuant to paragraph (a).
11. If an artesian condition is encountered in a dissolved mineral resource exploration well, such that water is flowing at the surface, the well driller shall ensure that an unperforated casing extends through the confining strata above the artesian zone. The annular space between the casing and the walls of the well bore must be sealed by placing neat cement, cement grout or bentonite chips by tremie pipe in an upward direction from the top of the artesian zone to the level necessary to prevent the leakage of artesian water above or below the surface.
12. Any flow of artesian water must be stopped completely using any necessary valves, plugs or other appliances to prevent or control the flow of water from the dissolved mineral resource exploration well and prevent the loss of groundwater above or below the ground surface before the drill rig is removed from the drill site.
13. The operator of a dissolved mineral resource exploration well shall:
 - (a) Install a water meter capable of measuring the total withdrawal of water, resulting from pumping for the purpose of testing and sampling the dissolved mineral resource exploration well.
 - (b) Maintain an accurate record of meter readings, including the serial number of the meter.
 - (c) Submit to the Division, on a form designated by the Division, a quarterly report which includes the serial number of the meter and the meter readings from the dissolved mineral resource exploration well. The report:
 - (1) Is required to include meter readings for each month beginning with the completion of drilling operations until the later of the expiration of the permit or until the dissolved mineral resource exploration well is plugged; and

- (2) Must be filed with the Division on or before the last day of January, April, July, and October of each year with the record for the quarter preceding the month the report is filed.
- (d) Ensure the total withdrawal of water from the dissolved mineral resource exploration project does not exceed 5 acre-feet.
- (e) Obtain a water right in compliance with the appropriation requirements of chapters 533 and 534 of NRS before water is pumped from the dissolved mineral resource exploration project in excess of 5 acre-feet.

14. The well driller shall:

- (a) Keep a record of the depth, thickness and character of the different strata penetrated and the location of the water-bearing strata;
- (b) Keep an accurate record of the work, including, without limitation:
 - (1) A statement of the date that work begins;
 - (2) The date of completion of the dissolved mineral resource exploration well;
 - (3) The name and the type of machine used to drill;

 - (4) The length, size and weight of the casing and how it is placed, including, without limitation, a description of any perforations;
 - (5) The size of the hole that is drilled for the dissolved mineral resource exploration well;
 - (6) Identification of the water-bearing strata;
 - (7) The maximum temperature of the water in the dissolved mineral resource exploration well measured in degrees Fahrenheit; and
 - (8) If a seal was installed, the interval sealed off and the type of seal; and
- (c) Submit a report of the record of the work to the Administrator on a form designated by the Division. The report must be provided by the well driller to the Administrator for every dissolved mineral resource exploration well that is drilled not later than 30 days after the well is completed.

15. A dissolved mineral resource exploration well must be plugged by:

- (a) A well driller before the expiration of the permit, unless a waiver or permit is issued by the State Engineer to change the status of the dissolved mineral resource exploration well.
- (b) Placing neat cement, cement grout or bentonite grout by tremie pipe in an upward direction from the bottom of the well to 100 feet above the uppermost perforated casing or to the surface of the dissolved mineral resource exploration well.
- (c) Removing the pump and any debris from the well bore with appropriate equipment.

16. Cement plugs must:

- (a) Be placed in the uncased portion of all dissolved mineral resource exploration wells to protect all subsurface resources.
- (b) Extend a minimum of 100 lineal feet above the producing formations and 100 lineal feet below the producing formations or to the total depth drilled, whichever is less.

(c) Be placed to isolate formations and to protect the fluids in those formations from interzonal migration.

17. A well driller may use uncontaminated fill from the top of the plug installed in accordance with subsection 1 to within 20 feet of the surface of the dissolved mineral resource exploration well. The well driller shall place a surface plug in the dissolved mineral resource exploration well consisting of neat cement, cement grout or concrete grout from a depth of at least 20 feet to the surface of the dissolved mineral resource exploration well.
18. All casing strings must be cut off below ground level and the casing stub must be permanently capped.
19. The surface must be restored as near as practicable to its original condition.
20. If conditions are encountered which prevent compliance with this section, the operator or well driller must submit an alternative plugging plan to the Division for the approval of the Division.
21. The operator or well driller shall file a plugging report to the Division on a form designated by the Division and available on the Internet website of the Division. The report must be signed by the well driller documenting proper plugging of the dissolved mineral resource exploration well not later than 30 days after completion of the work.
22. The owner and lessor of the land on which the dissolved mineral resource exploration well is located, the operator and the well driller are jointly and severally responsible for plugging the dissolved mineral resource exploration well pursuant to this chapter.
23. A permit to drill a dissolved mineral resource exploration well may be modified, suspended or revoked in whole or in part for any violation of this chapter and may be grounds for an action for enforcement.