Lithium Brine Exploration Report and Hydrogeological Evaluation for ACME Lithium Inc. Clayton Valley, Nevada Project

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Lithium Brine Exploration Report and Hydrogeological Evaluation for GeoXplor Corp. and ACME Lithium Inc.

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List of Common Acronyms and Terms

ACME………….....................ACME Lithium
AHL.………………………….....Applied Hydrologic LTD
amsl……………...................Above Mean Sea Level
bgs.……………….…………Below Ground Surface
BLM………….......................Bureau of Land Management
BMRR……….......................Bureau of Mining Regulation and Reclamation
CAU……………………….... Clastic and Ash Unit
COC…………………………Chain of Custody
CSU………….......................Clastic and Salt Unit
CSAMT / MT……………......Controlled-Source Audio-Magnetotellurics / Magnetotellurics
CS…………………………....Custody Seals
CWR …………………………Confluence Water Resources
DMRE………………………..Dissolved Mineral Resources Exploration
GeoXplor……………………GeoXplor Corp
gpm…………………………..Gallons per Minute
HSAMT……………………....Hybrid-Source Audio-Magnetotellurics
K………………………………Hydraulic Conductivity
LCE…………………………..Lithium Carbonate Equivalent
LCU…………………………..Lower Clastic Unit
LGA…………………………..Lower Gravel Aquifer
LGU…………………………..Lower Gravel Unit
MAU…………………………Main Ash Unit
MDBM………………………..Mount Diablo Baseline Maridian
mg/L…………………………Milligrams per Liter
NDEP…………………………Nevada Division of Environmental Protection
NDOM………………………..Nevada Division of Minerals
NDWR………………………..Nevada Division of Water Resources
NMR…………………………Nuclear Magnetic Resonance
NOI…………………………...Notice of Intent
ORP…………………………..Oxidation/Reduction Potential
PVC…………………………..Polly Vinal Chloride
QA/QC………………………Quality Control Quality Assurance
scfm…………………………..Cubic Feet per Minute at standard pressure
SC………………………….....Specific Conductance
Sy…………………………..…Specific Yield
S………………………………Storativity
TDS…………………………..Total Dissolved Solids
TDP…………………………..Temporary Discharge Permit
T……………………………....Transmissivity
Pt……………………………...Total Porosity
UCU…………………………..Upper Clastic Unit
VFD…………………………...Variable Frequency Drive
VWP…………………………..Vibrating Wire Piezometer

1 Purpose

This report has been prepared by Confluence Water Resources (CWR) on behalf of GeoXplor Corp (GeoXplor) to document the findings of Phase 1 and 2 lithium brine exploration programs and the hydrogeological evaluation for the ACME Lithium Inc. (ACME), Clayton Valley Project.

2 Disclaimer

This Report contains or incorporates by reference “forward-looking information” which means disclosure regarding possible events, conditions, acquisitions, or results of operations relating to the Project that is based on assumptions about future conditions and courses of action and includes future oriented financial information with respect to prospective results of operations, potential mineral deposits, production levels, costs, operational data and financial position or cash flows that is presented either as a forecast or a projection. Forward-looking statements or information are subject to a variety of risks and uncertainties which could cause actual events or results to differ from those reflected in the forward-looking statements or information, including, without limitation, risks and uncertainties relating to obtaining financing to meet the Claim holder’s exploration programs and operating costs during the exploratory stage of the Project, the interpretation of exploration results and the estimation of mineral resources and reserves, the geology, grade and continuity of mineral deposits, the possibility that future exploration, development or mining results will not be consistent with the Claim holder’s expectations, accidents, equipment breakdowns, title matters, or other unanticipated difficulties with or interruptions in production and operations, the potential for delays in exploration or development activities or the completion of feasibility studies, the inherent uncertainty of production and cost estimates and the potential for unexpected costs and expenses, commodity price fluctuations, currency fluctuations, regulatory restrictions, including the inability to obtain mining permits and environmental regulatory restrictions and liability, the speculative nature of mineral exploration, dilution, competition, loss of key employees, and other risks and uncertainties. The Claim holder does not undertake any obligation to revise any “forward looking statement,” to reflect events or circumstances after the date of this Report or to reflect the occurrence of unanticipated events. CWR reserves the right but not the obligation to revise this Report should additional information become available.

Mineral resources that are not mineral reserves do not have demonstrated economic viability. U.S. investors are advised that the SEC’s mining guidelines strictly regulate information of this type in documents filed with the SEC. U.S. Investors are cautioned that the results of current exploration and potential quantity and grade of proposed exploration targets identified in the Report are conceptual in nature; it is uncertain if further exploration will result in the exploration target being delineated as a mineral resource and there is no guarantee that these resources, if delineated, will be economic or sufficient to support a commercial mining operation. It is uncertain that it will be established that these resources will be converted into economically viable mining reserves. Until a full feasibility study has been completed, there is no certainty that these objectives will be met.

3 Executive Summary

The ACME project is in Clayton Valley, Nevada. Clayton Valley contains the only operating lithium brine mining facility in North America, currently owned and operated by Albemarle Corporation. Clayton Valley remains a key target for potential development of lithium brine resources in the United States. Lithium exploration has been ongoing in Clayton Valley for decades with intent to examine the potential extent of lithium bearing brines within the basin. The ACME Project area is located north and adjacent to the Albemarle operation and includes approximately 2,230 acres of unpatented mining claims in Section 36 of T1S R39E, Section 6 of T2S R40E, and Sections 30 and 31 of T1S R40E of the Mount Diablo Baseline Maridian (MDBM). A portion of the claims in the ACME Project area are under option from GeoXplor Corp and a portion are fully held by ACME.

Figure 1 shows the location of Clayton Valley and **Figure 2** shows the location of the ACME Project area within Clayton Valley. The objective of the ACME exploration campaign was to determine the potential for lithium enriched brines to exist within the ACME Project area and if discovered, examine for potential continuity with a larger lithium brine reservoir in the valley. Objectives also included evaluating the potential volume of lithium brine that could potentially be extracted from the ACME claims through pumping wells. Phase 1 was initiated in 2021. Phase 2 work was completed in late August 2023 after completion of the TW-1 pumping test. Considering the objectives, the following exploration work was completed:

- Geophysical surveys include a gravity survey and a Hybrid-Source Audio-Magnetotellurics (HSAMT) survey of the project area. The intent of the geophysical surveys was to examine the geometry of subterranean features and potential for highly conductive brines to exist. The results of geophysical surveys were used to provide targets for brine exploration holes required to verify potential lateral continuity of the lithium brine reservoir in Clayton Valley.
- Drilling of DH-1 exploration corehole (Phase 1). DH-1 was drilled to a depth of 1,460 feet below ground surface (feet bgs). The intent of the corehole was to validate the inferences of the geophysical survey’s brine targets and to document discovery of a lithium brine occurrence at the ACME project through downhole geophysics and results from brine sampling from multiple intervals. Core samples were collected from DH-1 for direct lithium assays and for laboratory Specific Yield analysis to examine the porosity of the material drilled.
- Drilling of DH-1A exploration borehole (Phase 2). DH-1A was drilled several feet away from DH-1 to a depth of 1,920 feet bgs as a twin hole to DH-1. DH-1A was drilled to document the potential vertical extent of the lithium bearing brine aquifer discovered at the DH-1 location, and examine the vertical extent of other aquifers if encountered through additional downhole geophysics, zonal brine sampling, and testing. The borehole was completed with a Vibrating Wire Piezometer (VWP) arrangement which was installed to be used to monitor vertical and lateral response to pumping and long-term water level changes in the basin.
- Drilling and completion of the TW-1 test well (Phase 2). A 7-inch diameter steel test well was drilled and installed to a depth of 1,818 feet bgs with perforated casing extending across the extent of the lithium brine aquifer discovered in DH-1 and DH-1A. TW-1 was drilled approximately 121 feet linear distance from DH-1 and DH-1A. The intent of the well was to complete necessary groundwater testing to examine the hydraulic properties

of the brine aquifer and potential concentration of elemental lithium from the extracted brine.

- Completion of a 10-day constant rate pumping test from TW-1. The data generated from the test was used to estimate hydraulic conductivity, transmissivity, and storativity of the lithium brine aquifer penetrated.
- Hydraulic parameters were subsequently used in forward looking hydrogeological simulations to estimate the potential volume of extractible lithium brine which could be extracted within the ACME project area over time.

The results from DH-1 indicated potential for a lithium brine deposit to exist at the ACME Project. The ACME program identified the Lower Gravel Unit (LGU) as a target aquifer for lithium brine production based on concentration of lithium and favorable permeability characteristics from the results of laboratory drainable porosity analysis and the TW-1 pumping test. The concentration of lithium in brine is expected to range as high as 130 milligrams per liter (mg/L) in the LGU. The dissolved lithium concentrations composited across the entire vertical extent of the LGU under pumping conditions are expected to be as high as 100 mg/L and average 96 mg/L based the samples collected from the TW-1 pumping test.

Laboratory drainable porosity analysis indicates the Specific Yield (Sy) of the LGU material averages approximately 0.06 and is as high as 0.18. Storativity estimated from the TW-1 pumping test is estimated to be approximately 0.0125 to 0.02 which agrees with the laboratory Specific Yield estimates. The Hydraulic Conductivity estimated from the LGU based on the results of the TW-1 pumping test analysis is expected to be between approximately 0.22 and 1.46 feet/day with Transmissivity ranging between 380 to 2,490 ft^2/day. The average Hydraulic Conductivity for the LGU assessed between analytical methods is approximately 0.8 feet/day and the average Transmissivity between methods is approximately 1,031 ft^2/day.

The deposit has potential direct connectivity to a larger regional resource as indicated from the water level trend analysis described in Section 9. An estimate of Transitional Storage Reserve (TSR) was prepared based on the results of ACME Phase 1 and Phase 2 exploration programs and the limitations and assumptions defined in this report.

An inferred resource was estimated assuming the average concentration of lithium within this potential reserve is approximately 96 mg/L and acknowledges the estimate does not factor in the results and interpretations from numerous samples collected within the LGU aquifer by other claim holders not available to CWR.

The estimate of extractable elemental lithium based on total extractable volume from TSR over 40 years is approximately 56,900 Metric Tons (units rounded). A factor of 5.323 was assigned to convert elemental lithium to lithium carbonate equivalent (LCE) based on industry wide common conversion factors. The inferred LCE is estimated to be approximately **302,900 Metric Tons** (units rounded).

The estimate assumes the following:

- The composite concentration of lithium in the LGU aquifer based on the average concentration of dissolved lithium from the TW-1 pumping test is approximately 96 mg/L.
- TSR is 33,000 Acre Feet based on an (Sy) of 6%.
- Total volume of extractable brine from the LGU aquifer over a 40-year period is approximately 473,000-Acre Feet or 11,825-Acre Feet per Year assuming a Perennial Yield of 22,000 Acre Feet as defined by Rush, 1968.

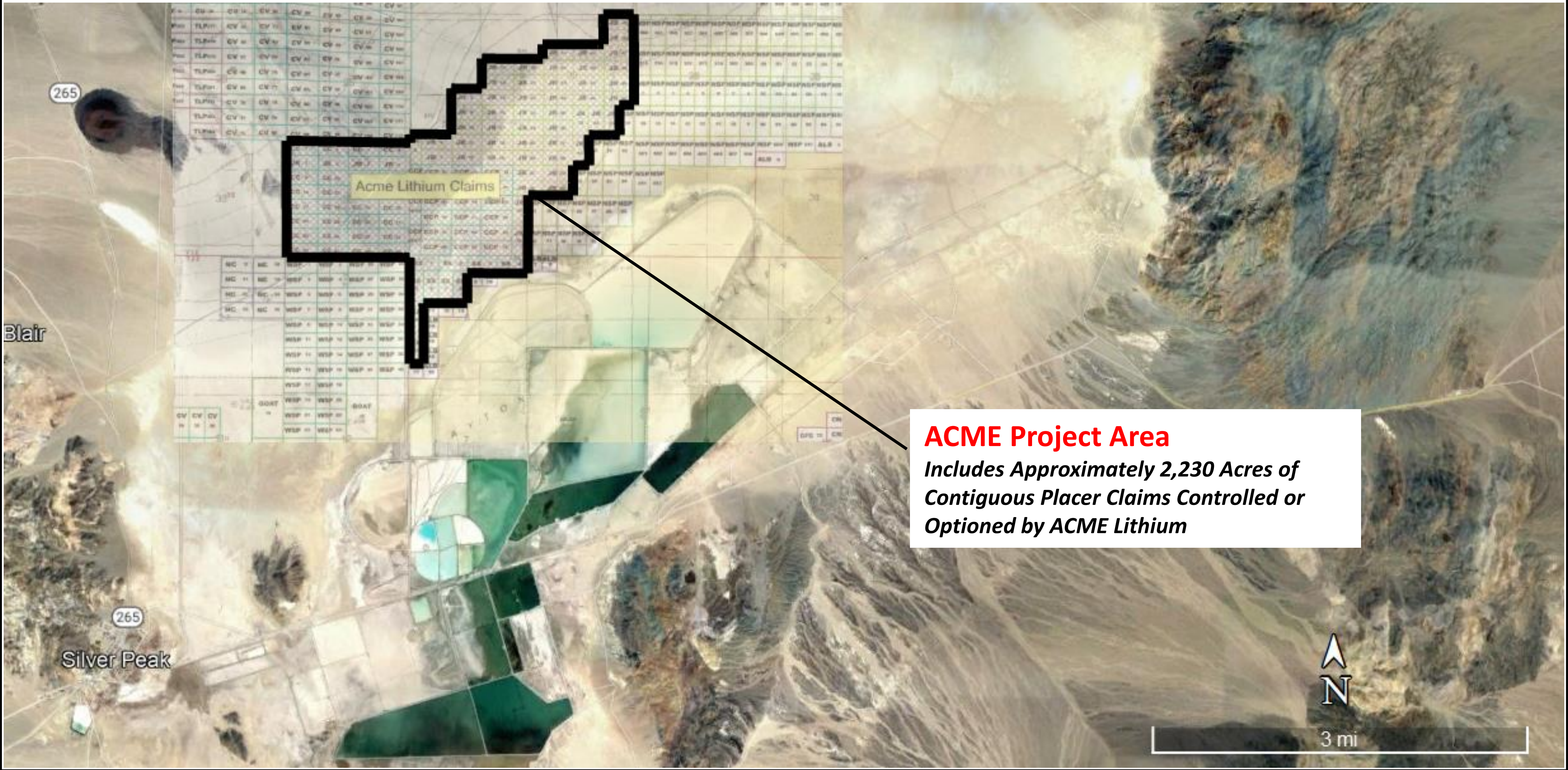
The results of a Theis based distance drawdown analysis using the Storativity and Transmissivity calculated from TW-1 aquifer testing data indicated that a deep, large diameter well in the LGU could potentially yield up to 1000 gallons per minute (gpm). The estimated TSR based on Specific Yield indicates up to approximately 7,330 gpm could potentially be developed from the LGU at the ACME Project. The Theis analysis of drawdown suggests this could be plausible with multiple wells if each well was spaced sufficient linear distance and the LGU aquifer exhibited similar or better storage coefficients and permeability as measured at TW-1. However, ability to obtain a Nevada water rights permit may limit ACME's ability to complete additional testing required to validate potential extraction scenarios as described in this report. Additional testing is recommended, understanding some of this testing may hinge on ACME's ability to obtain new water rights permits for the project.

Clayton Valley Location Map

Google Earth Imagery

ACME Lithium Exploration Report

Figure 1



ACME Project Area

Google Earth Imagery

ACME Lithium Exploration Report

Figure 2

4 Geologic Setting

This section describes the regional hydrogeological setting, results of geophysical survey indicating potential presence of brine and discussion on exploration targets within the ACME project area.

4.1 Regional Geology

Clayton Valley is in Esmeralda County, Nevada approximately 100 miles (160 km) north of Death Valley, California in Nevada hydrogeographic Basin 143. The Clayton Valley hydrogeographic basin, as defined by the Nevada Division of Water Resources (NDWR) covers approximately 557 square miles. The basin is on the western edge of the Basin and Range Province of the Great Basin. The basin is influenced by the Silver Peak-Lone Mountain extensional complex which includes a expanse of extensional structural stepover faults and crosscutting right-lateral strike faults of the Furnace Creek system in the Walker Lane of central Nevada. The structural arrangement of Clayton Valley creates a topographically closed basin environment.

Clayton Valley is geologically bounded to the west and southwest by the Silver Peak Range. The Weepah Hills bind the basin to the north and northeast. Paymaster Ridge binds the basin to the east and southeast. Quaternary alluvial fans surround the valley floor and extend from basement fault blocks that structurally bind the basin on all sides. Basement rocks are late Neoproterozoic to Ordovician North American western passive margin siliciclastic and carbonate units (Oldow et al., 1989). During late Paleozoic and Mesozoic orogenies, the region was shortened and subjected to low-grade metamorphism (Oldow et al., 1989, 2009), and granitoids were emplaced between 155 and 85 million years ago. Extension continues to the present (Burrus, 2013; Oldow et. al., 2009, and Coffey, D.M., et. al., 2021).

4.2 Basin Fill

Basin infill consists of alluvial, fluvial, and lacustrine sediments, ash, and materials broken down to clays. Coffey, D.M., et. al., 2021 describes the subsurface sedimentology and stratigraphic correlations from five exploration holes in Clayton Valley (EXP1 through EXP5). These correlations are in general alignment with the subsurface stratigraphy as described by SRK, 2022, SEC Technical Report Summary Pre-Feasibility Study Silver Peak Lithium Operation Nevada, USA. Coffey, D.M., et. al., 2021 suggests the basal and marginal basin sediments consist of alluvial gravel and coarse sand which overlay basement rock. Basement bedrock is described as the Cambrian Campito Formation. Green lacustrine clay with carbonate cement and thin organic rich layers dominates much of the middle basin fill. Fluvio-lacustrine brown and green mud, fine to coarse silt and sand with localized gravel define the middle to upper basin stratigraphy. Thin interbeds of volcanic ash occur throughout the basin. A basin-wide ash layer is observed in the upper basin fill. To the east-northeast halite lenses are interbedded with green clay and occur over approximately 122 m (400 ft) thick segment.

Basin fill sediments as described by (Munk et al., 2011; Zampirro, 2004) are presented as five stratigraphic units or aquifers defined by composition, lithology, and color. The lithostratigraphic units include the upper clastic unit (UCU), the main ash unit (MAU), the lower clastic unit (LCU), the clastic and ash unit (CAU), the clastic and salt unit (CSU), and the Lower Gravel Unit (LGU). The LGU has been described as the basal gravel or pebble gravels overlaying basement rocks, Pure Energy Minerals, 2017, NI 43-101 Technical Report Preliminary Economic Assessment of the Clayton Valley Lithium Project Esmeralda County, Nevada. Further evidence of the basal gravels is documented in the Albemarle in the 2022 SEC submittal, SRK, 2022. Both reports document the LGU or Lower Gravel Aquifer (LGA) and the MAU as potential exploration targets for high concentration lithium brines in Clayton Valley.

5 Exploration Targets

As part of early phase exploration, Hasbrouck Geophysics Inc., completed a detailed Hybrid-Source Audio-Magnetotellurics (HSAMT) survey, also known as a Controlled-Source Audio-Magnetotellurics / Magnetotellurics (CSAMT / MT) survey, over a portion of the CC, CCP, SX, and JR claims (ACME Project area) in Clayton Valley, Nevada. The purposes of the HSAMT survey was to acquire data at stations selected from the results of a gravity survey over the claims and map geologic stratigraphy and structure relative to the occurrence of lithium-bearing brine, identify conductors that are thought to be representative of lithium-bearing brine, determine the dip and thickness of those conductors, and provide information for the selection and design of additional geophysical surveys or the identification of drilling locations. The Hasbrouck survey is provided in **Appendix A**.

The results of the geophysical survey were used to select an exploration target based on gravity mapping of known stratigraphy and the conductor footprint from a nearby borehole (LX-1) drilled by Lithium-X, CWR, 2016. **Figure 3** shows the modeled bedrock depth from gravity survey and HSAMT survey line locations. **Figure 4** shows the resistivity footprint of the HSAMT survey in 3D section slices.

Figure 3: Modeled Bedrock Depth from Gravity Survey

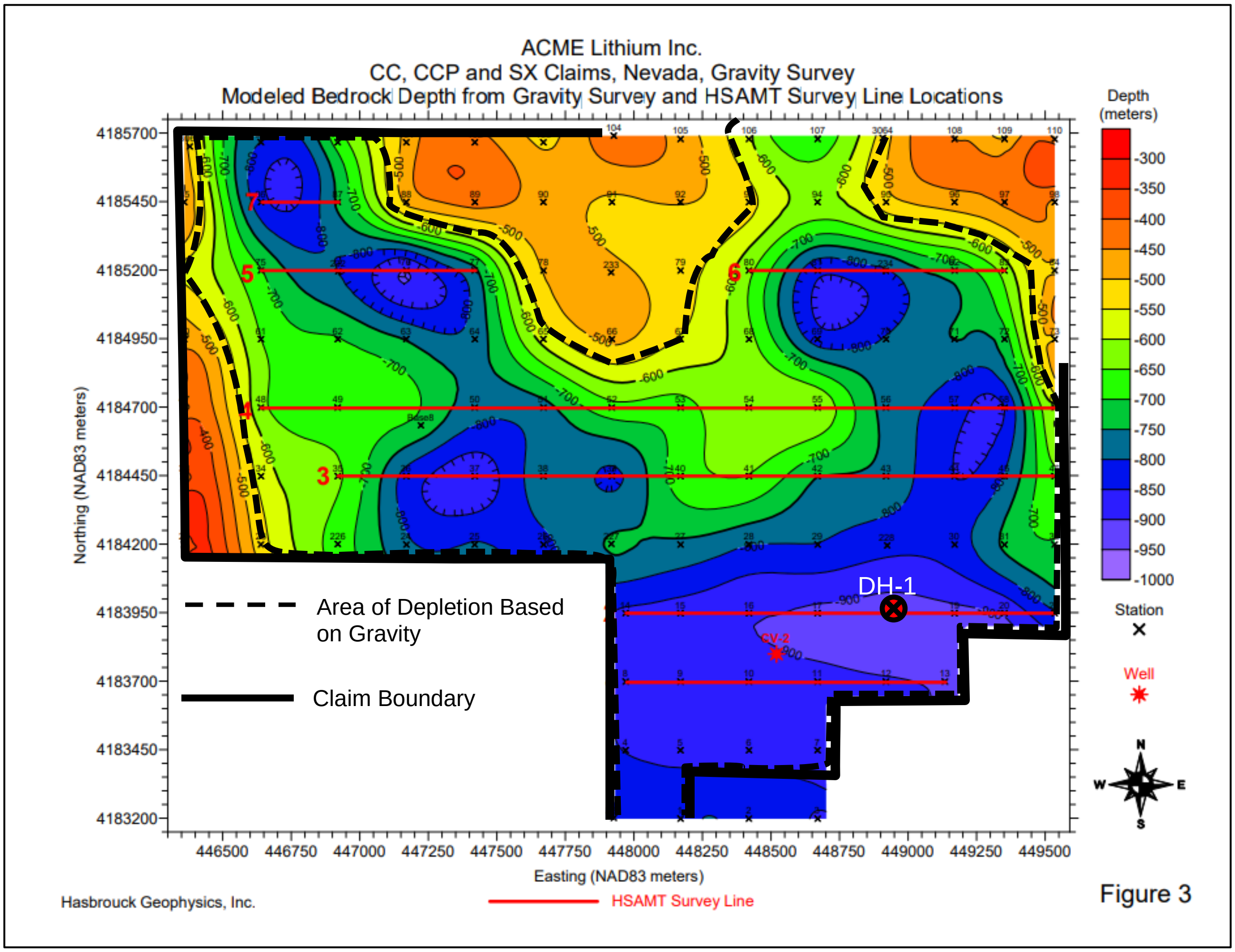
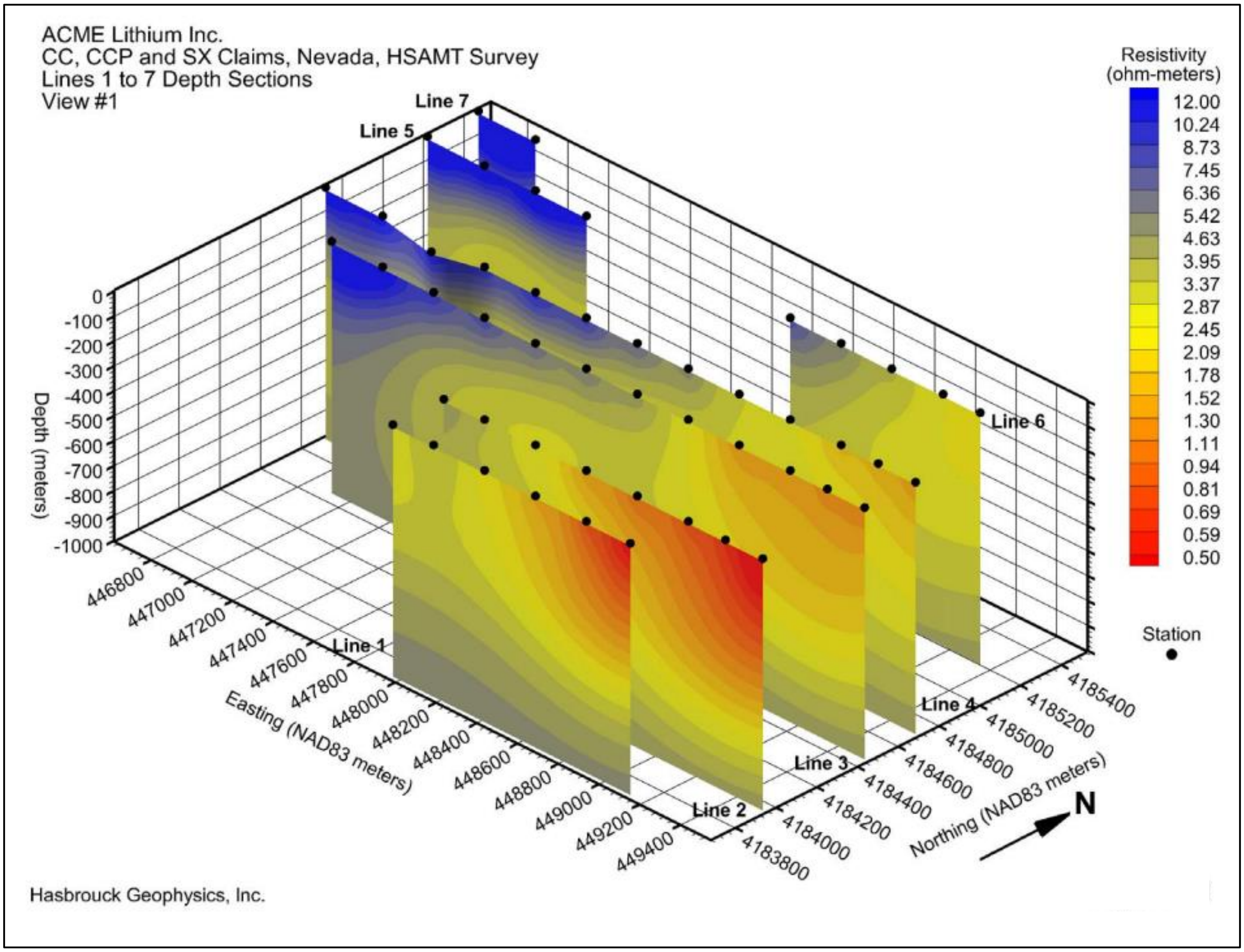


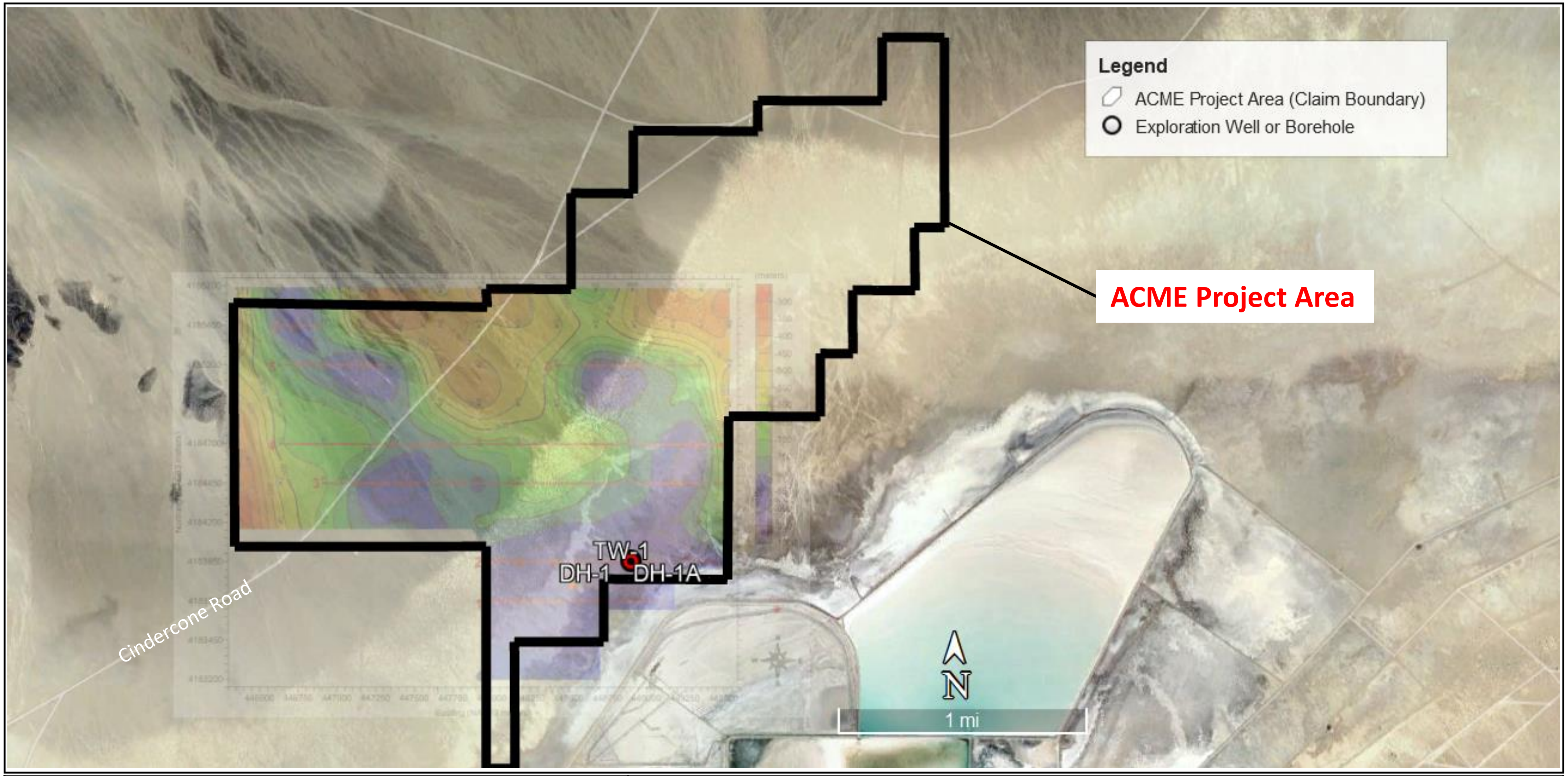
Figure 3

Figure 4: Resistivity From HSAMT Survey



Drilling was proposed to examine continuity of basin stratigraphy and potential for the lithium brine reservoir in Clayton Valley to extend north of the Albemarle Project. A drill target was selected based on resistivity footprints between 0.50 and 3.95 ohm-meter. The proposed drill location was adjusted from the recommendations from Hasbrouck to achieve best access for drilling and maintain proximity to the recommended target. The drill target is shown as DH-1 in **Figure 5**.

Section 6 provides details from the Phase 1 and Phase 2 exploration programs.



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ACME Project Exploration Holes

Google Earth Imagery

ACME Lithium Exploration Report

Figure 5

6 Phase 1 and Phase 2 Exploration Program Details

Phase 1 and 2 exploration included advancement holes through the basal pebble gravel (LGU) which was identified at Lithium X's LX-1 and inferred from the Hasbrouck gravity and HSAMT survey. Exploration holes were recommended to confirm presence of the LGU, and if encountered, examine the vertical extent of the LGU to the contact with bedrock and the potential for the LGU to host lithium enriched brines at the ACME project. The program proposed collection of the following data from the exploration holes.

- Collection of HQ core and drill cutting samples for logging, lithium assay and laboratory analysis for Specific Yield.
- The collection of brine samples for analysis of elemental lithium, and other constituents typical of the lithium brine system in Clayton Valley.
- Completion of downhole geophysical surveys to assess potential fluid resistivity and permeability.
- Hydraulic testing to assess formation permeability.
- Aquifer testing would later be recommended to assess transmissivity and storativity of the potential lithium brine aquifer encountered in the exploration holes.

A 10-day pumping test was recommended upon discovery of high concentration lithium in brines contained in the LGU. A test well program was designed to examine the characteristics of the deep aquifer system identified in the LGU in DH-1 and DH-1A. SRK, 2022, defines the LGA as a potential production aquifer for lithium brines. The LGA is contained in the basal gravels overlying bedrock in Clayton Valley. The LGU as defined by Coffey et.al 2021, is expected to extend north from the Albemarle project in vicinity of the ACME project. The inference was confirmed from the Hasbrouck geophysical survey and through drilling of DH-1 and DH-1A as described below. The LGU was defined to vertically extend from at least 1,250 feet to 1,820 feet bgs at the ACME project and contained the highest lithium values from all the brine samples collected in DH-1 and DH-1A exploration holes.

The following summarizes the early phase exploration programs completed at the ACME project. **Table 1** provides hole locations, depth, completion details and status specific to each of the exploration holes. This section describes program details for the following:

- DH-1 (Discovery Hole)
- DH-1A (Exploration Borehole)
- TW-1 (Test Well Drilling and Well Installation)
- TW-1 Pumping Test

Table 1: Exploration Hole Locations

Hole ID	Type	Location NAD 83 Easting	Location NAD 83 Northing	Location Lat Long Lat	Location Lat Long Long	Drill Depth (ft bgs)	Status
DH-1	Core	448918	4183952	37.801483°	-117.580231°	1460	Sampled, Tested and Abandoned
DH-1A	Core	448919	4183956	37.801555°	-117.580243°	1940	Sampled, Tested, VWP Installed
TW-1	Well	448947	4184008	37.802025°	-117.579929°	1823	7'' Steel Well TW-1 Completion

*Feet below ground surface (ft bgs).
*Locations are approximate based on handheld GPS.

6.1 Exploration Corehole DH-1 (Discovery Hole)

The Phase 1 exploration hole, (DH-1) was advanced to target deep pebble gravels of the LGU. DH-1 was drilled in the NW ¼ NE ¼ of Section 6, T.2S, R.40E MDBM at Latitude 37.801483° Longitude -117.580231°. The intent of the Phase 1 exploration hole was to validate the inferences of the geophysical survey's brine targets and to document discovery of a lithium brine occurrence at the ACME project through downhole geophysics and results from brine sampling from multiple intervals. Harris Exploration Drilling began hole advancement in May of 2022 under approved Bureau of Land Management (BLM) Notice of Intent (NOI) NVN 101026 and Nevada Division of Minerals (NDOM) Dissolved Minerals Resource Exploration (DMRE) Well Permit No. W0014. The Phase 1 drilling and sampling program was completed on June 24, 2023.

HWT surface conductor casing was advanced and cemented in place to approximately 200 feet bgs to preclude sloughing and collapsing issues typical in the upper portion of exploration holes in Clayton Valley. From the HWT surface casing, the hole was advanced HQ diameter core to a depth of 1,460 feet bgs. Core samples were collected from DH-1 for direct lithium assays and for laboratory Specific Yield analysis to examine the porosity of the material drilled.

DH-1 intersected multiple potential productive horizons including the targeted basal gravel aquifer at an approximate depth of 1,250 feet bgs which extended to the bottom of the hole to 1,460 feet bgs. Additional aquifers were intercepted above the basal gravel layer including the main ash layer which is believed to be one of the targeted production horizons of Albemarle's neighboring Silver Peak lithium project. An assessment of major contacts encountered in DH-1 as they may apply to those described in regional historical drilling in Clayton Valley is provided below:

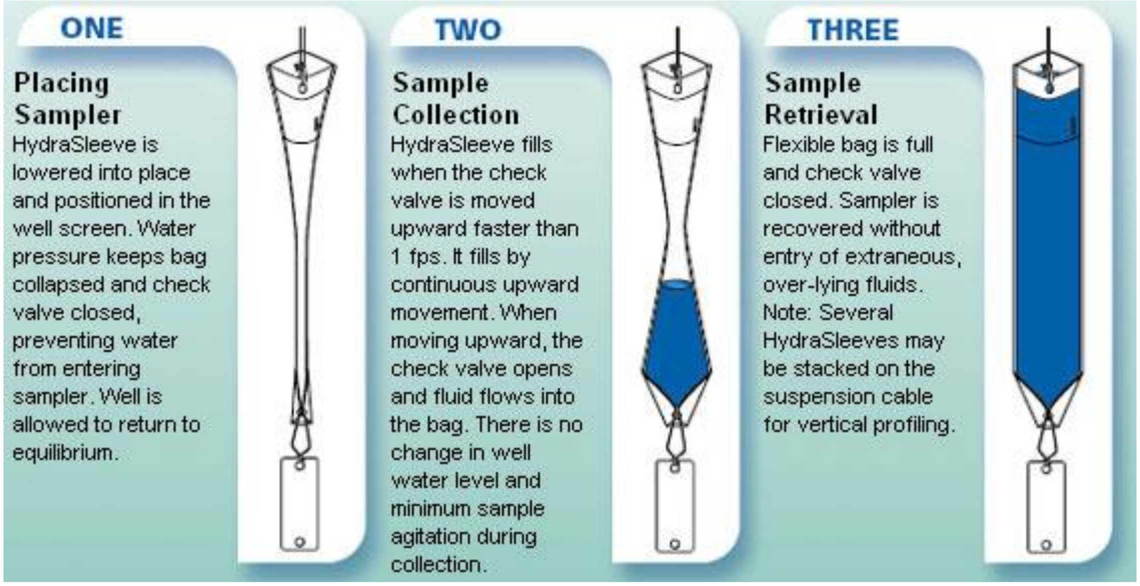
- 0 to 181' Upper Clastic Unit (UCU)
- 181 to 195' Main Ash Unit (MAU)
- 195 to 479' Lower Clastic Unit (LCU)
- 479 to 1,180' Lower Gravel Unit LGU/LCU
- 1,185 to 1,250' Airfall Ash – Lacustrine Tuff (CAU)
- 1,250 to 1,460 Transition Between LCU/LGU

A stratigraphic log for DH-1 is provided in **Appendix B**. Photographs of DH-1 core are provided in **Appendix C**.

Perforated three-inch diameter PVC well casing was installed from 200 feet to 1,460 feet bgs. The perforations allow formation fluids to flow through the casing. Solid three-inch PVC well casing was installed from 200 feet to the ground surface. Downhole wireline logs and geophysical surveys were completed through the PVC casing for hole deviation, natural gamma, fluid conductivity and temperature. The sum of all observations from drilling and downhole geophysical surveys indicated fresh water may be present to 800 feet bgs transitioning to a strong brine occurrence at approximately 850 feet bgs, with electrical conductivity and total dissolved solids concentrations increasing with depth to 1460 feet bgs. The results of DH-1 wireline logs and downhole geophysical surveys are provided in **Appendix D**.

The fluids in the wellbore were then developed out of the hole via airlift to remove potential drilling contaminants. The well was then allowed to recover and equilibrate after the airlift development. A static water level of 72.7 feet bgs., was measured from the top of the PVC casing once recovery was achieved. Upon completion of well development activities, individual passive composite zone samples were collected using the HydraSleeve™ technology. **Figure 6** provides the general operation of HydraSleeve sampling.

Figure 6: **HydraSleeve Sampling Procedures**



The image above is referenced from the manufacture's website at:
HydraSleeve, the no-purge groundwater sampling system from GeoInsight

The HydraSleeve (U.S. Patent No. 6,481,300; No. 6,837,120; No. 9,726,013; others pending) was evaluated against other methods of sampling technology and selected based on the results of multiple independent case studies. Independent case studies describing the effectiveness and defensibility of sample collection are available on the manufacturer's website at: HydraSleeve, the no-purge groundwater sampling system from GeoInsight.

Samples of lithium enriched brine were taken from DH-1 at various intervals and were sent to an independent lab and analyzed for lithium and other elements typical of lithium enriched brine systems. Target sampling zones and depths were based on the results of geophysical surveys, interpretations of the drilled lithology, and field observations including fluid conductivity and salt precipitation on the exposed core. Independent laboratory analytical results from the brine samples collected from DH-1 were used to select core samples for further laboratory analysis for Specific Yield (i.e. drainable porosity) of the aquifer(s) penetrated. Additional core samples were selected for direct lithium assay of the physical material drilled.

From the DH-1 core, 12 samples were collected and submitted to an independent laboratory for direct lithium assay and 15 samples of core were collected and prepared for laboratory analysis of Specific Yield, Field Water Capacity, and Porosity. Samples collected for direct lithium assay focused on material drilled throughout the entire depth of the corehole, except for zones with low to no core recovery. Sample collection for Specific Yield, Field Water Capacity, and Porosity focused on selection of core from the lower lacustrine tuff or ash (1,185 feet to 1,250 feet) as described in the stratigraphic log for DH-1, and from the LGU extending from 1,250 to the bottom of DH-1. The lower ash and LGU were targeted since lithium concentrations were indicated from analytical results to be highest in the two prospective deeper aquifers.

Table 2 is a tabulation of samples collected from DH-1 via HydraSleeve and submitted to an independent laboratory for analysis of elemental lithium in brine and Nevada Profile 1 constituents. **Table 3** provides a summary of samples collected for direct lithium assay of the DH-1 core. **Table 4** provides a summary of the samples collected for Specific Yield, Field Water Capacity, and Porosity analysis.

Table 2: DH-1 Brine Sample Collection Inventory

Target Depth	Target Lithology	Analytes
DH-1 @ 220’	Near Bottom of (MAU)	Total Lithium and Boron
DH-1 @ 260’	Silty Ash, Overlying Fine Sand (LCU)	Total Lithium and Boron
DH-1 @ 300’	Fine Sand with Silt (LCU)	Total Lithium and Boron
DH-1 @ 425’	Silty Fine Sand and Pumice (LCU)	Total Lithium and Boron
DH-1 @ 460’	Silty Clay (LCU)	Total Lithium and Boron
DH-1 @ 500’	Top of (LGU)	Total Lithium and Boron
DH-1 @ 550’	Silty Fine to Coarse Sand with Gravels (LGU)	Total Lithium and Boron
DH-1 @ 600’	Silty Fine to Coarse Sand with Gravels (LGU), Ash at 600’	Total Lithium and Boron
DH-1 @ 650’	Silty Fine to Coarse Sand with Gravels (LGU)	Total Lithium and Boron
DH-1 @ 700’	Silty Fine to Coarse Sand with Gravels (LGU)	Total Lithium and Boron
DH-1 @ 750’	Silty Fine to Coarse Sand with Gravels (LGU)	Total Lithium and Boron
DH-1 @ 775’	Fine to Coarse Sand with Gravels (LGU), Transition to Clast Supported Gravels, Possibly (LCU)	Total Lithium and Boron
DH-1 @ 825’	LCU/LGU	Total Lithium and Boron
DH-1 @ 850’	LCU/LGU – Indication of Inflow from Geophysics and Temp Survey	NV Profile 1 with Lithium and Boron. Includes Total Alkalinity, TDS, pH, and Most Metals
DH-1 @ 900’	LCU/LGU	Total Lithium and Boron
DH-1 @ 950’	LCU/LGU	Total Lithium and Boron
DH-1 @ 1,000’	LCU/LGU	Total Lithium and Boron
DH-1 @ 1,050’	LCU/LGU	Total Lithium and Boron
DH-1 @ 1,100’	LCU/LGU	Total Lithium and Boron
DH-1 @ 1,150’	LCU/LGU	Total Lithium and Boron
DH-1 @ 1,200’	Airfall Ash – Lacustrine Tuff (CAU?) Indication of Inflow from Geophysics and Temp Survey	NV Profile 1 with Lithium and Boron. Includes Total Alkalinity, TDS, pH, and Most Metals
DH-1 @ 1,250’	Airfall Ash – Lacustrine Tuff CAU/LCU/LGU Contact	Total Lithium and Boron
DH-1 @ 1,300’	LCU/LGU	Total Lithium and Boron
DH-1 @ 1,350’	LCU/LGU	Total Lithium and Boron
DH-1 @ 1,400’	LCU/LGU	Total Lithium and Boron

Table 3: DH-1 Core Material Samples Collected for Lithium Assay

				Analytical Code
Sample #	Hole ID	Sample Type	Sample ID	IM-4AB61
1	DH-1	Core	DH-1 (71.6' to 72')	X
2	DH-1	Core	DH-1 (189.6' to 190')	X
3	DH-1	Core	DH-1 (256' to 256.3')	X
4	DH-1	Core	DH-1 (339.1' to 339.3')	X
5	DH-1	Core	DH-1 (546' to 546.3')	X
6	DH-1	Core	DH-1 (595.7' to 595.9')	X
7	DH-1	Core	DH-1 (768' to 768.3')	X
8	DH-1	Core	DH-1 (979' to 979.2')	X
9	DH-1	Core	DH-1 (1088.8' to 1089')	X
10	DH-1	Core	DH-1 (1192.8' to 1193')	X
11	DH-1	Core	DH-1 (1245' to 1245.3')	X
12	DH-1	Core	DH-1 (1357' to 1357.3')	X

Table 4: DH-1 Samples Collected for Specific Yield

Sample ID	# of Containers	Container Type
DH-1 (1200.15 to 1200.75)	1	HQ Core
DH-1 (1219.0 to 1219.4)	1	HQ Core
DH-1 (1222 to 1222.5)	1	HQ Core
DH-1 (1229 to 1229.8)	1	HQ Core
DH-1 (1246 to 1246.5)	1	HQ Core
DH-1 (1262 to 1262.58)	1	HQ Core
DH-1 (1312.3 to 1312.7)	1	HQ Core
DH-1 (1339 to 1339.4)	1	HQ Core
DH-1 (1341.2 to 1341.8)	1	HQ Core
DH-1 (1351.8 to 1352.4)	1	HQ Core
DH-1 (1363 to 1363.6)	1	HQ Core
DH-1 (1367.5 to 1368)	1	HQ Core
DH-1 (1393.41 to 1394)	1	HQ Core
DH-1 (1395.5 to 1396)	1	HQ Core
DH-1 (1398.3 to 1398.7)	1	HQ Core

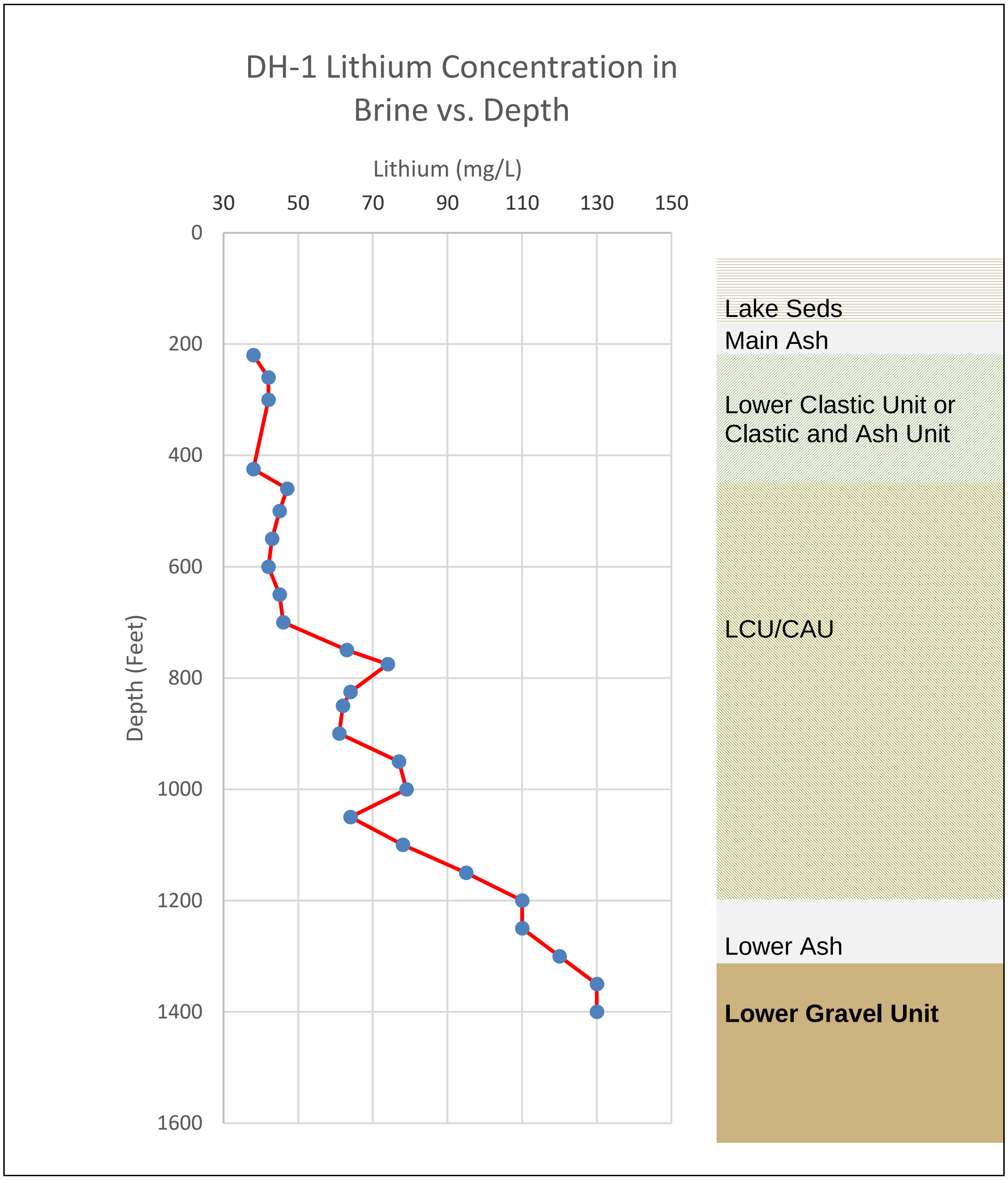
Material samples could not be collected from the static water level to 200 feet bgs due to poor sample recovery. This includes the main ash unit (MAU) which has been described to be a production aquifer in Clayton Valley. Brine samples could not be collected since the hole was cased from the surface to 200 feet bgs to preclude sloughing and to protect the corehole during drilling. **Table 5** provides a summary and assessment of the average concentration of lithium in brine from the major stratigraphic units identified in DH-1 based on the analytical results received from the laboratory:

Table 5: Lithium Concentrations Across Test Intervals

Hole Depth (Feet)	No. of Samples Collected	Average Lithium Concentration (mg/L)	Unit	Unit Description
195' to 479'	5	41.4	LCU	Lower Clastic Unit
479' to 1180'	15	62.5	LGU/LCU	Transition Between Lower Gravel Unit and Lower Clastic Unit
1185' to 1250'	2	110	CAU	Lacustrine Tuff
1250' to 1400'	3	126.6	LCU/LGU	Transition Between Lower Clastic Unit and Lower Gravel Unit

Chart 1 shows the concentration of lithium from all the brine samples collected from DH-1 in mg/L vs. depth, based on the logged stratigraphy.

Chart 1: Lithium Concentration vs. Depth in DH-1



Laboratory analytical results from first pass sampling from DH-1 indicated the following.

- Lithium was detected from all brine samples at concentrations ranging between 38 and 130 mg/L.
- The results strongly indicate the existence of a bicarbonate rich groundwater quality affinity which is typical in the Clayton Valley lithium brine aquifers.
- Lithium concentrations appear to increase in the vicinity of the deeper lacustrine tuff unit at 1,185 feet bgs and increase further to 130 mg/L in the deep gravels underlying the tuff near 1,400 feet bgs.

Following sampling and laboratory analyses, the PVC casing was removed and the corehole was plugged and abandoned in accordance with the conditions of the DMRE well permit.

6.2 Exploration Hole DH-1A

DH-1A was drilled as a twin hole to DH-1 and is located in the NW ¼ NE ¼ of Section 6, T.2S, R.40E MDBM at Lat 37.80155° Long -117.58024°. The hole was advanced with added objectives to identify the depth to bedrock, the extent of the LGU encountered in DH-1, and potential concentration of lithium approaching the contact with bedrock. The Hasbrouck geophysics report, (Hasbrouck, 2021) suggests the bedrock contact at the DH-1A location would be between 1,800 and 2,000 feet bgs based on their interpretation of the gravity and resistivity data. Harris-Earth Drilling began operations at DH-1A in December of 2022 under approved NOI NVN 101026 and NDOM DMRE Borehole Permit N0043. DH-1A included the following program elements to satisfy the objectives described above.

- Advancement of a nominal 10-inch diameter rotary borehole to 200 feet bgs from which a brine sample was airlifted from the hole to examine potential lithium concentration in the MAU encountered in DH-1 and throughout Clayton Valley.
- Continued advancement of a 10-inch mud-rotary borehole to 300 feet bgs and installation of steel conductor casing, cemented in place to preclude sloughing and to protect the borehole for advancement to the target depth.
- Advancement of a 7 5/8-inch diameter mud-rotary borehole to 1,460 feet bgs and confirmatory logging of drill cuttings.
- Advancement of an HQ corehole from 1,460 feet to 1,940 feet bgs, with intent to gather core samples for additional laboratory analysis and examine the composition and lithostratigraphy of the core drilled. Core recovery and rate of penetration was not sufficient to meet the program objectives and the hole was opened to 7 5/8-inch diameter via mud-rotary drilling, and advanced to 1,940 feet bgs.
- Completion of downhole geophysical wireline logs to include a nuclear magnetic resonance (NMR) log which provides indications of potential fluid volume, mobile, or capillary bound waters, and estimates of hydraulic conductivity throughout the entire borehole. Borehole deviation and caliper surveys were completed in addition to micro-resistivity, natural gamma, fluid conductivity and temperature log profile of the borehole.
- Zone isolated hydraulic testing and brine sampling via airlifting through downhole inflatable packer system. This style of testing was largely unsuccessful and only one test was completed in bedrock before the packer system parted and was lost to the hole.
- Completion of additional open hole airlifting and brine sampling.
- Collection of field chemical parameters during all airlift testing to document drilling fluid evacuation from the borehole and the presence of formation fluid as field parameter stabilize.
- Installation of a grouted-in Vibrating Wire Piezometers (VWP) to monitor long-term changes in water levels at the ACME project and response from the TW-1 pumping test.

6.2.1 Shallow Airlift Testing and Drilling

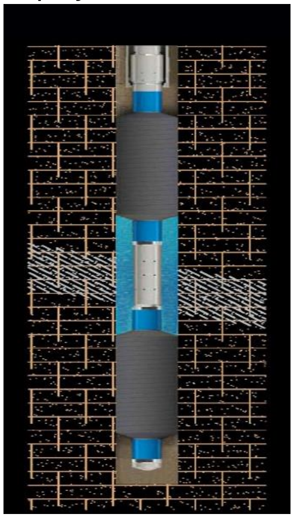
An airlift was conducted in DH-1A at 200 feet bgs prior to further advancement of the hole, with intent to gather water quality samples for assessment of lithium brine occurrence in the MAU at the ACME project. A water quality sample was collected from the airlift however, the sample was determined by CWR to be subjected to influences from drilling fluids since the airlift terminated prior to stabilization of field chemical parameters. After the airlift, the borehole was reestablished and advanced 10-inch diameter to 300 feet bgs for installation of steel conduction casing. The hole was advanced 7 5/8-inch diameter using mud rotary drilling from the conductor casing at 300 feet to 1,460 feet bgs and then to 1,940 feet bgs after multiple failed attempts to core from 1,460 feet.

6.2.2 Logging

Appendix B contains a stratigraphic log for DH-1A. The log is a confirmatory log since it is a twin hole to DH-1. The DH-1A log contains descriptions of the material drilled to a depth of 1,940 feet bgs. A copy of the wireline logs and downhole geophysical surveys are provided in **Appendix D**. Further discussion regarding the results of the downhole geophysical survey from DH-1A is provided in Section 15.

6.2.3 Zone Testing

The DH-1A program called for completion of zonal isolated hydraulic testing and brine sampling across multiple units identified in the DH-1 program. These units were identified to host potential aquifers varying in characteristics, composition, and potential lithium concentration. Test intervals were proposed in the bedrock, i.e., Campito Formation encountered in DH-1A, the LGU aquifer, the lower Airfall Ash – Lacustrine Tuff (CAU), and the LCU and gravel units overlying the lower ash. Zone testing operations included deployment of a straddle packer arrangement like what is shown in the schematic below.



Straddle Packer Schematic

The straddle packer arrangement is deployed on an independent tubular pipe from the drill deck to the planned test zone. The straddle packer arrangement included two pneumatically inflatable elements separated by a testing sub from which the test zone would be isolated by inflation of the elements above and below the test zone. Hydraulic conductivity testing and brine sampling is then conducted through the testing sub via airlifting through the tubular pipe.

A zone isolated packer test was successfully completed in DH-1A. The test was completed in the Campito Formation or bedrock unit underlying the LGU from 1,880 feet to 1,840 feet bgs. A brine sample was collected near the end of the airlift once field chemical parameters had stabilized in accordance with the sampling protocols described in Section 7. Additional testing was attempted and determined unsuccessful due to the packer arrangement separating from the tubular pipe provided by the drilling contractor.

Section 8 provides a summary of results from the packer test completed in DH-1A. The results of zone isolated testing of the bedrock underlying the LGU indicated the hydraulic conductivity of the upper portion of the bedrock near the contact with the LGU is approximately 0.50 feet per day, and the total lithium concentration of the brine encountered in bedrock is approximately 71 mg/L.

6.2.4 Vibrating Wire Piezometer Installation

Upon termination of packer testing operations, the borehole was reestablished and opened to the top of the parted packer and conditioned with drilling muds for installation of a grouted in VWP arrangement. Three (3) GeoKon model 4500INCO VWPs were installed and grouted in place in accordance with the manufacture's instruction manual, available at. https://www.geokon.com/Piezometers

Piezometers were installed and grouted in place in the DH-1A borehole to monitor changes in hydrostatic pressure and assess the potentiometric surface of the LGU, lower ash, and LCU and gravel units overlying the lower ash encountered in both DH-1 and DH-1A. The piezometers were outfitted with Inconel wetted parts which protects the instruments from corrosion in saline conditions. **Table 6** provides instrumentation and installation depth details of the DH-1A VWP arrangement.

Table 6: DH-1A Instrument and Installation Depth Details

ID	Target From (fbgs)	Target To (fbgs)	Geologic Unit	VWP As-Built Installation Depth (ftbgs)	VWP Type	Cable Type
DH-1A	479'	1180'	Transition Between Lower Gravel Unit and Lower Clastic Unit	590'	Geokon 4500S (3 MPa)	Green PU
	1180'	1250'	Deep Lacustrine Tuff or Ash	1220'	Geokon 4500S (7.5 MPa)	Green PU
	1250'	2000'	Lower Gravel Unit	1550'	Geokon 4500SH (7.5 MPa)	Green PU

Field calibration was completed prior to installation in accordance with the instructions provided by the manufacturer. Calibration instructions and procedures can be reviewed in the GeoKon 4500 Series installation instruction manual, https://www.geokon.com/Piezometers. Initial field readings collected prior to installation in accordance with the manufacturer's instructions are provided in **Table 7**. Guage and thermal factors reported in the manufactures instrument calibration sheets for each respective piezometer are also provided in **Table 7**.

Table 7: **Initial VWP Field Readings, Thermal and Guage Factors**

Piezo #	Serial #	Field Readout (Digits)	Field Readout (Temp ˚C)	(G) Guage Factor (psi/digit)	(K) Thermal Factor (psi/C)	Installed Depth (ft-bgs)
DH-1A #2	22112476	8696.6	10.1	-0.1088	0.08474	590
DH-1A #3	22526732	8863.6	10.4	-0.2398	0.4279	1220
DH-1A #4	2252673	8733.4	10.6	-0.2691	0.4475	1550

The VWP arrangement was affixed to a 1-inch diameter steel guide pipe which was installed during installation to ensure accuracy in depth placement for each piezometer. The steel guide pipe was installed slightly above the bottom of the open borehole and secured in tension for grouting. Cement-bentonite grout was mixed with water at a ratio of 2 parts Type II neat cement to 1.5 parts bentonite to create a 11.6 pound by volume grout mixture. The grout was pumped through the 1-inch guide pipe, filling the volume of the borehole via positive displacement from bottom to top until full returns were observed at the surface. A total of 25 cubic yards of grout was placed in the installation of the DH-1A VWP.

A GeoNet 8840 data logger was programed to interface with the piezometers to record pressure and temperature measurements which were later converted to depth to water measurements. A discussion on water level measurements and the data collected from the DH-1A VWP is provided in Section 9.

Photograph, southwest view of DH-1 drill-site.
Showing DH-1A VWP installation.

6.3 Test Well (TW-1)

TW-1 is in the NW ¼ NE ¼ of Section 6, T.2S, R.40E MDBM, Latitude 37.802025°N, Longitude -117.579929°W. Harris-Earth Drilling began operations at TW-1 in April of 2023 under NVN-101026 and DMRE Well Permit W0017.

The TW-1 program consisted of the following:

- Advancement of a 14.75-inch mud rotary borehole to a maximum depth of 1,823 feet below ground surface (bgs).
- Sampling of drill cuttings and chips for mineral assays.
- Completion of open hole wireline logging and geophysical surveys.
- Installation of a 7-inch diameter, steel well casing.
- Well development via airlifting and swabbing.

The operation included drilling a 24-inch diameter surface conductor hole to a depth of 260 feet bgs. A 16-inch diameter steel A53B PEB, 0.25-inch wall surface conductor casing was installed to 260 feet bgs and cemented in place. A 14.75-inch diameter mud rotary borehole was then advanced from the steel conductor casing to a depth of 1,823 feet bgs. The hole was terminated at the bedrock contact with the LGU. The hole was conditioned for completion of deviation survey, caliper log, and E-Log. Once the open hole surveys were completed, a 7-inch diameter, A53B STC, 0.272-inch wall, steel well casing was installed with 3 x 1/16-inch double row perforations extending from 1,800 feet to 1,296 feet bgs. A gravel pack was installed by tremie pipe from 1,823 feet to 1,273 feet bgs, below the contact with the lower ash unit encountered in DH-1. The remaining annulus of the well was sealed with bentonite grout from 1,273 to 23 feet bgs and with Type II neat cement from 23 feet bgs to the ground surface in accordance with the Nevada well regulations. The well was designed to isolate the LGU aquifer from overlying aquifers which are potentially lower in lithium concentrations and from those aquifers containing potential freshwater intrusions higher in the borehole. An as-built well completion diagram and well drillers report for TW-1 is provided in **Appendix E**.

Photograph, east view of TW-1 drill-site,
ACME Lithium Project

TW-1 was airlift developed to remove drilling fluids which remained in the well and wellbore from the drilling operation. Latent drilling fluids were developed from the well by surge airlifting while working the perforations with double ended swab tool, est. of 1-hr to 15 minutes per 20 feet of perforations from bottom to top of the perforations. Mud dispersants products were worked into the well with the swab tool. Field chemistry parameters including pH, Total Dissolved Solids, Electrical Conductivity and Temperature were recorded during the development process. Development conformance criteria required monitoring field chemistry in series over time, so that consecutive measurements of airlift discharge do not deviate within 10% from the previous recordings. Initial development conformance testing was conducted after swabbing via airlifting from below transmissive zones in the aquifer for 2-3 consecutive hours while monitoring the field chemistry. Additional development conformance was finalized with the driller in the field based on the conditions encountered during drilling. This included collecting grab samples of discharge water at the end of a series of swabs to visually inspect clarity, turbidity, and sand content. Completion and acceptance of airlift development was determined by CWR in accordance with the procedures described in Section 7.

6.4 TW-1 Pumping Test

A pumping test was designed considering the program objectives to estimate transmissivity and storativity of the LGU and the limitations of the TW-1 DMRE well permit. The DMRE well permit limits the discharge to 5 Acre Feet total discharge. Additional discharge limitations were required as a condition of the Nevada Division of Environmental Protection (NDEP), Temporary Discharge Permit for the project. Both permits restricted the pumping discharge rate to less than 100 gpm, not to exceed 144,000 gallons per day or 5 Acre Feet total discharge from the well. The pumping test program included the following.

- Collection of background water level data from TW-1 and from DH-1A which was completed from June 5 to July 27, 2023.
- Completion of a step drawdown test of TW-1 on July 27, 2023.
- Completion of a 10-day constant rate discharge test of TW-1, initiated on July 28th and completed on August 7, 2023.
- Collection of post pumping test aquifer recovery data from TW-1 and DH-1A from August 7th to August 18, 2023.

Lewis Drilling was contracted to install a 10-hp submersible pump in TW-1 to a depth of 480 feet bgs and the various support equipment necessary to complete the test. A variable frequency drive (VFD) was installed to control the voltage to the pump motor, allowing for a constant rate discharge to be maintained. The drop-pipe to the pump was outfitted with a check valve to preclude instantaneous surging of water back to formation from the discharge line during the recovery portion of the test. Two sounding tubes were installed in TW-1 to allow access for water level monitoring equipment. A vented Insitu Level Troll pressure transducer was installed in one of the sounder tubes to log and record water level drawdown and recovery data during the test. The second sounder tube was used to collect backup water level measurements with a water level sounder tool.

A totalizing flow meter was installed to monitor gallons per minute (gpm) and total gallons pumped from the well. Discharge was conveyed from the well via 2-inch lay flat pipe to the discharge management area approximately 2,000 feet northwest TW-1, where it was allowed to evaporate or infiltrate in accordance with the conditions of the NDEP Temporary Discharge Permit and BLM NOI.

The results of the step test were used to assess well efficiency and the optimal pumping rate for the constant rate discharge test. The results of the step test are discussed in Section 10. Following the step test, a 10-day duration, 94 gpm constant rate pumping test was completed. Drawdown was monitored in the pumping well in addition to the drawdown response propagated to DH-1A from pumping TW-1. The results of the constant rate pumping test are discussed in Section 11. In addition to drawdown and recovery data collection from the testing, brine samples were collected daily from the pumping test discharge for chemical analysis.

7 Water Quality Sampling Methods, Procedures and Conformance Criteria

Section 13 presents the methods for collection of water quality samples which were submitted to a Nevada Certified Laboratory for analysis of elemental lithium and Nevada Profile 1 chemical parameters. Physical measurements, sample collection and preparation procedures were completed in accordance with the Guidance Document for the Design and Construction of Groundwater Monitoring Wells and Approved Monitoring and Sampling Methods, Nevada Division of Environmental Protection – Bureau of Mining Regulation and Reclamation (NDEP/BMRR, 2018). The sampling procedures described below are consistent with these methods. Groundwater samples were collected using the following sampling methods:

- HydraSleeve, composite passive sampling.
- Evacuation of multiple wellbore volumes via airlifting.
- High flow sampling from a pumped well.

All brine and water quality samples were collected by CWR or the GeoXplor geologist under direct oversight from CWR.

7.1 HydraSleeve, Composite Passive Sampling Method

Water quality samples were collected via HydraSleeve at multiple intervals from DH-1 as described in Section 6.1. Groundwater samples were collected using dedicated HydraSleeve® samplers set at a specific depth based on the logged stratigraphy from the DH-1 corehole. HydraSleeve groundwater samplers are considered instantaneous grab-sampling devices designed to collect water samples from groundwater wells without purging or mixing water from other intervals. HydraSleeve samplers are made from a collapsible tube of polyethylene, sealed at the bottom end, and built with a self-sealing reed-valve at the top end. The HydraSleeve samplers were installed empty into the water column where hydrostatic pressure keeps the device closed except during sample collection. The sampler device was deployed to a specific sampling depth in the temporary well screen as described in Section 6.1. Following sampler deployment, the sampler was left in place long enough for the well water, contaminant distribution, and flow dynamics to restabilize after the minor vertical mixing caused by the installation of the sampler. Literature from the manufacturer suggested 15-20 minutes was sufficient time for stabilization within the well column.

To initiate sample collection, the HydraSleeve was pulled upward through the sample zone (or 1.0 to 1.5 times the sampler length) at a rate of one foot per second or faster. The reed-valve at the top opens as the sleeve is pulled through a “core” of water, and the sleeve expands to contain the sample. Once the sample sleeve is full, the self-sealing reed-valve closes, preventing loss of the sample or the entry of extraneous fluid as the HydraSleeve is recovered. At the surface, the HydraSleeve can be punctured with the pointed discharge straw and the sample transferred to the bottle sets (following filtering, if required) for transport to the laboratory. The empty HydraSleeve were disposed. HydraSleeves are single use sampling devices and cannot be reused.

Field chemical parameters were collected and recorded in accordance with the procedures described in Section 7.4 below. Sample preparation, preservation, handling, and shipping was conducted in accordance with the procedures described in Section 7.6.

7.2 Airlift Sampling Method

A packer isolated airlift, drawdown and recovery test was completed in DH-1A as described in Section 6.2.3. The zone isolated test was completed bedrock unit underlying the LGU from 1,880 feet to 1,840 feet bgs. Additional zone testing was attempted using downhole straddle packer system however, these tests were generally unsuccessful since the packer parted from the drop pipe after the first test in bedrock. Water quality samples collected from DH-1A above the bedrock contact are indicative to a composite sample of the overlying aquifers and are not zone isolated across the respective aquifers encountered. The results of these test are anecdotal to the water quality footprint of the aquifers overlying the bedrock and LGU.

Brine samples were collected near the end of the airlift once field chemical parameters had stabilized to meet the conformance criteria described in Section 7.5. Airlift testing was done by first fitting the packer arrangement drop pipe with a diverter head, and then inserting an airline (3/4” tremie pipe) through the head and into the drop pipe. The depth of the airline was calculated to give maximum submergence while remaining within air compressor range. For each airlift test, a data-recording pressure transducer was lowered into the drop pipe attached to or enclosed within the bottom of the airline. The top of the airline was fitted with a high-pressure air hose from the compressor, and a discharge hose was attached to the diverter head.

Airlift testing then proceeded by injecting air at about 150 to 200 cubic feet per minute (at standard pressure – scfm) down the airline. Upon exiting the airline, air bubbles rise in the water column, entraining and lifting water through the wellbore and out the packer drop pipe. Water is thereby “pumped” out of the test interval. The volume of water pumped in this manner was measured by directing the air/water discharge into an open-top drum of known volume while recording the time to fill the vessel.

Airlift “pumping” was continued until chemical field parameters met the conformance criteria as described in Section 7.5 below. A brine sample was then collected in accordance with the sample collection, preservation, handling, and shipping procedures described in Section 7.6.

7.3 High Flow Sampling from Pumped Well

Brine samples were collected daily from TW-1 pumping test discharge water. A grab sample was collected through sampling ports built into the well discharge line at the well head. Daily sampling began once chemical field parameters met the conformance criteria as described in Section 7.5 below. Brine samples were then collected in accordance with the sample collection, preservation, handling, and shipping procedures described in Section 7.6

7.4 Collection of Field Chemical Parameters

Water quality field parameters were monitored in the field at the time of sampling. Field parameters for all samples collected were monitored and recorded at a frequency specific to the sampling method. Field parameters were monitored as follows:

- Airlift sampling – measure and record field parameters every 10 minutes or until conformance criteria are achieved. The airlift purging method requires conformance with stabilization of field parameter criteria before samples are collected.
- High flow purging – measure and record field parameters until conformance criteria are achieved. High flow purging methods require conformance with stabilization of field parameter criteria before samples are collected.
- HydraSleeve Sampling - measure and record field parameters at the time of sampling.

Field chemical parameters should include monitoring of the following:

- pH
- Specific Conductance (SC)
- Total Dissolved Solids (TDS)
- Temperature (T)
- Oxidation/Reduction Potential (ORP)

A multi-parameter water quality meter (e.g., MYRON L Co. Ultrameter II) was used for measuring field parameters during sampling. The multi-parameter meter was field calibrated in accordance with the manufactures specifications prior to use each day. Field calibrations and field parameters measurements for each sample were recorded in the field notebook or field sampling forms.

7.5 Field Parameter Conformance Criteria

Conformance criteria for airlift and well discharge sampling is intended to ensure water samples collected are representative of formation groundwater without influence of wellbore storage effects and latent drilling fluids. The procedure includes airlifting or pumping, while monitoring chemical field parameters. Deviations in field parameters are indicative to influences of the wellbore. These influences are overcome as pumping accesses formation water outside the wellbore and the field parameters stabilize at the point of discharge, representing the footprint of groundwater outside the well. Field parameters were monitored at the frequency described above until parameters stabilized to within the following range prior to collection of samples.

- pH, three (3) consecutive measurements not to deviate within 1% of each of the consecutive measurements.
- SC and TDS, three (3) consecutive measurements not to deviate within 10% of each of the consecutive measurements.

- Temperature, three (3) consecutive measurements not to deviate within 10% of each of the consecutive measurements.

Field parameter measurements were recorded in field notebook or field sampling forms to monitor stabilization of parameters. Once parameters met the conformance and stabilization criteria, a water quality sample was collected. Field parameters collected to document conformance of sampling criteria are provided in **Appendix F**.

7.6 Sample Collection, Preservation, Handling, and Shipping

Sample collection requirements and procedures are based on the analytical parameters and the specific analytical laboratory performing the analyses. For this program the analytical laboratory would deliver sample bottles to the sampler (as requested) and provide detailed instructions on sample collection with each sample bottle delivery. The laboratory is required to be certified in the state of Nevada for analysis of regulatory compliant water quality samples. The specific sample bottle requirements and procedures and protocols are summarized below.

7.6.1 General Sampling Considerations

Coolers filled with sample bottles containing required preservatives were shipped to the sampler. Upon receipt of the sample coolers, the samplers inspected the sample containers. If any of the preservatives leaked, the project manager and/or laboratory were notified. If the bottles were not used immediately, the bottles were stored cool. If the bottles get too warm, the preservative may explode when the bottles are opened. This was taken into consideration on hot days when the sample bottles are kept in warm vehicles.

The sample containers were packaged in separate polyurethane bags representing the total number of samples requested. The sample containers and preservative type were identified by colored labels. Raw/unpreserved container types did not have a colored label. Except for RAW container types, each container has a preservative specific to the analyses requested. The containers were not rinsed, and care was taken not to lose any of the preservative when filling containers with samples (i.e., do not let the bottes overflow during filling). Some samples collected for inorganic constituents were field filtered either at the sampling location or immediately upon returning to a safe/sheltered location, if weather conditions were problematic.

7.6.2 Filtering Procedures and Requirements

Filtering for dissolved metals was achieved using a peristaltic or hand pump, dedicated well pump and dedicated Teflon tubing, and disposable 0.45-micron field filters. If the sampler was unable to perform the filtration in the field, it was documented in the field notes and both the project manager, and the laboratory contact was notified so that the samples were properly filtered when they arrived at the laboratory. For this program, the laboratory was required to filter samples when weather, equipment, or other sampling conditions preclude the sampler from filtering in the field. Filtering is not required for total metals analysis. Filtering for dissolved metals analysis was completed prior to HNO3 preservation.

7.6.3 Sample Preservation

For Nevada Profile 1 constituents, including total and dissolved lithium the following bottles and preservatives are required:
1-L plastic, unpreserved.
1-500 mL plastic, HNO3 preservative. Requires filtration prior to adding preservative.
1-500 mL plastic, H2SO4 preservative.
1-250 mL plastic, NaOH preservative.

7.6.4 Sample Labeling, Handling and Chain of Custody

All sample bottles were labeled with the provided labels for the samples using a waterproof marker; completed labels were covered with clear tape to prevent any damage from water. For each label, the project name, sample location and sample interval (e.g., “DH-1A @ 1400 feet”), sample date and time, and sampler’s initials. The labels were marked to indicate whether the sample was filtered or not. Samplers made sure all bottle caps were tight for packing and any debris from the outside of the containers was cleaned. Sample sets were placed back into the original polyurethane bag. The samples were cooled to 0ºC to 4ºC using ice packs, or bagged ice, and placed upright in a similar configuration within the cooler provided. Once samples were collected, a chain of custody (COC) form was completed for the sampling event.

7.6.5 Sample Delivery and Hold Times

Samplers were instructed to return samples to the analytical laboratory within the required holding time for the analyses. The shortest holding time was for pH, which was not achievable due to the remoteness of the project. The second shortest hold time is for total dissolved solids (TDS) analysis which is 7 days from the time of sampling. Therefore, all samples arrived to the laboratory within at least 5 days of the sampling time/date. Samples were hand delivered or shipped out via overnight delivery within the same day or two of sample collection. All samples were cooled and maintained at a temperature of 0ºC to 6ºC for return shipment. Ice was double bagged in Ziploc bags to prevent leakage during shipment. As such, use of a cooler as a shipping container was recommended. A signed copy of the COC was placed in each shipping cooler before the shipping cooler was sealed. The COC was placed in a plastic bag to prevent damage in case of leakage. For security purposes the use of custody seals (CS) was utilized. The CS was applied to the sample cooler and cooler lid when samples were shipped or delivered to the laboratory.

The condition of the seal upon receipt is indicative if the cooler has been tampered with during the time in transit. The CS was applied on the opening side of the container, signed, and dated, and covered with clear packing tape. Upon receipt of the shipped cooler at the lab, any damage would be reported, the temperature was measured, and the samples were logged into the laboratory using the COC. Cooler shipped were sent via overnight shipping to the analytical laboratory using the provided shipping labels. The laboratory was notified when a cooler was in transit.

7.7 Duplicate Samples

Duplicate samples were collected in accordance with the sampling procedures described above. Duplicate samples were submitted to separate independent laboratory for QA/QC between laboratory procedures and analytical methods. Duplicate samples were labeled in accordance with the sample location and sample interval (e.g., “DH-1A @ 1400 feet”), sample date and time, and sampler’s initials.

7.8 Decontamination

Decontamination supplies including approved cleaning solutions, paper towels, brushes, etc. were on site during sampling. Appropriate nitrile gloves were worn during sample collection; gloves were changed between samples and prior to decontamination of any equipment. The use of airlift equipment, dedicated pumps, HydraSleeve samplers, tubing, and filters reduced the amount of time spent on decontamination. Any non-dedicated or single-use sample containers or equipment, including the water level probe, would be decontaminated between each sampling event by wiping or scrubbing off soil or other foreign material, washing with a laboratory grade detergent (Liquinox or equivalent)/clean-water solution, and rinsing with tap water followed by a final rinse with distilled or deionized water.

7.9 Documentation

Logbooks, COC forms, sample collection forms, and digital camera were used for sample documentation. SDS forms for preservatives were also required to be carried during sampling. Field notes were maintained in a notebook containing records of all field calibrations performed during the sampling event. The field notes include details of the sampling event (personnel on site, date/times), site conditions (weather, road conditions, other site activities), sampling equipment (HydraSleeves, pumps, flow meters, filters, etc.), and any other relevant details of the sampling event. Sample collection field forms were used to document sample collection protocol, water levels, flow rate (if applicable), field parameters, sample bottles collected, etc.

8 Results of DH-1A Hydraulic Test

As discussed in Section 6.2.3., a zone isolated packer test was successfully completed in DH-1A. The test was completed in the Campito Formation or bedrock unit underlying the LGU from 1,880 feet to 1,840 feet bgs. The following provides the results from the hydraulic test.

An airlift was completed through packer isolated test zone to simulate response from pumping. The airlift continued until latent drilling fluid was evacuated from the test zone and formation water was evident in the airlift returns. Conformance criteria documenting verification of formation water required monitoring field chemistry in series over time, so that consecutive measurements of airlift discharge did not deviate within 10% from the previous recordings and the sample was clear and free of drilling polymers. Brine samples were collected for analysis of Nevada Profile 1 constituents, total lithium, dissolved lithium, and stable isotopes at the end of the airlift. The airlift was terminated, and recovery data was recorded on the downhole pressure transducer. Recovery data collected from the test were used to calculate hydraulic conductivity and transmissivity of the formation tested. Water-level recovery data were analyzed using two methods:

- Recovery in the “pumped” well following constant-rate pumping, using the Theis straight-line recovery method (Kruseman and DeRidder, 1970); and
- Rising-head recovery following a rapid slug withdrawal, using Hvorslev’s method (1951) of plotting the logarithm of the ratio of residual drawdown to total drawdown, (H-h)/(H-H0), vs. time (t) on an arithmetic scale.

The Theis recovery method is believed to be particularly effective in tests of higher-K units, where the airlift pumping rate does not greatly exceed the formation yield (that is, where casing storage effects from the deep airlines do not overwhelm the formation recovery). In most instances, typical semi-logarithmic recovery curves show a steep portion representing casing or well-bore storage affects, followed in time (moving to the left on the graph) by a flatter portion whose slope, along with pumping rate, can be used to estimate the transmissivity of the test interval.

The Hvorslev method is effective in analyzing very-short term tests, which occur primarily in wells or zones where lower hydraulic conductivity units are tested. Because the test was of relatively low stress and short duration, the packer isolated test zone was used as the formation saturated thickness in calculating a hydraulic conductivity (K) value. The borehole radius was determined based on the diameter of the drill bit (hole diameter).

Chart 2 presents the airlift recovery curve and **Chart 3**, and **Chart 4** presents a graphical hydraulic analysis for the test completed in bedrock. Both Theis (Chart 3) and Hvorslev (Chart 4) analysis are provided to compare the methods and results.

Chart 2: DH-1A Airlift (1880 to 1840 Feet) All Data

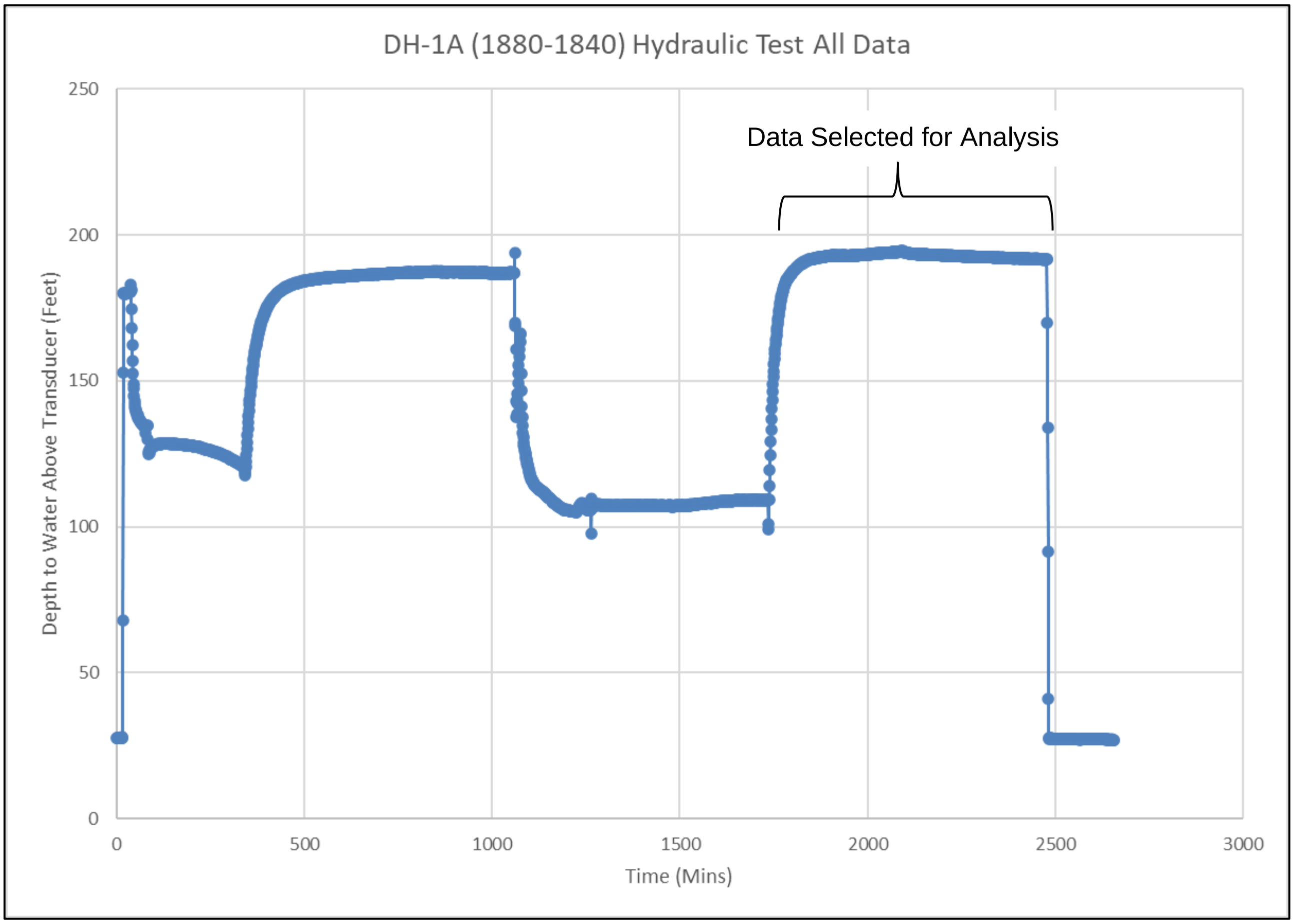
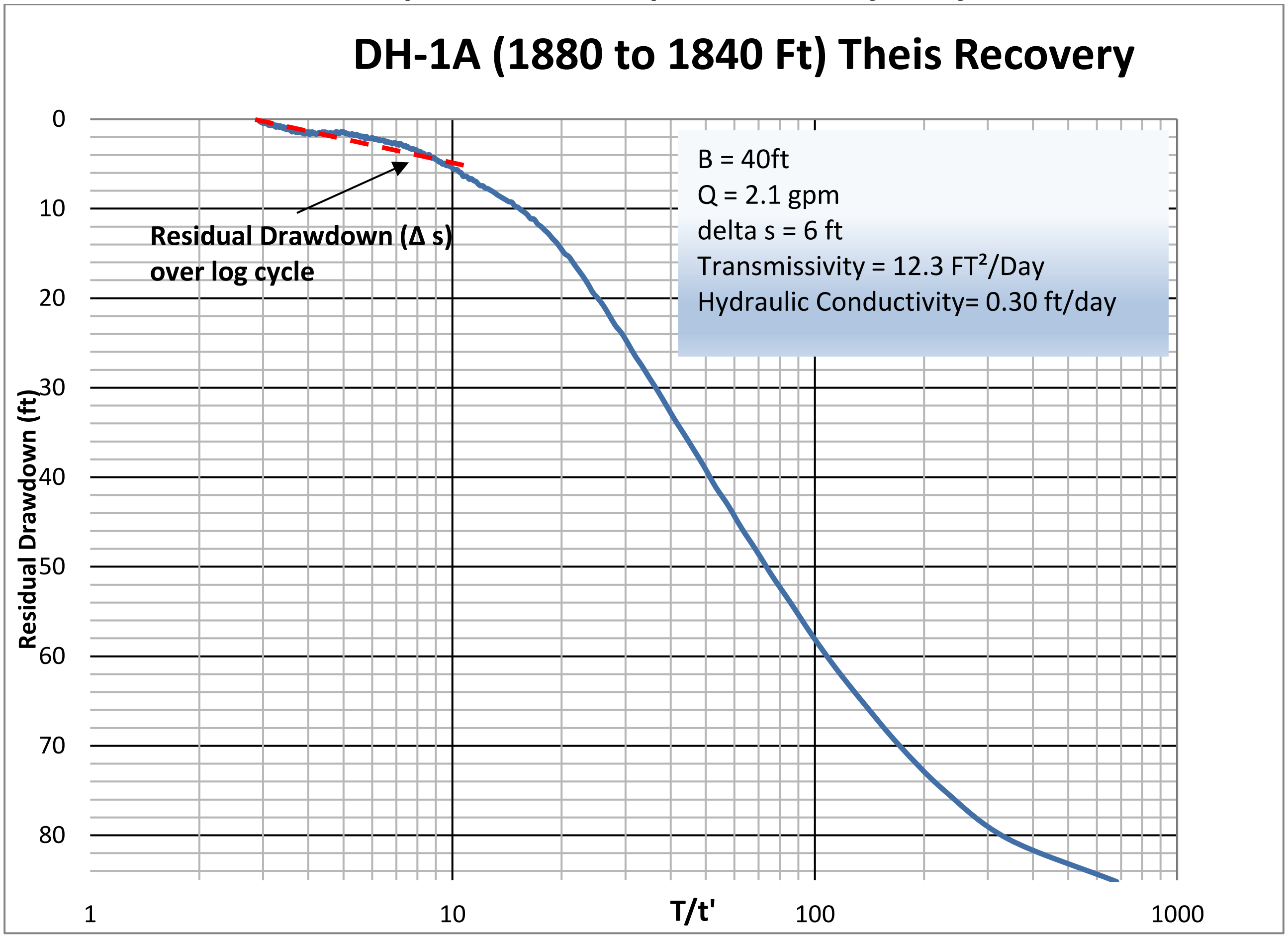
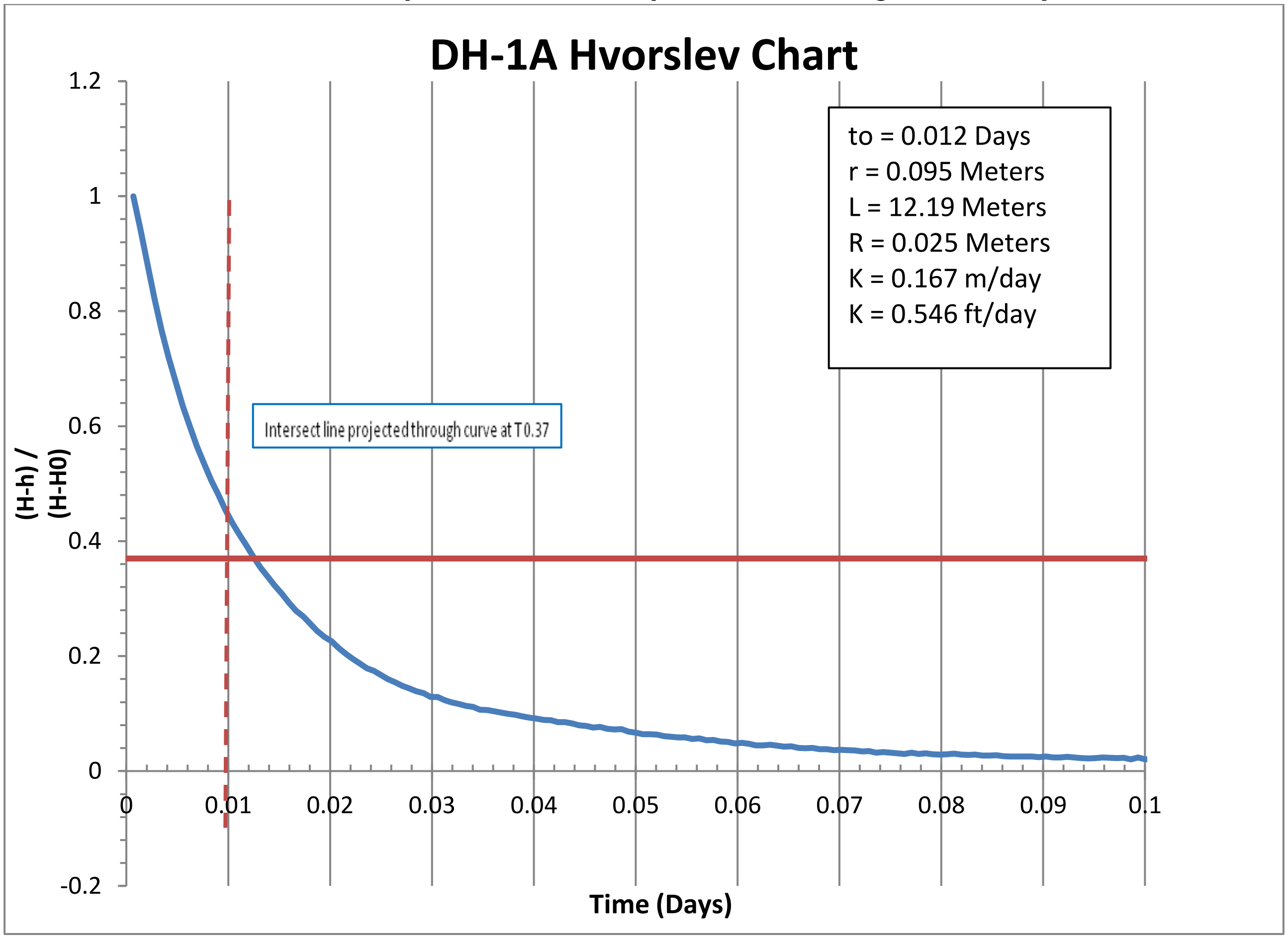


Chart 3: DH-1A Airlift (1880 to 1840 Feet) Theis Recovery Analysis



T =	Total Test Time Drawdown and Recovery
t' =	Recovery
Q =	Average Discharge Rate
B =	Test Interval Isolated Between Packer
delta s =	Residual drawdown over one log cycle

Chart 4: DH-1A Airlift (1880 to 1840 Feet) Hvorslev Rising Head Analysis



K = Hydraulic Conductivity
r = radius of borehole
R = Radius of well screen or packer testing sub
L = Length of test interval
t_o = Time it takes for the water level to rise or fall 37% of the initial change in head $\frac{H-h}{H-H0}$

The results of hydraulic testing slightly below the contact between the LGU and bedrock indicate the hydraulic conductivity (K) of the upper portion of the bedrock is in the magnitude of 0.30 and 0.54 feet/day. The K values estimated between the Theis recovery and Hvorslev methods as described above, are in general agreement. However, the Hvorslev method is typically more reliable in analyzing short term tests, in zones of lower-hydraulic conductivity. See Section 13 for a summary of water quality analytical results from the sample collected in this test zone.

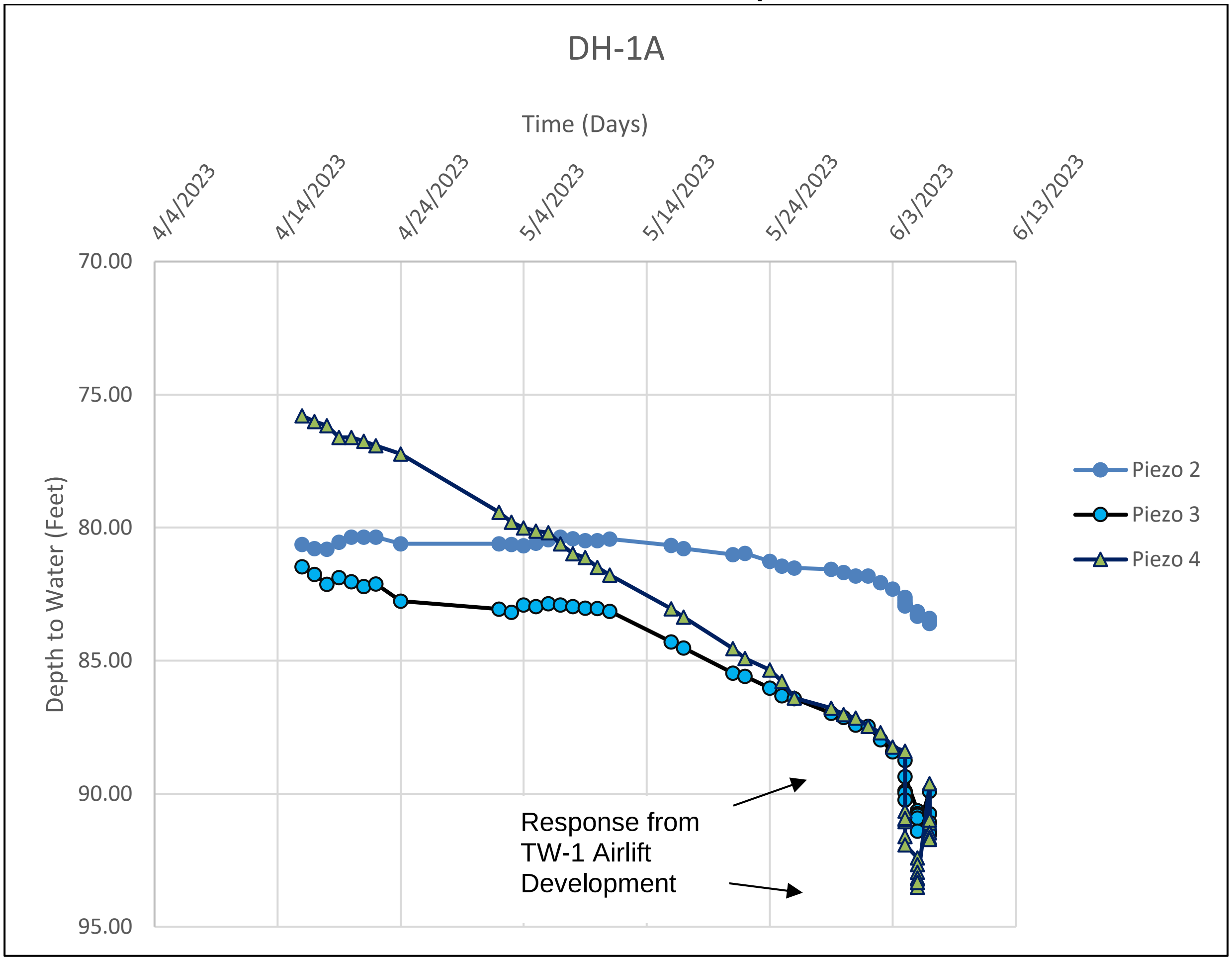
9 Results of Water Level Trend Investigation

DH-1A was completed with grouted-in piezometers to monitor changes in hydrostatic pressure and assess the potentiometric surface of the LGU, lower ash, and LCU and gravel units overlying the lower ash encountered in both DH-1 and DH-1A. Water level measurements generated from the piezometers were used for the following purposes.

- Examine vertical gradients between aquifers encountered at the ACME project.
- Identify potential transient changes in water levels due to regional pumping.
- Measure response to local pumping from TW-1 with primary objective to estimate transmissivity and storativity of the LGU.

Chart 5 shows the DH-1A piezometer trends prior to well development activities and pumping at TW-1.

Chart 5: Water Level Trends Prior to TW-1 Well Development



Piezo 2 Installed at 590'. Transition Between Lower Gravel Unit and Lower Clastic Unit.
Piezo 3 Installed at 1,220'. Lower Tuff or Ash.
Piezo 4 Installed at 1,550'. Lower Gravel Unit.

The trends from Piezometers 3 and 4 are steep with convergence points in late May of 2023. The depth to water from DH-1 penetrating the LGU was 72.7 feet bgs in June of 2023 which is consistent with the slope of the trends expressed in Piezometer 4, also installed in the LGU. The slope from water levels of Piezometer 2 is dampened, suggesting the shallow aquifer system may have limited connectivity with the LGU. To the right of the chart, the water levels show the response to airlift development at TW-1. This is shown as a sharp downward drop in water levels of the deep piezometers and a dampened response in the shallower piezometer on June 4, 2023. The trend appears to continue into the pumping test. As such, the data required detrending to properly assess the response to exclusively pumping from TW-1.

The water level trends show a tight relationship between Piezometer 3 and 4, suggesting the LGU and lower ash are likely hydraulicly connected. The water levels from Piezometer 2 are much different from Piezometers 3 and 4, over 8-feet shallower. The difference in potentiometric pressures between the deep Piezometers 3 and 4 and shallow Piezometer 2 suggest there is a downward vertical gradient. The difference in levels and transient trends also suggest there may be potential for partial vertical flow boundaries to exist between deep and shallow aquifer systems. This is typical where overlying clays may create aquitards or leaky confining conditions. **Table 8** provides a tabulation of pre-pumping test water levels from all piezometers and TW-1.

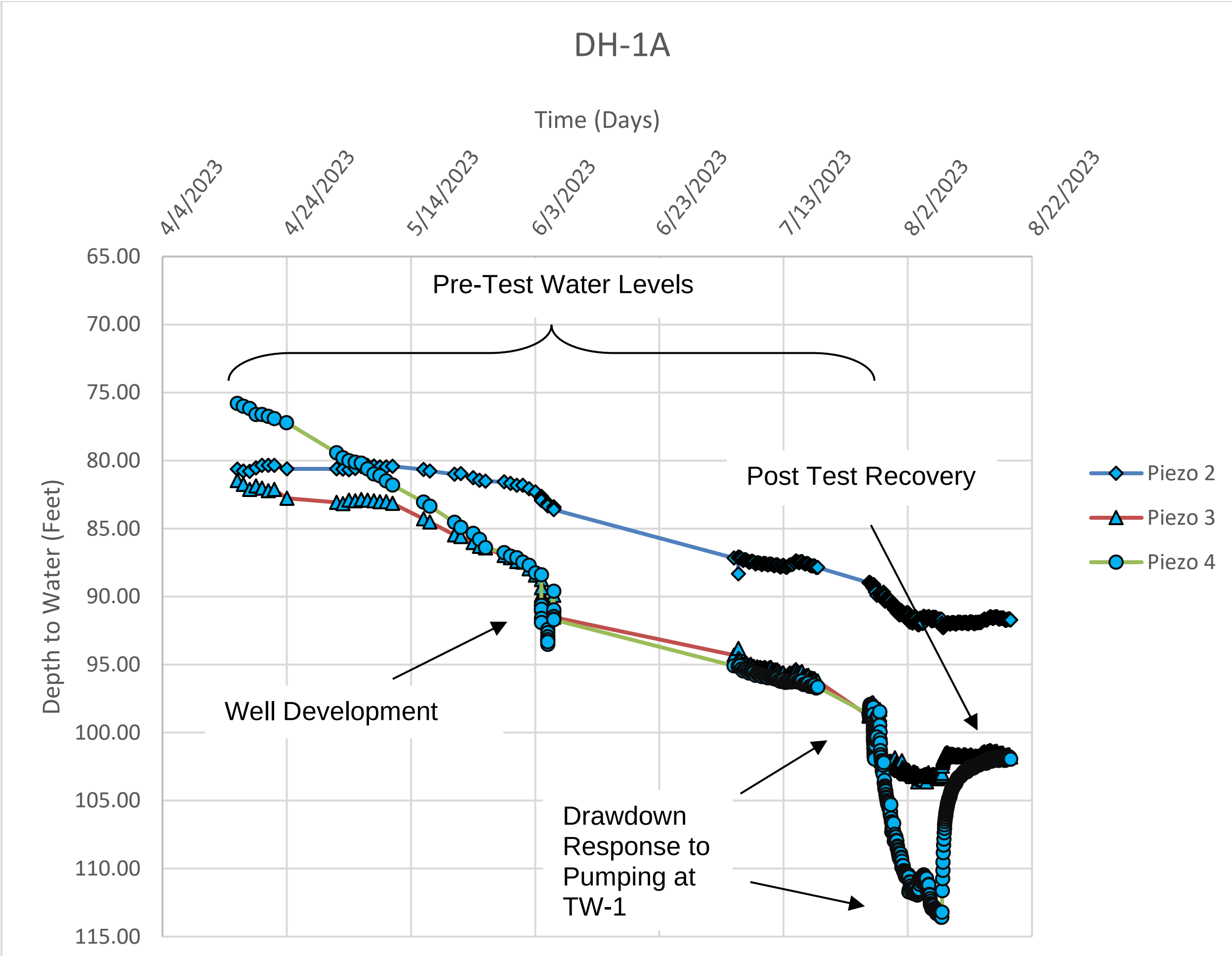
Table 8: Pre-Pumping Test Water Levels

Piezo# Well ID	Piezo/Well Screen Depths (Feet bgs)	Geologic Unit	Depth to Water (Feet bgs) 7/27/23 at 10:20	Depth to Water (Feet amsl) 7/27/23 at 10:20
DH-1A #2	590	Transition Between Lower Gravel Unit and Lower Clastic Unit	89.34	4187.66
DH-1A #3	1220	Deep Lacustrine Tuff or Ash	97.86	4179.14
DH-1A #4	1550	Lower Gravel Unit	98.41	4178.59
TW-1	1296-1800	Lower Gravel Unit	101.60	4175.4

Feet below ground surface (Feet bgs)
Feet above mean sea level (Feet amsl)

Chart 6 shows the water level trends from DH-1A before, during and after the TW-1 pumping test. The response to pumping is shown in the chart below as well as aquifer recovery post pumping. The downward trend is clearly expressed in the data set after the aquifer had fully recovered from local pumping at TW-1.

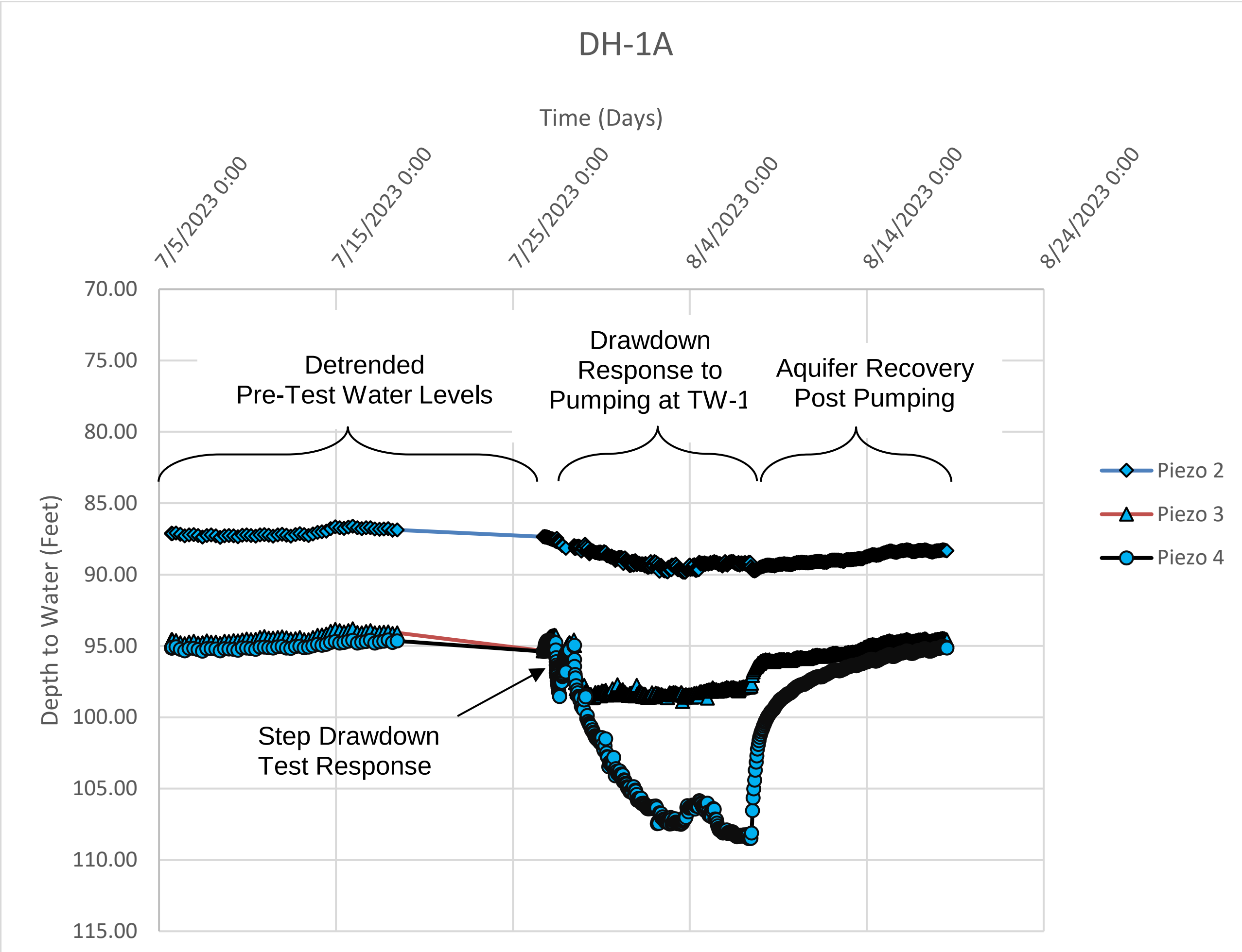
Chart 6: Water Level Trends in DH-1A VWP, All Data



The downward trend is clearly shown in the chart and likely represents the transient changes in water levels in the area due to regional pumping. It is very evident that these water levels are being influenced by the Albemarle extraction wells. In this case, the LGU aquifer at the ACME project would have direct continuity with the deeper regional lithium brine resource defined by Albemarle.

As described above, the downward trend continues through the duration of the pumping test. The data required detrending to properly assess the response to pumping at TW-1. The detrended data which was evaluated in the pumping test analysis is presented in **Chart 7**.

Chart 7: Detrended Water Levels DH-1A VWP, (TW-1 Pumping Test Response)



Note: Pretest water levels 7/18/23 to 7/26/23 are not available due to issues with the VWP data logger.

10 Results of TW-1 Step Drawdown Test

CWR and Lewis Drilling completed a step drawdown test of TW-1 before the pumping test to evaluate Well Efficiency, Specific Capacity, and the optimal rate for the pumping test. The step test consisted of three (3), 100-minute steps. Test data were collected by downhole pressure transducer and water level sounder tool. Jacob, 1947, introduced the concept of a multiple step-drawdown pumping test with the objective of determining well losses and the effective radius of a well. Jacob noted that drawdown in a pumping well has two components:

- The first component termed “Aquifer or Formation Loss” arises from the “resistance” of the aquifer matrix to fluid flow. Aquifer loss is proportional to discharge (Q) and increases with time as the cone of influence expands.
- The second component, termed “Well Loss”, represents the loss of head that accompanies the flow through a well screen, gravel pack and in the casing. Well loss is proportional to the square of the discharge (Q) and is independent of time. To solve, Jacob defined the following equation:

$S_{total} = BQ + CQ$

Where:

S_{total} = *Total drawdown in a pumping well.*

Q = Pumping Rate.

BQ = Component of drawdown due to aquifer or formation loss.

CQ^2 = *Component of drawdown due to well loss.*

B = Aquifer loss constant, B represents the total resistance of the aquifer matrix from the well wall out to the radius of influence.

C = Well loss constant.

Well efficiency, which expresses the ratio of aquifer loss (theoretical drawdown) to total (measured) drawdown in the pumped well can be expressed as follows:

E = Well efficiency (%) = 1 ÷ [1+(C/B) x Q] x 100

Where:

Q = Well discharge rate (gpm)

S = Drawdown at end of each respective step (ft)

S_{total} = *Total drawdown (ft)*

B_1 = *Formation loss = y-intercept from trendline equation =* S/Q^2

C = Well loss = slope from trendline equation

S' = Calculated drawdown (ft) = $B_1Q + CQ^2$

B_2 = *Skin Factor =* $S_{total} - S'$

A water level and pumpage hydrograph for TW-1 during the step test is presented below in **Chart 8**. The inputs of the well efficiency analysis and the test results are provided in **Table 9** and **Table 10**. This analysis is derived graphically from the y-intercept and slope of the trendline presented in **Chart 9**.

Chart 8: TW-1 Step Drawdown Test

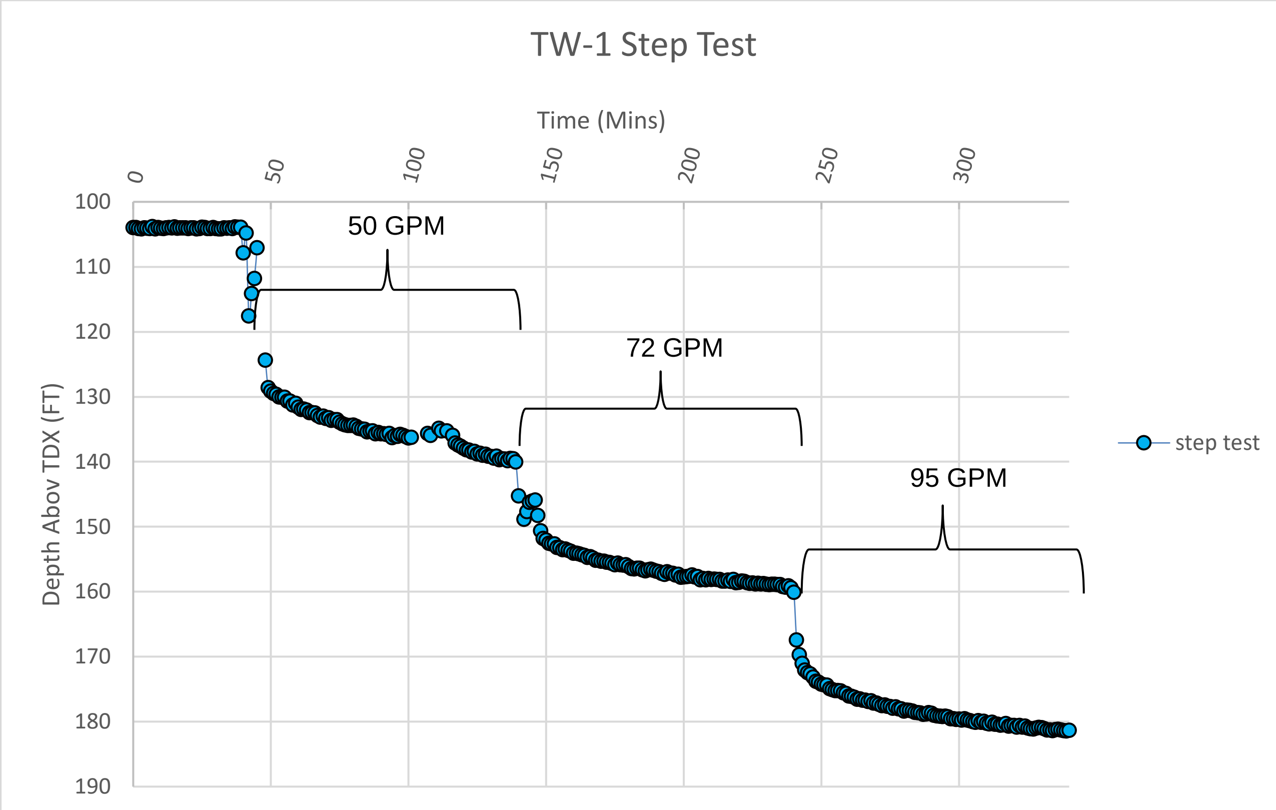


Chart 9: Specific Drawdown vs. Discharge Rate

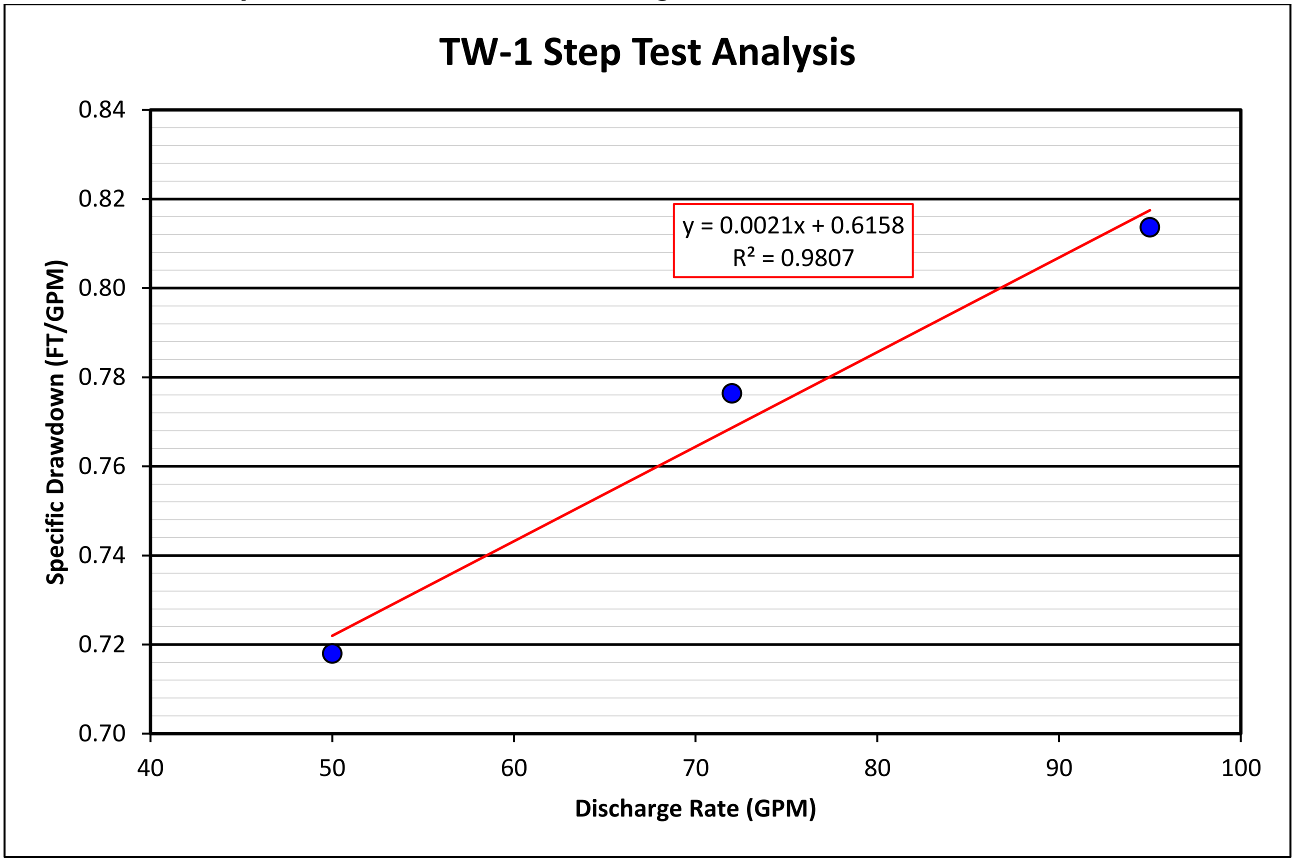


Table 9: Step Test Parameters

Step	Duration (min)	Q (gpm)	Step Drawdown S (ft)	Total Drawdown S_{total} (ft)	Specific Drawdown S/Q (ft/gpm)	Specific Capacity Q/S (gpm/ft)	(T) GPD/FT
1	100	50	35.9	35.9	0.72	1.39	2,785.52
2	100	72	20	55.9	0.78	1.29	2,576.03
3	100	95	21.4	77.3	0.81	1.23	2,457.96

The Specific Capacity of the well is presented as (gpm/ft) of drawdown for each step. The following equation can be used to estimate transmissivity from Specific Capacity per (Driscoll, 1986):

T = 1500 * Q/s (for an unconfined aquifer)
T = 2000 * Q/s (for a confined aquifer as assumed for TW-1)

Note: T = Transmissivity (gpd/ft); Q/s = Specific Capacity (gpm/ft)

Table 10: Step Test Results

Q (gpm)	Aquifer Loss BQ (ft)	Well Loss CQ^2 (ft)	Calculated Drawdown S' (ft)	Calculated Specific Capacity Q/S' (gpm/ft)	Well Efficiency E (%)	Skin
50	30.79	5.25	36.04	1.39	85.4	-0.1
72	44.34	10.89	55.22	1.30	80.3	0.68
95	58.50	18.95	77.45	1.23	75.5	-0.2

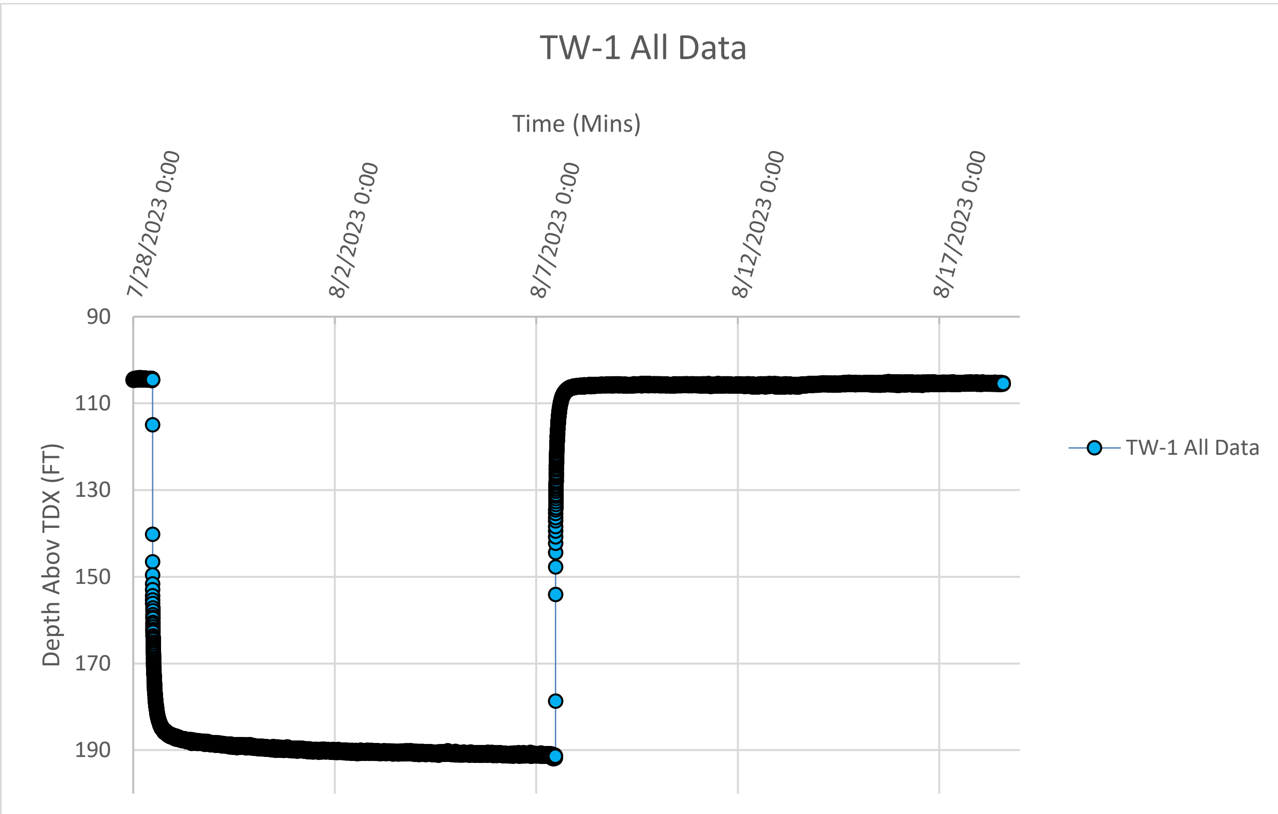
Well Efficiency calculated from Specific Capacity and Drawdown while pumping at a rate of 95 gpm is about 75%. It is theoretically impossible to have a 100% efficient well due to turbulence and frictional losses. Values for aquifer loss and well loss are estimated from the equation for the line of best fit for points of specific drawdown and discharge, as plotted above in **Chart 9**. **Table 9** and **Table 10** provide tabulations of the step test parameters which include Drawdown, Specific Capacity and Well Efficiencies at different pumping rates.

Assuming nonlinear (turbulent) well loss is negligible; the skin effect is the difference between the total drawdown in the well and the theoretical drawdown (aquifer loss) at the well screen. A positive skin indicates permeability reduction at the wellbore (e.g., clogging from drilling debris, or scaling). Negative skin suggests permeability enhancement. In TW-1, the skin factor is negative for most steps. For all steps, formation loss exceeds well loss.

11 Results of TW-1 Pumping Test (Aquifer Testing)

Following the step test, a constant rate pumping test was successfully completed at a rate of approximately 94 gpm for ten (10) consecutive days or 240 hours. Total drawdown in TW-1 after 10 consecutive days of pumping was 86.8 feet. A water level hydrograph showing drawdown and recovery is provided in **Chart 10**. The total volume of groundwater pumped during the test was 1,356,209 gallons or about 4.16-Acre Feet.

Chart 10: TW-1 Pumping Test Drawdown and Recovery



Drawdown and recovery data collected from the pumping tests were used to calculate hydraulic conductivity values and transmissivity of the LGU. **Table 11** lists the types of analysis completed, and the hydraulic conductivity values estimated from each analysis. Water-level recovery data were analyzed using two methods:

- Recovery in the “pumped” well following constant-rate pumping, using the Theis straight-line recovery method (Kruseman and DeRidder, 1970).
- Drawdown in the “pumped” well assuming non-equilibrium radial flow in a confined aquifer, using the Cooper-Jacob Straight-Line Time-Drawdown Method as described by CW. Fetter, Applied Hydrogeology, 2001, Fourth Edition.

Recovery data from the constant rate test were analyzed using the Theis Straight Line method (**Chart 11**). The following assumptions are made when using both Cooper-Jacob drawdown and the Theis recovery solution:

- The aquifer has infinite areal extent.
- The aquifer is homogenous, isotropic and of uniform thickness.
- The well is fully penetrating.
- Flow to the well is horizontal.
- The aquifer is confined.
- Flow to the well is unsteady.
- Water is released instantaneously from storage with decline in hydraulic head, and
- The diameter of the well is infinitesimally small so that storage in the well can be neglected.

The Theis analysis involves matching the Theis recovery solution to water-level recovery (residual drawdown) data collected after a pumping test. Theis derived an approximate linear equation to predict residual drawdown in a homogeneous, isotropic, and non-leaky confined aquifer, assuming a fully penetrating line sink that discharged at a constant rate prior to recovery. Although the LGU is probably not homogeneous, isotropic, and non-leaky, the solutions are still widely used in industry to provide estimates of hydraulic conductivity and transmissivity from drawdown and recovery data.

Transmissivity (T) is determined using the slope of the line, Δs', from the following equation:

$$T = \frac{2.3Q}{4\pi \Delta s'}$$

Drawdown data from the constant rate test were also analyzed using the Cooper-Jacob Straight-Line Time Drawdown solution (**Chart 12**). The analyses assume the following.

$$T = \frac{2.3Q}{4\pi \Delta (h0 - h)}$$

Where;

T = Transmissivity (Ft^2/Day)

Q = Pumping Rate (Ft^3/Day)

$\Delta(h_o - h)$ is the drawdown per log cycle of time (Ft)

Δs′ is the slope of the fitted line (change in residual drawdown per log cycle equivalent time)

The late time recovery data was used to determine Δs’ due to initial response to borehole storage. Transmissivity was calculated from average discharge and residual drawdown over one log cycle of T/t’ (total test time T over recovery time t’). Hydraulic conductivity is Transmissivity divided by the saturated thickness (or length of well screen) and is provided in **Table 11** for each of the analyses.

Table 11: Calculated Transmissivity and Hydraulic Conductivity from TW-1

Data	Solution	Transmissivity (FT^2/Day)	Hydraulic Conductivity (FT/Day)
Drawdown	Cooper-Jacob Straight Line	740	1.3
Recovery	Theis Straight Line Recovery	578	1.05

Chart 11: TW-1 Theis Recovery Analysis

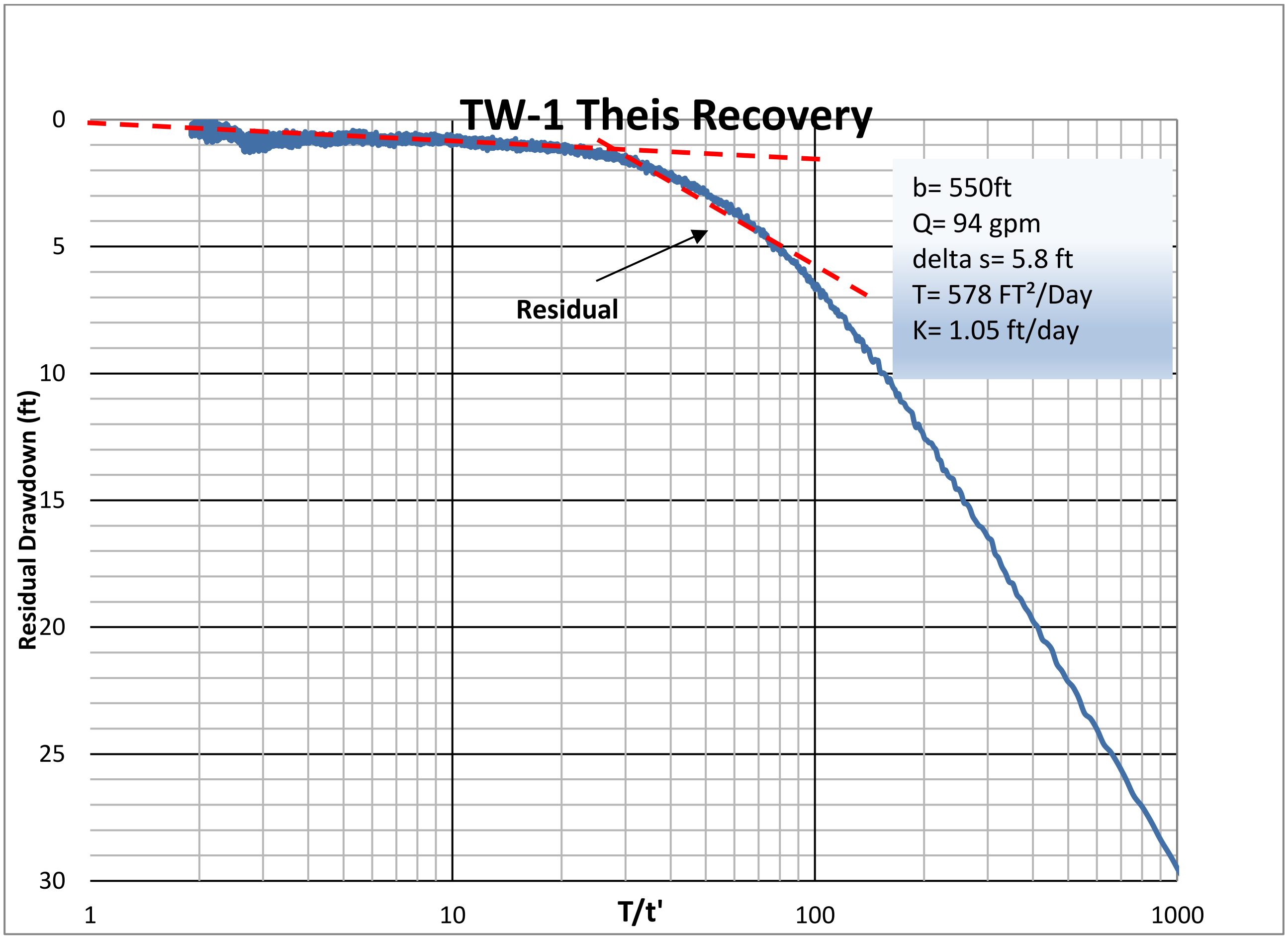
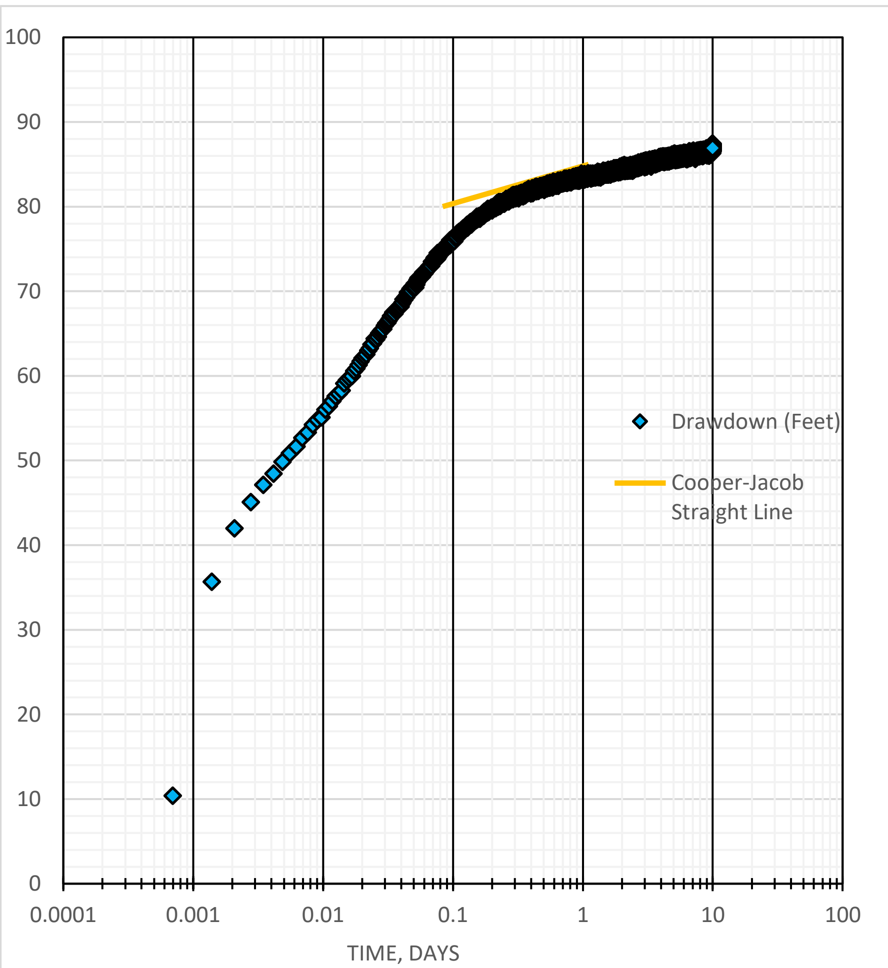


Chart 12: TW-1 Cooper Jacob Drawdown Analysis

Local ID: TW-1

INPUT		
Construction:		
Casing dia. (d_c)	7	Inch
Annulus dia. (d_w)	14	Inch
Screen Length (L)	550	Feet
Depths to:		
water level (DTW)	104	Feet
Top of Aquifer	1250	Feet
Base of Aquifer	1820	Feet
Annular Fill:		
across screen --	Gravel	
above screen --	Cement	
Aquifer Material --	Fine Sand	
FLOW RATE	94	GPM

COMPUTED		
Aquifer thickness =	570	Feet
Slope =	4.4554707	Feet/log10
Input is consistent.		
K =	1.3	Feet/Day
T =	740	Feet²/Day



Applied Hydrologic LTD (AHL) performed an independent review of the TW-1 pumping test data to validate the results of the analysis performed by CWR. The results of the AHL analysis are provided in **Appendix G**.

AHL utilized the AQTESOLV software to analyze the pumping test data. The Theis (Theis 1935), Theis-Hantush (Hantush 1961a, b), and Cooper-Jacob (Cooper 1946) solutions were used to analyze the drawdown, and the Theis solution for a recovery test (Thies 1935) was used to analyze the residual drawdown following cessation of pumping. Considering the limited level of lithostratigraphic understanding, AHL considered more sophisticated solutions to be unwarranted. **Table 12** and **Table 12-1** provide a comparison between hydraulic parameter analytical results from the TW-1 pumping test in the LGU.

11.1 Analyses of Hydraulic Response in DH-1A

DH-1A is located approximately 121 linear feet distance from TW-1. The total drawdown response from the DH-1A piezometers during the TW-1 pumping test is summarized below.

- Total drawdown at Piezometer 2 was approximately 1.96 feet after 10 consecutive days of pumping. The 14-Day post-test recovered water level was within 90% of the pre-test detrended water levels.
- Total drawdown at Piezometer 3 (lower ash/tuff) was approximately 4.87 feet after 10 consecutive days of pumping. The 14-Day post-test recovered water level was within 90% of the pre-test detrended water levels.
- Total drawdown at Piezometer 4 (LGU) was approximately 15 feet after 10 consecutive days of pumping. The 14-Day post-test recovered water level was within 90% of the pre-test detrended water levels.

CWR completed a Cooper-Jacob Straight-Line analyses from the drawdown response measured Piezometer 4 of DH-1A in the LGU which was later validated by an AQTESOLVE™ solution.

During the test, significant interference from transient water level declines due to regional pumping were observed in piezometer data. The data used for the analysis was adjusted to reflect the response of the test at TW-1 and remove most of the noise from regional pumping activities.

Charts 6 and **7** in Section 9 show the response in DH-1A from pumping at TW-1 at a rate of 94 gpm. Results of the AQTESOLVE™ solutions are presented in **Appendix G**.

11.1.1 Transmissivity and Storativity of LGU from DH-1A Response to Pumping

Cooper-Jacob drawdown assumed the following to solve for Transmissivity and Storativity.

$$T = \frac{2.3Q}{4\pi\Delta(h0 - h)}$$

$$S = \frac{2.25Tto}{r^2}$$

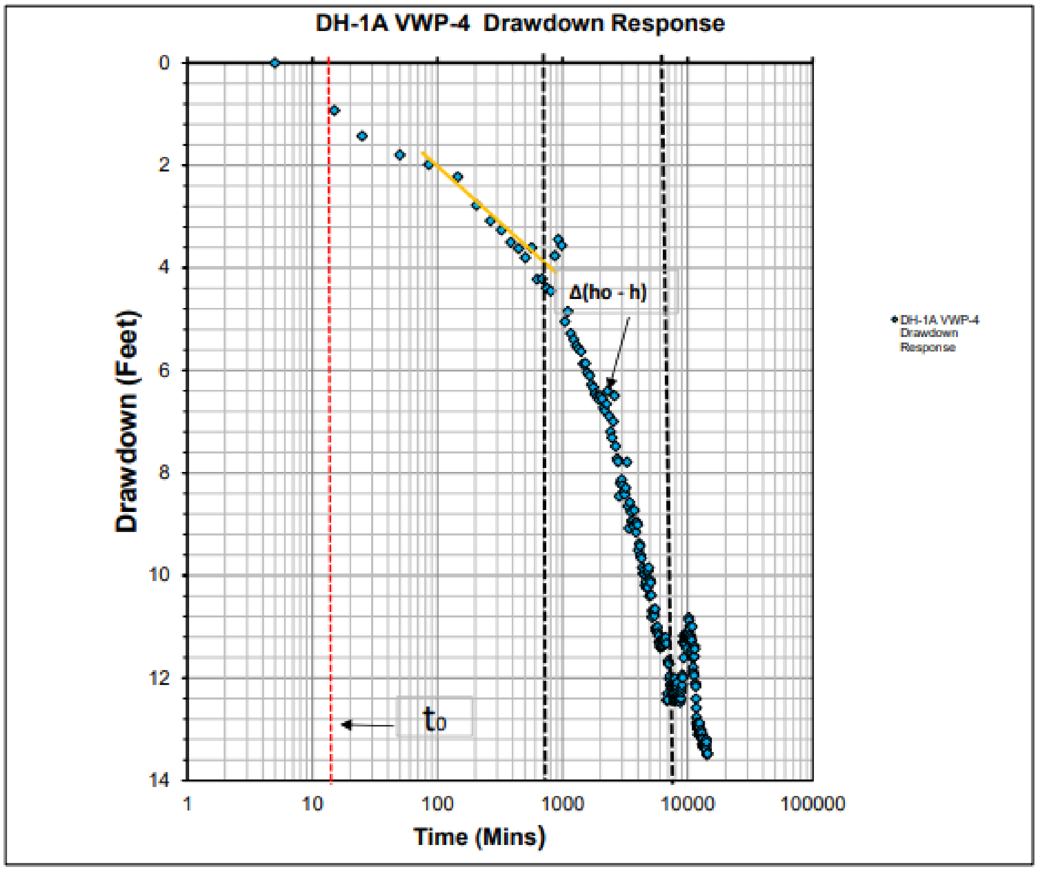
S = Storativity (Dimensionless)

r = Radial distance to the well (FT)

t_o = Time, where the straight line intersects the zero-drawdown axis (Days)

Chart 13 presents the Cooper Jacob Drawdown analysis from Piezometer 4 of DH-1A in the LGU.

Chart 13: Cooper Jacob Drawdown



$$T = \frac{2.3Q}{4\pi\Delta(h0-h)}$$

T = 1,673.73 Ft²/Day

$$S = \frac{2.25Tto}{r^2}$$

Q =	18,288.77	Ft³/Day
r =	121.00	FT
(ho - h) =	2	FT/log10
to =	1.0E-02	Days
S =	0.002679	

T = Transmissivity
Q = Discharge
Δ(ho - h) = *Drawdown per log cycle of time*
S = Storativity
r = Radial Distance to Well
t_o = *Time Where Staight Line Intersects Zero Drawdown*

Graphical analysis of the AQTESOLVE™ well test analysis for DH-1A piezometers is presented in **Appendix G**. **Table 12** and **Table 12-1** provide a summary of the range in hydraulic parameter test results from multiple data analysis techniques.

Table 12: Summary of Estimated Transmissivity and Storativity from CWR Analysis

Well ID	Hydraulic Conductivity (Ft/Day)	Transmissivity (Ft^2/Day)	Storativity
TW-1	1.05 to 1.3	578 to 740	NA
DH-1A @ 1550 (LGU)	0.98	1,674	0.002

Table 12-1: AHL Summary of Estimated Hydraulic Parameters from AQTESOLVE™ Software

ID	Interval (ft bgs) From	Interval (ft bgs) To	Analysis Type	Confinement Assumption	Aquifer Thickness (ft)	K (ft/day)	T (ft^2/day)	S (Ss or Sy) (Unitless)	S/S'	Analysis Quality	Comment
TW-1	1296	1800	Theis-Hantush	Confined	1711	0.48	825			Good	Reasonably good Theis type-curve match during drawdown and majority of recovery. Although minor deviations during drawdown are noted and may be due to undocumented pumping activities. The Storage Coefficient (S) of the pumping well is effectively meaningless. K calculated from screen interval rather than aquifer thickness.
TW-1	1296	1800	Cooper Jacob	Confined	1711	0.75	1285.1			Very Good	The derivative indicates an excellent IARF signature from days 1 through 4. After day 4, there appears to be either boundary effects or disturbance from undocumented pumping or drilling activities. S is meaningless in the pumping well and not recorded here. K calculated from screen interval rather than aquifer thickness.
TW-1	1296	1800	Theis Residual Drawdown	Confined	1711	1.46	2490			Good	The T/t' curve is impacted by the late time pumping perturbations, but a substantial interval provides a good straight-line match.
DH-1A_2	590	590.1	Theis-Hantush	Unconfined	1711	1.14	1950	0.005		Good	There appears to be some unaccounted for recharge days 6 -10 of pumping that were not matched in the analysis. A good match was achieved Days 2 through 7 and recovery.
DH-1A_2	590	590.1	Cooper Jacob	Unconfined	1711	1.20	2050	0.15		Fair	The derivative clearly indicates recharge or termination of unknown pumping on day 6 of the pump test. However, a good match to days 2 - 6.
DH-1A_2	590	590.1	Theis Residual Drawdown	Confined	1711	0.95	1630		1.9	Fair	Moderately irregular recurve and the unconfined assumption may be questionable. Most likely partially confined.

**From Table 2 of AHL Report (Appendix G)*

Table 12-1 Continued: AHL Summary of Estimated Hydraulic Parameters from AQTESOLVE™

ID	Interval (ft bgs) From	Interval (ft bgs) To	Analysis Type	Confinement Assumption	Aquifer Thickness (ft)	K (ft/day)	T (ft²/day)	S (Ss or Sy) (Unitless)	S/S'	Analysis Quality	Comment
DH-1A_3	1220	1220.1	Theis-Hantush	Confined	1711	2.90	4970	1.00E-05		Fair	Similar to DH-1A_2, the drawdown reverses at day 6 of pumping. This suggests an unaccounted for source of drawdown ended. Additionally, midway through the first day of recovery, the drawdown may have resumed. This caused a dog-leg in the recovery curve.
DH-1A_3	1220	1220.1	Cooper Jacob	Confined	1711	2.63	4500	1.00E-05		Good	Matched days 2-6 of drawdown. The derivative strongly indicates IARF conditions during this interval.
DH-1A_3	1220	1220.1	Theis Residual Drawdown	Confined	1711	0.99	1690		1.9	Fair	Moderately irregular recovery curve, but good early T/t' straight-line match.
DH-1A_4	1550	1550.1	Theis-Hantush	Confined	1711	0.72	1225	0.02		Good	Drawdown is clearly reversed on day 6 (145 hours into pumping) and recovers on day 8 (198 hours). This drawdown curve clearly illustrates disruptions to the pumping test, although the end result is likely minimally effected. The Theis type-curve was matched to minimally impacted intervals of the hydrograph, to the extent possible.
DH-1A_4	1550	1550.1	Cooper Jacob	Confined	1711	0.42	720	0.0125		Fair	The derivative suggests a constant head boundary condition evident on day 5, but the interference from undocumented drawdown reduces the confidence in this interpretation. The Cooper-Jacob solution matches late time conditions, to the extent possible.
DH-1A_4	1550	1550.1	Theis Residual Drawdown	Confined	1711	0.22	380		1.95	Good	Good match, although recovery is likely somewhat impacted by unquantified drawdown.

*From Table 2 of AHL Report (Appendix G)

Results of data analysis agree within an order of magnitude for estimated Hydraulic Conductivity and Transmissivity at TW-1 and DH-1A Piezo 4 in the LGU. However, the estimated Storativity between methods slightly deviate based on assumptions made between analytical methods and software used. AQTESOLVE™ is widely used in industry to estimate hydraulic parameters from pumping test data, and the results of the AQTESOLVE™ Storativity analysis was assumed for forward looking simulations of aquifer performance.

12 Results of Specific Yield Analysis (DH-1 Core)

Fifteen HQ core samples collected from the lower ash and LCU in DH-1 were submitted to GeoSystems Analysis (GSA) Laboratory in Tucson AZ. Nine (9) of these samples were tested using the Rapid Brine Release method (Yao et al., 2018) at the GSA Laboratory. Six of the samples were not testable because they had large pebble and cobble fractions with little fine to sand material and/or they are heavily fractured. Tests were conducted to measure specific yield (Sy) and total porosity (Pt). The Sy, or drainable porosity, is the amount of solution that may be released under gravity drainage conditions from saturated porous media. The Pt is the ratio of the pore volume to the bulk soil volume.

The Rapid Brine Release (RBR) method is based on the moisture retention characteristics (MRC) method for direct measurement of total porosity (Pt, MOSA Part 4 Ch. 2, 2.3.2.1), specific retention (Sr, MOSA Part 4 Ch3, 3.3.3.5), and specific yield (Sy, Cassel and Nielson, 1986). A simplified Tempe cell design (Modified ASTM D6836-16) was used to test intact core. Cores were 6.3 cm (HQ) in diameter and 13 cm to 18 cm in length. The HQ samples were delivered in transparent plastic food wrap wrapped in aluminum foil.
To assess the relationship between the porosity parameters (Sy and Pt) and lithology, GSA classified samples into two (2) lithologic categories, conglomerate/breccia, and volcanic material. The conglomerate/breccia as classified by GSA were samples collected from the LGU and volcanic material as classified by GSA were samples collected from the lower ash unit. Histograms and normal distributions for the GSA RBR data are shown in Figure 7 and Table 3 of the GSA report, see **Appendix H**.

Average Pt values ranged from 0.22 (conglomerate/breccia) to 0.38 (volcanic material). The volcanic material group had the highest mean Sy value (0.18), while the conglomerate/breccia group had an Sy average value almost three times lower (0.06). Conglomerate/breccia samples were more varied in nature; most of them have a matrix with a high proportion of fines which reduces their ability to release water. Mean values for Pt and Sy are in good agreement with literature values for these types of sediments/deposits. **Table 13** provides a summary of total porosity (Pt), specific yield (Sy), and drainable porosity statistics by GSA estimated lithological group.

Table 13: Summary of Total Porosity, Specific Yield and Drainable Porosity Statistics

Lithological Group	n	RBR Pt		RBR Sy		RBR Drainable Porosity @ 120 mbar	
		Mean	StdDev	Mean	Std Dev	Mean	Std Dev
Conglomerate/Breccia	5	0.22	0.03	0.06	0.04	0.05	0.04
Volcanic Material	4	0.38	0.04	0.18	0.01	0.04	0.02

The average estimated particle density results by lithologic group are provided in **Table 14**. Particle densities for the siliciclastic group (i.e., conglomerate/breccia) averaged 2.81 g/cm^3 and are within ranges typical of clastic materials (the particle density of quartz is 2.65 g/cm^3). The volcanic material group had a lower average particle density of 2.07 g/cm^3 consistent with its high proportion of volcanic ash and pumice (pumice particle density ranges from 0.7-1.2 g/cm^3, (GSA, 2023).

Table 14. Measured and Estimated Particle Density Results

Lithological Group	n	Estimated Particle Density (g/cm³)	
		Mean	StdDev
Conglomerate/Breccia	5	2.81	0.04
Volcanic Material	4	2.07	0.12

The GSA report, GSA, 2023 (**Appendix H**) suggested in many lithium deposit boreholes, decreasing Pt and Sy is evident with increasing depth below ground surface due to increasing compaction and the tendency for cementation (which reduces porosity) to increase with depth. However, the samples were taken at great depth and from a narrow interval, that those factors likely do not significantly influence Pt and Sy. The deeper conglomerate samples were observed to have an increasing percentage of gravel content. The cause of decreasing Pt and Sy with depth is likely due to a change in lithology (from volcanic tuff to conglomerate) and a larger gravel fraction with depth.

Nine core samples were analyzed from borehole DH-1 from depths of 1200.5 to 1393.7 ft bgs. There was a clear distribution of material type within the investigated depth, with the section from 1200 to 1250 feet bgs consisting of volcanic material, mainly rhyolite/dacite tuff with pumice and lithic fragments up to 2 cm. Conglomerates and breccias were dominant between 1339.2 to 1393.7 feet bgs.

GSA, 2023 reported the volcanic material Pt values averaged 0.38, while their Sy values were below 0.19 at all depths and showed a slightly decreasing trend with increasing depth. Volcanic tuff samples released small quantities of brine in the initial pressure step, with yield for 0 - 120 mbar values ranging from 0.02 to 0.05. Most of their capacity was reflected in the 120 – 333 mbar step, which suggests that most of the porosity of the volcanic material is due to micropores. This also suggests that they will take a longer time to release brine under drain conditions. Pt values ranged from 0.18 to 0.26 for conglomerates and breccias, and a gradual decline was observed in Sy values, with all but one sample (1367.8 ft bgs) having values less than 0.06. This sample had higher Pt (0.26) and Sy (0.13) values compared to the average for this lithologic group due to its very coarse sandy matrix, while other core samples have finer sandy matrices with a higher proportion of fines.

13 Results of Lithium Brine Water Quality Analysis and Analytical Methods

From Phase 1 and Phase 2 ACME programs, 25 water quality samples were collected from DH-1, two (2) samples were collected from DH-1A, and 11 samples were collected from TW-1 discharge. Multiple duplicate samples were collected for QA/QC between laboratory procedures and analytical methods. The following presents the laboratory analytical methods and results of water quality analyses.

13.1 Laboratory Analytical Methods

In the U.S., the regulatory compliance monitoring requires water quality samples to be analyzed using ICP-OES which governed by EPA Methods 200.5 and 200.7. EPA Method 200.7 was approved for use as axial view of ICP-OES and is the required EPA method for compliance monitoring by ICP-OES. EPA Method 200.8 governs regulatory compliance using ICP-MS. Both EPA 200.7 and 200.8 can be used for compliance with the Safe Drinking Water Act and the Clean Water Act.

ICP-OES is preferred for analysis of samples with high total dissolved solids (TDS) or suspended solids. ICP-OES is used to measure contaminants for environmental safety assessment and elements with a higher regulatory limit. ICP-MS is used for analyzing samples with low regulatory limits. ICP-OES has a higher tolerance for TDS, up to 30%. ICP-MS has a much lower tolerance for TDS, about 0.2%, and requires modification to increase the tolerance. Both ICP-OES and ICP-MS are used for high matrix samples, sample dilution is often necessary for use on ICP-MS. However, if a sample contains analytes of great difference in concentration, ICP-MS has wider dynamic linear range so the sample may not be diluted to detect these elements at the same time.

Water quality was analyzed by WET Laboratory in Sparks, Nevada. The analytical data and information contained in the WET Lab analytical reports was generated using specified or selected methods contained in their references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition. Total and dissolved lithium was analyzed using EPA Method 200.7.

Duplicate samples were analyzed by Alpha Analytical Inc. in Sparks, Nevada, and ALS Environmental in Fort Collins Colorado. ALS analyzed samples following SW-846, 3rd Edition procedures. ALS analysis by Trace ICP following method 6010D and the current revision of SOP 834 of the 6010D method. Matrix spike recoveries could not be evaluated by ALS for several samples as indicated in their laboratory report. Alpha Analytical Inc. analyzed lithium in accordance with EPA 200.8 as described above.

All samples were received by the respective laboratories in good condition and met all applicable hold times except for pH.

13.2 Expected Elemental Lithium Concentration in Brine Package

Total lithium and boron analytical results from DH-1 samples, analyzed by WET Lab in accordance with EPA 200.7 are provided are provided in **Table 15**. The results from duplicate samples collected from DH-1, analyzed by ALS, following SW-846, 3rd Edition procedures, are provided in **Table 16**.

Dissolved and total lithium and boron analytical results from the DH-1A packer test in bedrock and TW-1 well sampling are provided in **Table 17** and Table **18,** respectively. Samples analyzed by WET Lab in accordance with EPA 200.7 are provided in **Table 17**. The results of duplicate samples analyzed by Alpha Analytical Inc. in accordance with EPA 200.8 are provided in **Table 18**.

Table 15: DH-1 Total Lithium and Boron Results (EPA 200.7)

Hole ID	Sample ID Depth/Interval	Sample Type	Stratigraphic Unit	Sampling Method	Laboratory	Analytical Method	Lithium (mg/L) Total	Boron (mg/L) Total
DH-1	DH-1 Airlift	Brine	All Units Encountered	Airlift	Wet Lab	EPA 200.7	71	30
DH-1	DH-1 @ 220 feet	Brine	Near Bottom of (MAU)	HydraSleeve	Wet Lab	EPA 200.7	38	16
DH-1	DH-1 @ 260 feet	Brine	Silty Ash, Overlying Fine Sand (LCU)	HydraSleeve	Wet Lab	EPA 200.7	42	17
DH-1	DH-1 @ 300 feet	Brine	Fine Sand with Silt (LCU)	HydraSleeve	Wet Lab	EPA 200.7	42	17
DH-1	DH-1 @ 425 feet	Brine	Silty Fine Sand and Pumice (LCU)	HydraSleeve	Wet Lab	EPA 200.7	38	16
DH-1	DH-1 @ 460 feet	Brine	Silty Clay (LCU)	HydraSleeve	Wet Lab	EPA 200.7	47	19
DH-1	DH-1 @ 500 feet	Brine	Top of (LGU)	HydraSleeve	Wet Lab	EPA 200.7	45	18
DH-1	DH-1 @ 550 feet	Brine	Silty Fine to Coarse Sand with Gravels (LGU)	HydraSleeve	Wet Lab	EPA 200.7	43	17
DH-1	DH-1 @ 600 feet	Brine	Silty Fine to Coarse Sand with Gravels (LGU), Ash at 600'	HydraSleeve	Wet Lab	EPA 200.7	42	16
DH-1	DH-1 @ 650 feet	Brine	Silty Fine to Coarse Sand with Gravels (LGU)	HydraSleeve	Wet Lab	EPA 200.7	45	18
DH-1	DH-1 @ 700 feet	Brine	Silty Fine to Coarse Sand with Gravels (LGU)	HydraSleeve	Wet Lab	EPA 200.7	46	18
DH-1	DH-1 @ 750 feet	Brine	Silty Fine to Coarse Sand with Gravels (LGU)	HydraSleeve	Wet Lab	EPA 200.7	63	20
DH-1	DH-1 @ 775 feet	Brine	Fine to Coarse Sand with Gravels (LGU), Transition to Clast Supported Gravels, Possibly (LCU)	HydraSleeve	Wet Lab	EPA 200.7	74	25
DH-1	DH-1 @ 825 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	64	25
DH-1	DH-1 @ 850 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	62	25
DH-1	DH-1 @ 900 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	61	25
DH-1	DH-1 @ 950 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	77	28
DH-1	DH-1 @ 1000 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	79	31
DH-1	DH-1 @ 1050 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	64	26
DH-1	DH-1 @ 1100 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	78	31
DH-1	DH-1 @ 1150 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	95	30
DH-1	DH-1 @ 1200 feet	Brine	Airfall Ash - Lacustrine Tuff (CAU?)	HydraSleeve	Wet Lab	EPA 200.7	110	32
DH-1	DH-1 @ 1250 feet	Brine	Airfall Ash - Lacustrine Tuff CAU/LCU/LGU Contact	HydraSleeve	Wet Lab	EPA 200.7	110	32
DH-1	DH-1 @ 1300 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	120	34
DH-1	DH-1 @ 1350 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	130	35
DH-1	DH-1 @ 1400 feet	Brine	LCU/LGU	HydraSleeve	Wet Lab	EPA 200.7	130	39

Table 16: DH-1 Total Lithium and Boron Results (SW-846)

Hole ID	Sample ID Depth/Interval	Sample Type	Stratigraphic Unit	Sampling Method	Laboratory	Analytical Method	Lithium (mg/L) Total	Boron (mg/L) Total
DH-1	DH-1 @ 425 feet	Duplicate Sample	Silty Fine Sand and Pumice (LCU)	HydraSleeve	ALS	SW-846	33	14
DH-1	DH-1 @ 650 feet	Duplicate Sample	Silty Fine to Coarse Sand with Gravels (LGU)	HydraSleeve	ALS	SW-846	36	15
DH-1	DH-1 @ 775 feet	Duplicate Sample	Fine to Coarse Sand with Gravels (LGU), Transition to Clast Supported Gravels, Possibly (LCU)	HydraSleeve	ALS	SW-846	38	17
DH-1	DH-1 @ 900 feet	Duplicate Sample	LCU/LGU	HydraSleeve	ALS	SW-846	50	23
DH-1	DH-1 @ 1050 feet	Duplicate Sample	LCU/LGU	HydraSleeve	ALS	SW-846	36	17
DH-1	DH-1 @ 1200 feet	Duplicate Sample	Airfall Ash - Lacustrine Tuff (CAU?)	HydraSleeve	ALS	SW-846	62	23
DH-1	DH-1 @ 1400 feet	Duplicate Sample	LCU/LGU	HydraSleeve	ALS	SW-846	77	26

Table 17: DH-1A and TW-1 Lithium and Boron Results (EPA 200.7)

Hole ID	Sample ID Depth/Interval	Sample Depth/Interval (Feet bgs.)	Sample Type	Stratigraphic Unit	Sampling Method	Laboratory	Analytical Method	Lithium (mg/L) Total	Lithium (mg/L) Dissolved	Boron (mg/L) Total
DH-1A	DH-1A 1880-1840	1880 to 1840	Brine	Bedrock	Packer Test	Wet Lab	EPA 200.7	77	72	16
DH-1A	DH-1A 1880-1840	1880 to 1840	Duplicate Sample	Bedrock	Packer Test	Wet Lab	EPA 200.7	71	--	--
TW-1	TW-1	1800 to 1296	Brine	LGU	Airlift	Wet Lab	EPA 200.7	110	--	--
TW-1	TW-1 -1	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	100	100	33
TW-1	TW-1 -2	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	100	100	32
TW-1	TW-1 -3	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	88	92	30
TW-1	TW-1 -4	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	87	89	31
TW-1	TW-1 -5	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	88	83	29
TW-1	TW-1 8/2/22 @ 12:	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	88	110	30
TW-1	TW-1 -6	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	97	97	30
TW-1	TW-1 -7	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	100	97	30
TW-1	TW-1 -8	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	98	100	31
TW-1	TW-1 -9	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	100	99	31
TW-1	TW-1 -10	1800 to 1296	Brine	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	94	91	30
TW-1	TW-1 -10A	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Wet Lab	EPA 200.7	95	99	30

Table 18: DH-1A and TW-1 Lithium and Boron Results (EPA 200.8)

Hole ID	Sample ID Depth/Interval	Sample Depth/Interval (Feet bgs.)	Sample Type	Stratigraphic Unit	Sampling Method	Laboratory	Analytical Method	Lithium (mg/L) Total	Lithium (mg/L) Dissolved
TW-1	TW-1 -2	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	80	--
TW-1	TW-1 -3	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	71	--
TW-1	TW-1 -4	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	74	--
TW-1	TW-1 -5	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	81	81
TW-1	TW-1 -6	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	89	77
TW-1	TW-1 -7	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	86	84
TW-1	TW-1 -8	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	75	--
TW-1	TW-1 -9	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	77	--
TW-1	TW-1 -10	1800 to 1296	Grab Brine Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	78	84
TW-1	TW-1 -10A	1800 to 1296	Duplicate Sample	LGU	Pumping Test Discharge	Alpha Analytical	EPA 200.8	69	78

There are significant statistical deviations between laboratory results analyzing total lithium concentrations using EPA Method 200.7 vs 200.8. As described in Section 14.1., ICP-OES by EPA 200.7 has a higher tolerance for TDS. In the case of the Clayton Valley brine field, the TDS is high. It is possible the analyses completed following EPA 200.8 may be underreporting the lithium concentration in the samples collected. Additional evaluations of the analytical methods and reporting limits are required. WET Lab has significant experience with Clayton Valley brines. WET Lab is the reporting laboratory for lithium results submitted to the EPA from the Albemarle Project (SRK, 2022). For this reason, the lithium concentrations analyzed by WET Lab using EPA 200.7 Methods were used in evaluating the concentration of lithium in the brine package at the ACME Project.

Chart 14 provides a vertical profile of both total and dissolved lithium from the samples collected during the Phase 1 and Phase 2 programs using the WET Lab EPA 200.7 results. The chart shows the lithium concentration in mg/L, designation between total and dissolved lithium samples, sample depth, and sampling methodology.

Chart 14: Vertical Profile of Total and Dissolved Lithium at DH-1A and TW-1

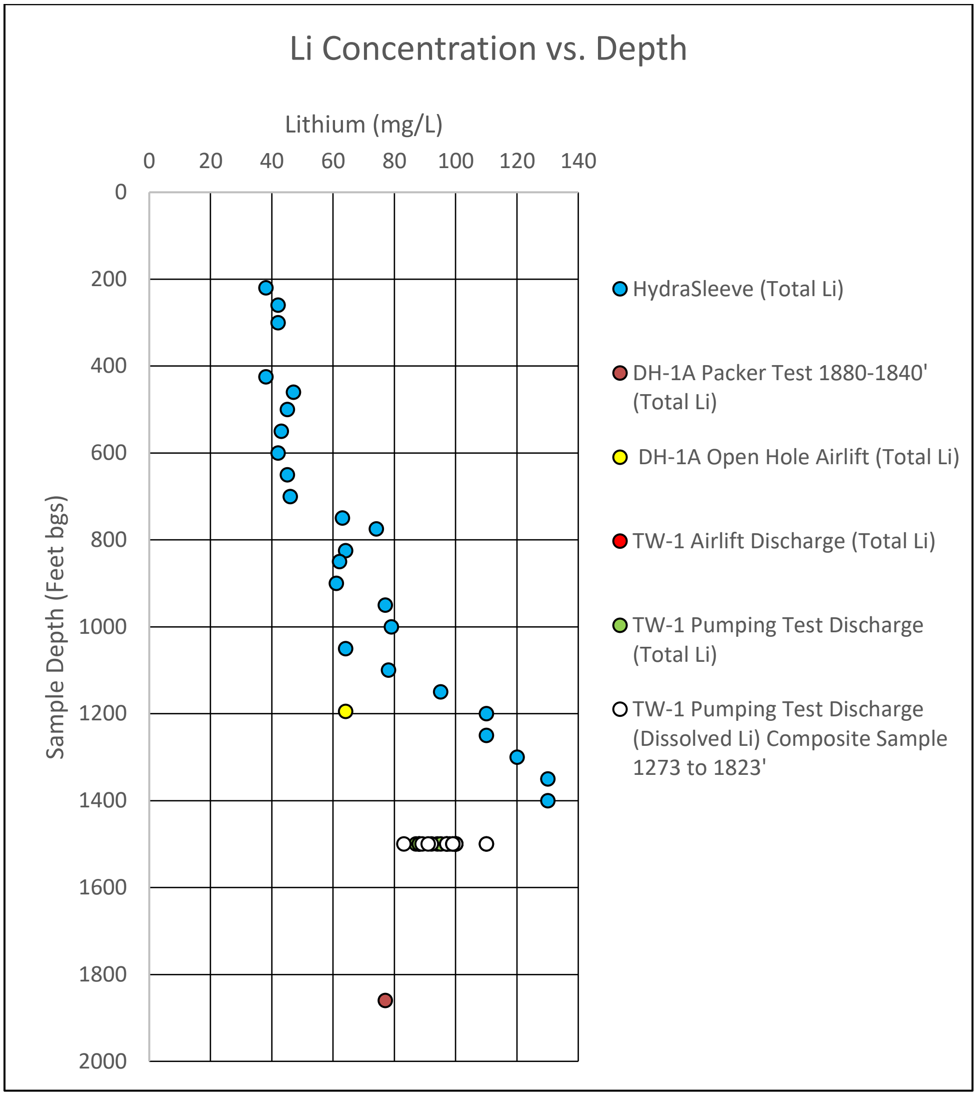


Chart 15 provides a comparison between total lithium and dissolved lithium concentration throughout the 10-day TW-1 pumping test. **Table 19** provides a statistical comparison between total and dissolved lithium concentrations from the samples collected over a 10-day period.

Chart 15: Total & Dissolved Lithium Concentration During TW-1 10-Day Pumping Test

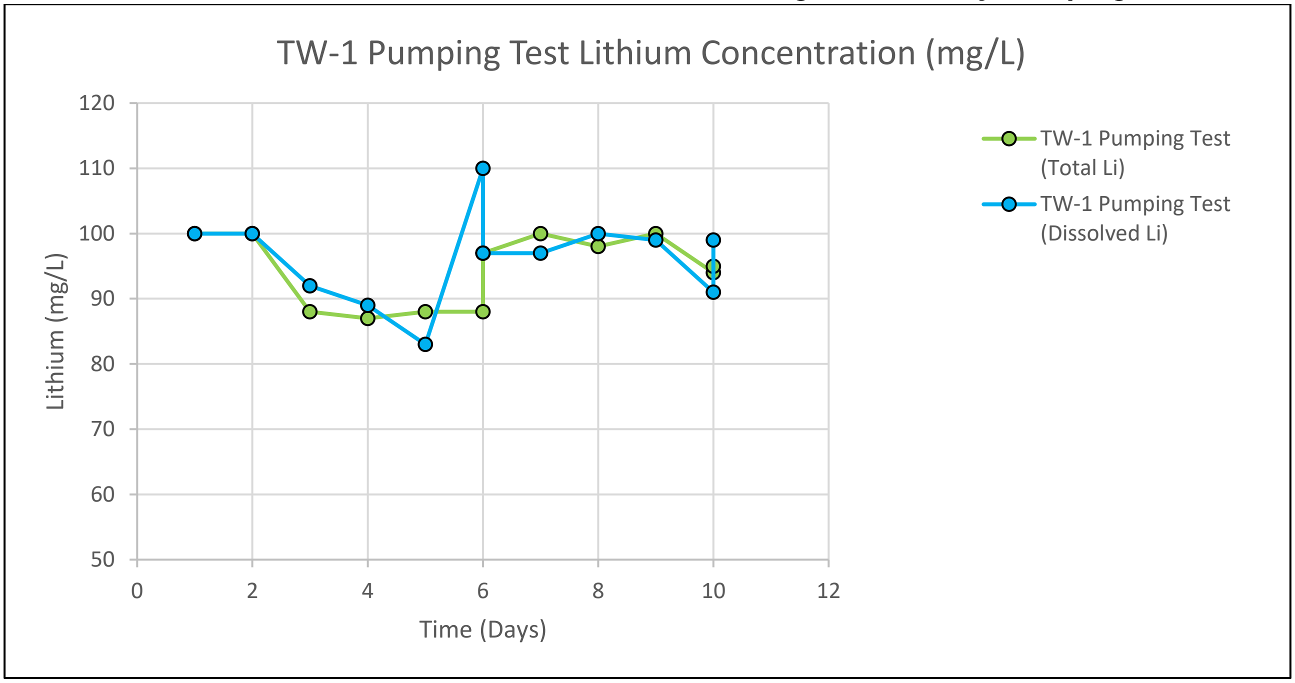


Table 19: Statistical Assessment of TW-1 Lithium Concentrations

	Min	Mean	Max	Average	STDEV
Total Li (mg/L)	87	94.44	100	94.6	5.418123
Dissolved Li (mg/L)	83	96.19	110	96.4	6.881574

The standard deviation between total lithium samples from the TW-1 pumping test is slightly lower than the standard deviation between dissolved lithium samples. Both suggest some variation in the data.

There is not enough data to statistically examine potential for major deviations in total vs dissolved lithium concentrations between individual samples. However, the spread between total and dissolved lithium from the same sample was used to estimate potential for significant variability. **Table 20** provides the spread between total and dissolved lithium concentrations for samples collected during the TW-1 pumping test.

Table 20 Spread Between Total and Dissolved Lithium From TW-1 Pumping Test

Sample ID	Sample Collection Day	Sample Type	Unit	Total Li (mg/L)	Dissolved Li (mg/L)	Spread
TW-1-1	7/28/23	TW-1 Pumping Test Discharge	LGU	100	100	0
TW-1-2	7/29/23	TW-1 Pumping Test Discharge	LGU	100	100	0
TW-1-3	7/30/23	TW-1 Pumping Test Discharge	LGU	88	92	4
TW-1-4	7/31/23	TW-1 Pumping Test Discharge	LGU	87	89	2
TW-1-5	8/1/23	TW-1 Pumping Test Discharge	LGU	88	83	5
TW-1 8/2/22 @ 12:00	8/2/23	TW-1 Pumping Test Discharge	LGU	88	110	22
TW-1-6	8/2/23	TW-1 Pumping Test Discharge	LGU	97	97	0
TW-1-7	8/3/23	TW-1 Pumping Test Discharge	LGU	100	97	3
TW-1-8	8/4/23	TW-1 Pumping Test Discharge	LGU	98	100	2
TW-1-9	8/5/23	TW-1 Pumping Test Discharge	LGU	100	99	1
TW-1-10	8/6/23	TW-1 Pumping Test Discharge	LGU	94	91	3
TW-1-10A	8/7/23	TW-1 Pumping Test Discharge	LGU	95	99	4

The average spread between total and dissolved lithium is 3.8 mg/L which is reasonable. The standard deviation in spread values is approximately 6.0. Sample results where the spread is greater than the standard deviation are suspected outliers.

13.3 Multi Element Analysis

Multi-element analyses were completed from the following samples:

*DH-1 Airlift *DH-1@ 220 Feet *DH-1@ 850 Feet
* DH-1@ 900 Feet *DH-1@ 1250 Feet *DH-1@ 1400 Feet
*DH-1A 1880 to 1840 *DH-1A 1390 to 1430 (*corrected to 1195 feet bgs*)
*TW-1-1 (Day 1 of Test) *TW-1 8/2/22 @ 12:00 (Day 5 of Test)
*TW-1-10 (Day 10 of Test)

Note: The sample collected as reported on the lab reports for DH-1A 1390 to 1430 feet is incorrect. The packer parted from the drop pipe below this test zone and the airlift test was conducted in the open borehole without packer isolation above a depth of approximately 1190 feet bgs. The results of the water quality sample collected are representative of the open borehole above about 1195 feet bgs.

Duplicates were collected for multi-element analysis from the following samples:

*TW-1 8/2/22 @ 12:00 (Day 5 of Test)
* TW-1-10 (Day 10 of Test)

Nevada Profile 1 includes the following constituents:

*Alkalinity as CaCO3 *Bicarbonate *Total Alkalinity
*Chloride *Fluoride *Nitrate+Nitrate (as N)
*Nitrogen Total (as N) *pH (± 0.1 SU) *Sulfate
*Total Dissolved Solids *Aluminum *Antimony
*Arsenic *Barium *Beryllium
*Cadmium *Calcium *Chromium

*Copper	*Copper	*Iron
*Lead	*Magnesium	*Manganese
*Mercury	*Potassium	*Selenium
*Silver	*Sodium	*Thallium
*Uranium	*Zinc	

Electrical conductivity, fluid density, silica, sulfur, boron and lithium were also included in the analytical suite with Nevada Profile 1 constituents from several TW-1 pumping test samples. The results from multi-element Nevada Profile 1 water quality are tabulated in the tables found in **Appendix I**. Laboratory reports for all the samples collected are provided in **Appendix J**.

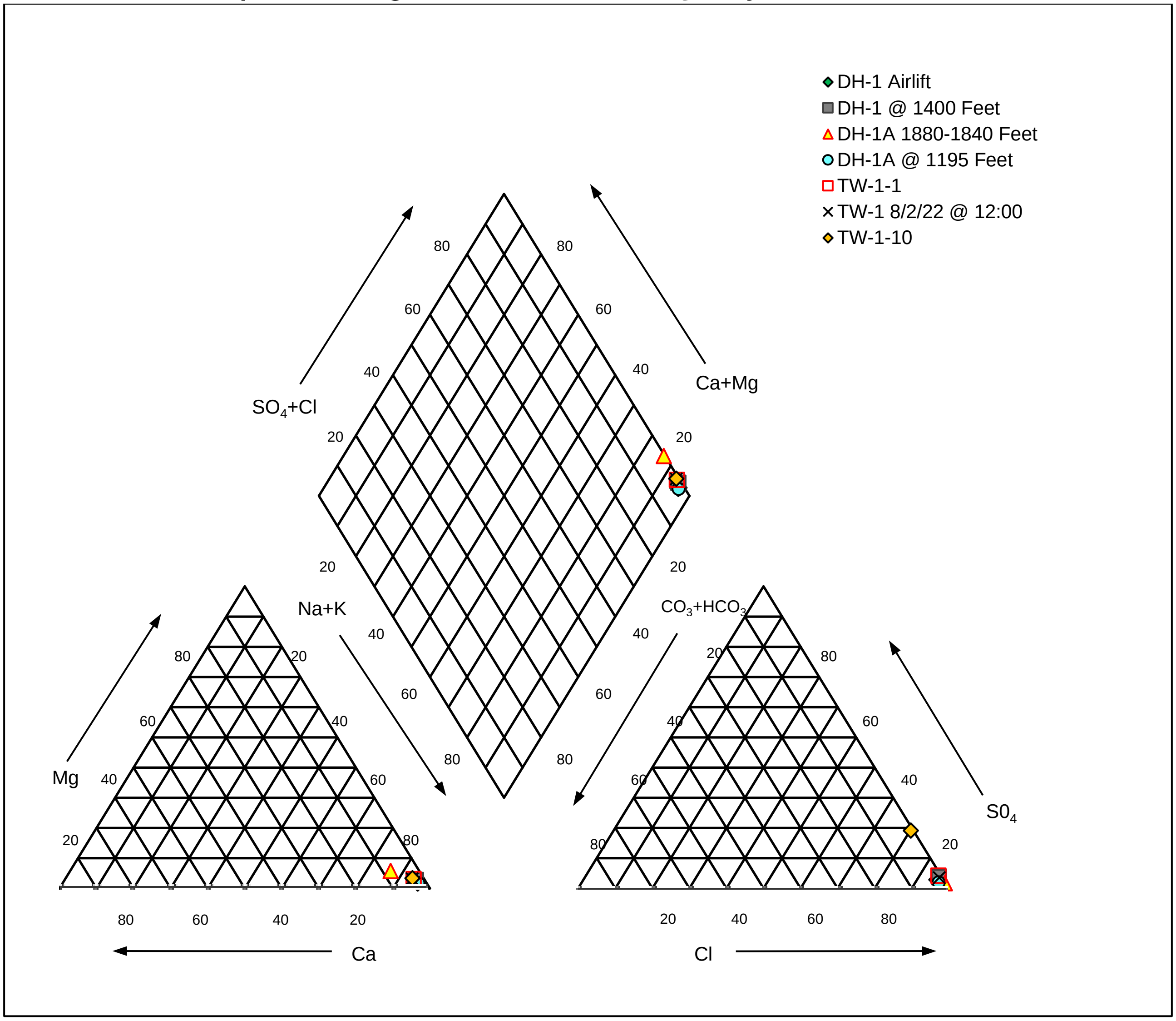
The multi-element water quality analytical results were evaluated using a Piper Plot Diagram, which graphically displays the percent relative composition of major cations (Ca, Mg, Na, K) and anions (Cl, SO4, HCO3, CO3) in solution, to categorize the water chemistry at the ACME Project (**Chart 16**). **Table 21** presents the concentration of these constituents in mg/L., from the laboratory reports provided in **Appendix J**. In constructing the diagram, the milliequivalents of major cations and anions are first plotted on the lower left- and right-hand trilinear diagrams, respectively. A line is then projected from each of these trilinear plots from the corresponding sample and parallel to the Mg and SO4 axes. The intersection of these two lines defines the sample location on the diamond shaped field. The chemical composition of the water sample reflects water-rock interactions and/or anthropogenic contamination and indicates the hydrochemical facies (dominant ions, water type).

Table 21: **Cations and Anions in Solution**

Parameter	Mg	Na	K	Ca	Cl	SO_4	HCO_3	CO_3
DH-1 Airlift	190	16000	1500	350	25000	1000	590	1
DH-1 @ 1400 Feet	360	22000	2100	510	36000	1900	420	1
DH-1A 1880-1840 Feet	670	19000	340	1500	35000	820	130	1
DH-1A @ 1195 Feet	150	14000	1400	300	24000	660	610	1
TW-1-1	420	23000	1900	650	37000	2200	370	1
TW-1 8/2/22 @ 12:00	370	20000	1800	640	34000	1700	380	1
TW-1-10	380	19000	1700	570	30000	9700	370	1

**Units in mg/L.*

Chart 16: Piper Plot Diagram for ACME Water Quality



All samples are sodium potassium and chloride type waters. The bottom right triangle indicates there may be some mixing of different water compositions in TW-1-10 with increase in sulfate from the sample. The sample was collected from TW-1 discharge on day 10 of the pumping test. It is plausible that pumping accessed water from storage with higher sulfate concentration. Also, the well construction may influence sulfate precipitation to the casing over time, or there is a potential laboratory error. Regardless, the sample was collected under extraction conditions i.e. pumping, met the conformance and reporting QA/QC criteria from the laboratory, and was included in this assessment as reported. The TW-1-10 sample is the only outlier, with an increase in SO_4 which is suspect. The water quality sample collected in bedrock (DH-1A 1880 to 1840 feet) is a minor outlier with increase in calcium and magnesium type water. As described above, all samples are sodium potassium and chloride dominate.

The water quality of the brine encountered at the ACME Project categorizes well with the brine and hot spring water quality affinity shown in the Piper Plot Diagram (Figure 7) of Coffey, D.M., et. al., 2021.

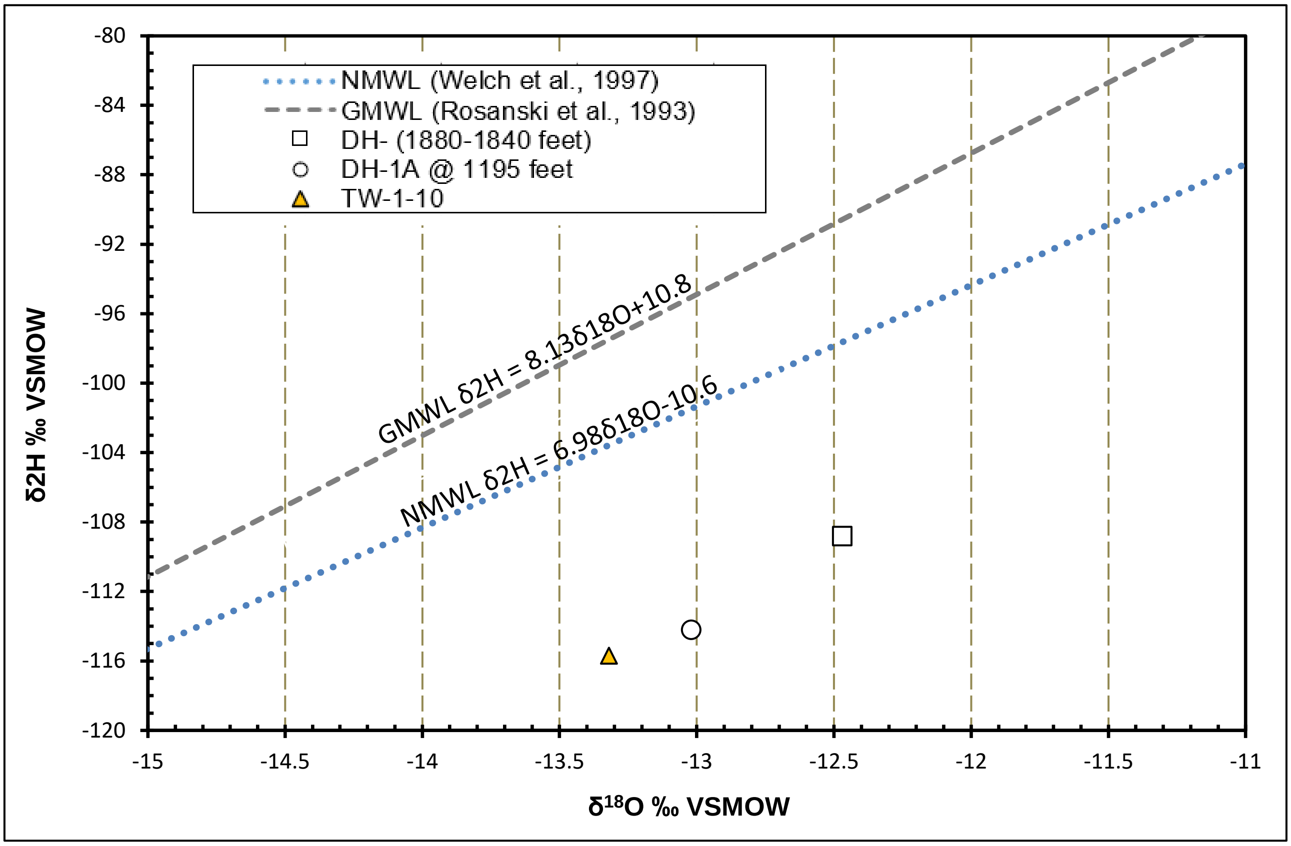
13.4 Isotopes Analyses of Brine

In addition to elemental analysis of brine composition through ICP, brine samples were collected for analysis of deuterium, oxygen 18, tritium, and carbon 14 by percent modern carbon as standard practice to evaluate the hydro-chemical footprint of the aquifers encountered. Isotope samples were collected and submitted to ISOTECH Labs. Isotope samples were analyzed from brines collected in the following stratigraphic units:

*DH-1A (1880 to 1840 feet) packer test in bedrock.
*DH-1A @ 1195 feet, open borehole airlift above lower ash unit.
*TW-1-10, sample collected on day 10 of the TW-1 pumping test from the LGU.

Chart 17 presents a graphical assessment of oxygen 18 and deuterium isotopes analyzed from the samples described above. The results are plotted against the global meteoric water line and a Nevada specific meteoric water line. Hydration of silicates (e.g., reaction of water with feldspars and hornblende to form clays) lightens oxygen 18 and increases deuterium. Since rocks are enriched in oxygen 18, isotopic equilibration with them at elevated temperature shifts the data points to the right in the evolution of deuterium and oxygen 18 in geothermal waters as a function of temperature during reaction with host rocks. Rocks tend to be strongly enriched in oxygen 18. The more energetic (hotter) the system, the more readily the rocks oxygen 18 is exchanged with the water. Cooler temperatures remove less oxygen 18 from the rocks. However, deuterium seems to behave in the opposite manner. This is probably because hydrogen is sparse in primary silicates. As these react, they form hydrous minerals such as phyllosilicates. As solid phases, these would tend to enrich in the heavier hydrogen isotope, (Clark and Fritz, 1997).

Chart 17: Global and Nevada Meteoric Water Line



Notes:

1) Global Meteoric Water Line (GMWL) Equation: δ2H = 8.13δ18O+10.8 (Rozanski et al., 1993)
2) Nevada Meteoric Water Line (NMWL) Equation: δ2H = 6.98δ18O-10.6 (Welch and others, 1997)
3) Units: Per mil (‰) in reference to Vienna Standard Mean Ocean Water (VSMOW)

Water from all samples plot significantly below the Global and Nevada Meteoric Water Lines indicating very low interaction with meteoric water, i.e recharge from precipitation. An oxygen shift (to the right) commonly occurs when water is geothermally influenced by hot rock as seen in the sample from DH-1A in bedrock from 1880 to 1840 feet bgs. All samples appear to be geothermally influenced or have resided in aquifers with evaporite characteristics based on how low they fall below the meteoric water lines. For all samples, tritium content of water is below 1.0 TU indicating the water has been in storage since before nuclear testing in southern Nevada.

The results of laboratory testing Carbon 14 of water are summarized below:

DH-1A (1880 to 1840 feet)	^{14}C = 12.04 percent modern carbon
DH-1A @ 1195 feet	^{14}C = 4.1 ± 0.1 percent modern carbon
TW-1-10	^{14}C = 0.9 ± 0.0 percent modern carbon

Although the results are not conclusive, they provide indication of the potential residence time of the groundwater in the respective aquifers from which they were collected. The percent modern carbon in the sample collected from the TW-1 pumping test in the LGU aquifer is lower than that of the samples collected from the aquifers above and below the LGU. This provides evidence that some of the oldest waters in Clayton Valley may reside in the LGU and that the LGU may be somewhat hydrochemically distinct from overlying and underlying aquifers. **Appendix J** provides copies of the isotope analytical reports for the samples described above.

14 Results of DH-1 Core Lithium Assays

Twelve (12) samples were collected from DH-1 core for lithium assay. The core was analyzed by ALS Laboratory using a 35-element aqua regia ICP-AES, (ALS ME-ICP41 Method), with ore grade lithium analysis by specialized four acid digestion and ICP-AES finishes. Sample roasting was completed prior to analysis by ALS method RST-21. The results are summarized in **Table 22** and **Table 23** below. The ALS lab report for these samples are provided in **Appendix J**.

Table 22: Results of Multi Element Analysis of DH-1 Core Samples

Method	WEI-21	Li-OG63	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
Analyte	Recvd Wt.	Li	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
Units	kg	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
Sample Description LOD	0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
DH-1 (71.6 to 72)	0.37	0.033	<0.2	2.21	16	90	80	1.0	<2	3.39	<0.5	10	21	20	2.45
DH-1 (189.6 to 190)	0.28	0.011	<0.2	0.23	2	10	10	<0.5	<2	0.89	<0.5	1	1	3	0.27
DH-1 (256 to 256.3)	0.26	0.015	<0.2	1.60	9	50	120	0.7	<2	3.22	<0.5	7	13	12	1.68
DH-1 (339.1 to 339.3)	0.17	0.033	<0.2	4.01	6	180	110	2.0	<2	4.26	<0.5	10	22	23	2.88
DH-1 (546 to 546.3)	0.28	0.008	<0.2	1.47	13	20	370	0.8	<2	1.92	<0.5	7	14	9	1.84
DH-1 (595.7 to 595.9)	0.20	0.005	<0.2	0.20	<2	10	<10	<0.5	<2	0.07	<0.5	1	1	2	0.20
DH-1 (768 to 768.3)	0.21	0.007	<0.2	1.12	7	20	210	<0.5	<2	2.08	<0.5	5	9	8	1.41
DH-1 (979 to 979.2)	0.24	0.005	<0.2	0.95	12	10	40	<0.5	<2	7.2	<0.5	5	8	8	1.54
DH-1 (1088.8 to 1089)	0.30	0.006	<0.2	1.19	17	10	80	0.5	<2	7.6	<0.5	6	11	9	1.87
DH-1 (1192.8 to 1193)	0.18	0.008	<0.2	0.32	<2	10	40	<0.5	<2	0.14	<0.5	1	3	3	0.39
DH-1 (1245 to 1245.3)	0.28	0.010	<0.2	0.97	2	20	210	0.9	<2	0.06	<0.5	1	1	1	0.27
DH-1 (1357 to 1357.3)	0.35	0.006	<0.2	1.30	18	30	1080	0.8	<2	8.9	<0.5	7	16	29	2.41

Table 23: Results of Multi Element Analysis of DH-1 Core Samples Continued

Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
Analyte	Ga	Hg	K	La	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc
Units	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm
Sample Description LOD	10	1	0.01	10	10	0.01	5	1	0.01	1	10	2	0.01	2	1
DH-1 (71.6 to 72)	10	<1	1.19	20	260	1.39	414	1	0.40	26	690	12	0.01	<2	4
DH-1 (189.6 to 190)	<10	<1	0.13	<10	30	0.22	75	<1	0.09	1	50	2	<0.01	<2	<1
DH-1 (256 to 256.3)	<10	<1	0.68	20	90	0.58	374	1	0.30	14	480	8	0.01	<2	3
DH-1 (339.1 to 339.3)	10	<1	3.21	20	300	1.22	369	<1	1.24	24	510	12	0.03	<2	6
DH-1 (546 to 546.3)	<10	<1	0.69	20	40	0.79	298	1	0.31	14	480	10	0.01	<2	3
DH-1 (595.7 to 595.9)	<10	<1	0.15	<10	10	0.05	44	<1	0.14	<1	30	2	<0.01	<2	<1
DH-1 (768 to 768.3)	<10	<1	0.40	10	30	0.34	228	1	0.20	12	380	7	<0.01	<2	1
DH-1 (979 to 979.2)	<10	<1	0.39	20	30	0.34	269	1	0.16	10	460	9	<0.01	<2	2
DH-1 (1088.8 to 1089)	<10	<1	0.37	20	40	0.75	505	1	0.19	14	590	9	<0.01	3	2
DH-1 (1192.8 to 1193)	<10	<1	0.23	<10	40	0.11	64	<1	0.41	2	70	2	0.01	<2	1
DH-1 (1245 to 1245.3)	<10	<1	1.87	20	40	0.08	77	<1	1.13	1	70	4	0.02	<2	1
DH-1 (1357 to 1357.3)	<10	<1	0.58	20	30	0.72	610	2	0.25	22	1210	9	0.03	<2	4

Lithium ranges between 10 and 300 ppm for all samples, with the highest percentages of lithium by volume occurring higher in the corehole above about 340 feet bgs. Below 340 feet bgs, the lithium concentration in the solid core material decreases to the bottom of the hole. However, it must be noted that the concentration of lithium in brine increases into the LGU.

15 Interpretation of Downhole Geophysics

Downhole geophysical wireline logs were completed in DH-1, DH-1A and TW-1. The following provides a summary of the logs completed in each hole.

DH-1

- Borehole deviation.
- Resistivity, fluid conductivity, natural gamma, and temperature.

DH-1A

- Borehole deviation.
- Micro-resistivity, natural gamma, fluid conductivity and temperature.
- Nuclear magnetic resonance (NMR) log which provides indications of potential fluid volume, mobile, or capillary bound waters, and estimates of hydraulic conductivity throughout the entire borehole.

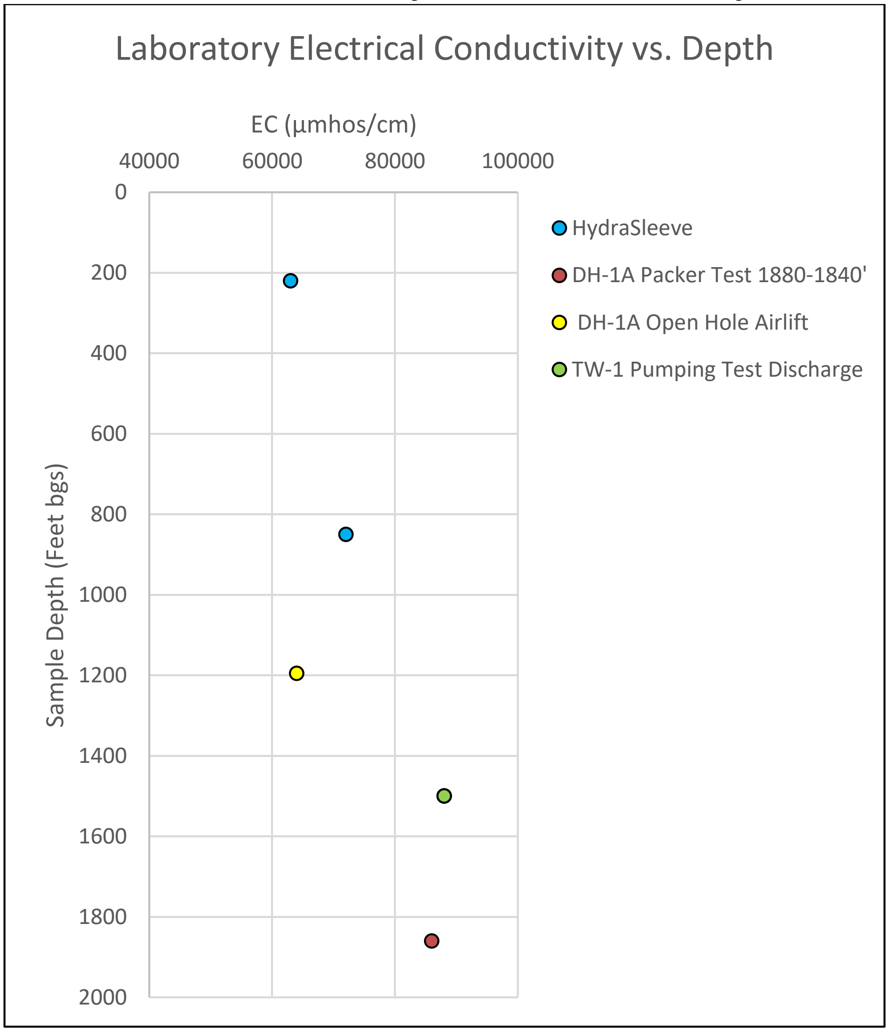
TW-1

- Borehole deviation and caliper log.
- Micro-resistivity, natural gamma, fluid conductivity, dual induction, and temperature.

For DH-1, the API signature of the natural gamma increases at approximately 330 feet bgs and at 380 feet bgs. Possibly responding to increase in potassium salts. The API remains consistent from approximately 380 feet bgs to 840 feet bgs where a slight left defection, reducing API signifies the possible change in chemical composition. However, a distinct unit contact was not logged at this location. The API defects right with increasing API in the vicinity of the lower ash unit near 1,190 feet bgs. Fluid conductivity by resistivity is consistently low in the borehole with slight right defection signifying increasing conductivity beginning around 600 feet bgs. A significant increase in conductivity begins with right defection around at 780 feet bgs. The fluid conductivity gradually increases with depth to the bottom of DH-1, approximately 200,000 us/cm according to the log. The temperature log shows a slight increasing thermal gradient with depth. The temperature defects right with increasing temperature near the lower ash around 1,190 feet bgs and continues to increase with hole depth.

Surveys completed in DH-1A were like those completed in DH-1. The caliper log completed in DH-1A, prior to packer testing, indicated there were no major washouts. The natural gamma API was like DH-1, however exhibited a more pronounced right shift, increasing between 1190 and 1250 feet bgs in the lower ash. The increase in API may correspond to an increase in potassium salts and may not be indicative to increase in brine conductivity or TDS. Micro resistivity of DH-1A slightly deflects left, reduces, in the vicinity of the lower ash. The resistivity spikes, increases, in small areas, presumably fractures at 1475 and 1570 feet bgs. Below 1570 feet bgs, several left deflections occur signifying decrease in resistivity to the bottom of the borehole. Fluid conductivity increases with depth to the bottom of the borehole. **Chart 18** provides a graphical assessment of laboratory fluid conductivity i.e. electrical conductivity vs. depth. The laboratory analytical results are consistent with the geophysical log, indicating fluid conductivity is lowest above the lower ash around 220 feet to 1190 feet bgs and increases in the LGU.

Chart 18: Laboratory Electrical Conductivity



Water quality analytical results from the samples collected in DH-1, DH-1A and TW-1 testing conform with the results of the downhole resistivity surveys which indicate lower electrical conductivity and potential freshwater influx in the upper aquifers above the lower ash.

The NMR log from DH-1A provides estimates of total fluid volume by fraction of clay bound fluid, capillary bound fluid, and mobile fluid. The highest fractions of capillary and mobile fluid appear higher in the borehole, 320 feet to 1190 feet bgs, with the highest fractions appearing in the lower ash, approximately 1190 to 1250 feet bgs. From the NMR log, capillary bound fluid (i.e. matrix bound fluid) appears to dominate through the majority of the lower ash which is consistent with the interpretation of laboratory porosity testing (GSA, 2023). Mobile and capillary bound fluid significantly decreases in the LGU to the bottom of the hole to the contact with bedrock. The hydraulic conductivity estimated by SDR and SOE from the NMR log are reflective of the mobile fluid signature. From 320 feet to 1,190 feet bgs the hydraulic conductivity values are generally over 1 ft/day. In the lower ash, 1,190 to 1,250 feet bgs, the hydraulic conductivity increases to over 10 ft/day according to the log, then decreases in the LGU to 1 ft/day or less. The hydraulic conductivity values calculated from the TW-1 pumping test are within the same magnitude of the values estimated by the NMR survey in the LGU but are not consistent with the NMR estimates in the lower ash. The temperature survey is like that of DH-1, showing a slight increase in temperature with depth.

The dual induction and natural gamma logs from TW-1 clearly show the lower ash overlaying the LGU from 1185 to 1250 feet bgs. The dual induction shows this zone to increase in long and short spacing conductivity. The long and short space conductivity significantly decreases in the LGU below 1250 feet bgs. Micro resistivity, and temperature logs are consistent with the DH-1A log. The caliper log from TW-1 showed a washout near the bottom of the TW-1 steel surface conductor casing around 280 feet bgs. This zone was cemented upon completion of the well.

The contact with the lower ash/tuff unit and the LGU appears to be distinguishable from the downhole geophysical logs. The resistivity, fluid capillary and mobile fluid volume appear to be consistent with the laboratory analytical results with exception of the NMR estimated hydraulic conductivity of the lower ash/tuff unit. For this, the hydraulic conductivity estimated from the TW-1 pumping test data is preferred. However, geophysical logs still can be used to infer conductivities and the signature of the LGU. Copies of the downhole geophysical logs are provided in **Appendix D**.

Profile sampling through all aquifers encountered as described in Section 7.1 indicates potential for interaction with lower conductivity waters in the upper aquifers above the lower ash/tuff contact. The same is also indicated based on the HSAMT survey showing higher resistivities along shallow zones in the western fringes of the ACME Project area. Downhole geophysical surveys indicate the electrical conductivity increases with depth which was confirmed by the results of the brine sampling program. The results of the program do not show a direct correlation between lithium concentration and electrical conductivity but does indicate a proportional relationship may exist with increase in total dissolved solutes approaching the basal pebble gravels or Lower Gravel Unit (LGU) which overlays bedrock. The HSAMT survey indicates the resistivity increases in bedrock which was validated by the results of brine sampling from the DH-1A (1,880-1,840 feet) bedrock packer test. Results from this test suggest the lithium concentrations near the bedrock contact may be lower than expected and highest in the lower ash and LGU.

16 Interpretation of Results and Evaluation of Inferred Lithium Brine Resource at the ACME Lithium, Clayton Valley Project

The following provides an evaluation of the inferred lithium brine resources at the ACME Lithium Inc., Clayton Valley Project. The evaluation is based upon the results of Phase 1 and Phase 2 ACME exploration programs and inferred data from public domain literature and reports. The information presented herein is in no way intended to be used to fully quantify the extent of the potential lithium resource held or optioned by ACME or adjacent claim holders in Clayton Valley. Rather, the intent is to provide a summary of the material information intended to be used to establish an inferred resource estimate, based on the data currently available to CWR.

The following literature and reports were reviewed in preparation of this inferred resource estimate:

- SRK, 2023, Updated SEC Technical Report Summary, Pre-feasibility Study, Silver Peak Lithium Operation, Nevada, USA.
- SRK, 2022, SEC Technical Report Summary Pre-Feasibility Study Silver Peak Lithium Operation Nevada, USA.
- Hasbrouck, 2021, Hybrid-Source Audio-Magnetotellurics (HSAMT) Survey, Over a Portion of the CC, CCP, SX, and JR claims in Clayton Valley, Nevada.
- Coffey, D.M., et. al., 2021 Lithium Storage and Release from Lacustrine Sediments: Implications for Lithium Enrichment and Sustainability in Continental Brines.
- Pure Energy Minerals, 2017, NI 43-101 Technical Report Preliminary Economic Assessment (Rev. 1) of the Clayton Valley Lithium Project Esmeralda County, Nevada.
- CWR, 2016, Technical Memorandum Regarding LX-1 Exploration Hole.
- C.W. Fetter, 2001, Applied Hydrogeology, Fourth Addition, p. 79 (Table 3.5).
- Zampirro, Danny, 2004, Hydrogeology of Clayton Valley brine deposits, Esmeralda County, Nevada: Nevada Bureau of Mines and Geology Special Publication 33, p. 271-280 (cross section and figures, full report not available to CWR).
- F. Eugene, Rush, 1968, Water Resource Reconnaissance Series, Report 45, Water Resource Appraisal of Clayton Valley – Stonewall Flat Area, Nevada, and California: Prepared by U.S. Geologic Survey.

16.1 Background Information from Adjacent Exploration

The LX-1 exploration test hole, as described in CWR 2016, provided additional insight into the lithology and lithium brine concentration within volcanic sediment aquifers in Clayton Valley. LX-1 also provided evidence of potential lateral geologic continuity within a deeper “lower aquifer” system as described by (Zampirro, 2004). The total extent of the lower basal gravel aquifer is unknown but has been inferred to have been laterally deposited across the playa and valley areas, (interpreted from available drilling logs and Zampirro 2004). Coffey, D.M., et. al., 2021, describes the Lower Gravel Unit (LGU) to be widely distributed throughout the basin and composed of coarse and poorly sorted sand and gravel.

The Pure Energy Minerals, 2017 NI 43-101 Technical Report suggests that the playa deposits in Clayton Valley are predominantly fine grained, clastic sediments with some salt deposits and localized sand and gravel facies. Below these deposits is a basal conglomerate sequence, predominantly matrix supported pebble conglomerate, overlying bedrock composed of brecciated meta-siltstones and sandstones with partially silicified carbonates. By composition and description, the LGU as described by Coffey, D.M., et. al., 2021 and Pure Energy Minerals is consistent with the composition and description of the core drilled in DH-1 at the ACME Project. GSA describes the core samples from DH-1 as volcanic material and conglomerate/breccia which is consistent with the Pure Energy Minerals descriptions of the basal gravel unit. See core photos provided in **Appendix C**.

CV-8 encountered a basal conglomerate sequence intercepted at a depth of 772 meters (2,534 ft) and continued to bedrock contact at 942 meters (3,090 ft). The total thickness of the basal conglomerate at CV-8 was 170 meters (558 feet), Pure Energy Minerals, 2017 NI 43-101 Technical Report. The report also indicates the concentrations of lithium from the CV-8 pumping test discharge was ± 100 mg/L. These results are like the concentrations from the TW-1 pumping test. TW-1 and CV-8 are both shown in **Figure 7**.

The SRK, 2022 SEC Technical Report described the Lower Gravel Aquifer (LGA). The LGA is defined as the deepest aquifer overlying bedrock in Clayton Valley. The LGA consists of gravel with a sand and silt matrix interlayered with clean gravel. It is considered alluvial material formed from the progradation of alluvial fans into the basin. Table 7.2 of the SRK, 2022 SEC Technical Report suggest five (5) production wells were drilled by Albemarle targeting the LGA. The production capacity, location and concentration of lithium produced from these wells are not available. However, their locations can be inferred to be within the extent of the Albemarle claim boundary. The SRK report acknowledges specific yield and hydraulic conductivity play a key role in estimating the volume of brine available for extraction. These factors are variable through the Albemarle project area and are difficult to directly measure. The assumptions utilized in the SRK predictive model could materially impact the estimate of brine available for extraction and associated concentrations of lithium. Model sensitivity analyses were completed by SRK on key aquifer parameters. The ranges evaluated in these analyses resulted in lithium concentrations ranging from 75 to 104 mg/l, at the end of the 30-year reserve life.

The basal conglomerate as described by Pure Energy Minerals, Lower Gravel Aquifer as described by Albemarle, or (LGU) as described by Coffey, D.M., et. al., 2021, appear to be consistent in description, composition, and vertical extent. Laterally, the LGU appears to extend beneath Pure Energy claims (currently operated by Schlumberger) and the Albemarle claims which are adjacent to the ACME Project.

16.2 Transitional Storage Reserve

This evaluation considers the concept of the Transitional Storage Reserve (TSR) for Clayton Valley as introduced in the 1968 Water Resource Recognizance report (Rush 1968). The Transitional Storage Reserve (TSR) has been defined as the quantity of water in storage in a particular groundwater reservoir that can be extracted and beneficially used during the transition period between natural equilibrium conditions and new equilibrium conditions under the perennial yield concept of groundwater development.

16.3 Historic 1968 Estimate of Transitional Storage Reserve for Clayton Valley, NV

Table 13 of (Rush 1968) provides a preliminary estimate of TSR for Clayton Valley. The TSR is estimated as follows:

TSR = Area of Depletion x Thickness to be Dewatered x Specific Yield

The area of depletion is defined as the area to be dewatered, and the thickness of the aquifer (saturated thickness) is defined as the thickness to be dewatered. The Specific Yield (Sy) is defined as the volume of water that could be released from storage in an unconfined aquifer per unit surface area, per unit decline of the water table, i.e., drainable porosity.

Rush 1968 assumes the following for Clayton Valley:

- Assumes a Specific Yield (Sy) of 10%.
- Assumes an Area of Depletion of 90,000 acres. However, excludes alluvial areas in Weepah Hills and Paymaster Canyon and isolated areas in the eastern portions of T2S R40E, T3S R40E and the southwestern part of T2S R41E.
- Excludes playa deposits pumped prior to 1968 for mineral extraction.

Based on this concept, (Rush 1968) estimated TSR in Clayton Valley as follows:

- TSR = 90,000 Acres x 50 feet x 0.10
- TSR = 450,000 AF (as estimated in 1968)

There are no validated publicly available long-term quantitative measurements of historical total groundwater pumped from Clayton Valley available from the period 1968 to about 2015 to validate the 1968 estimate, (i.e., water which was released from storage through pumping of wells). Additionally, the 1968 estimate does not consider evaporative loss, or losses from phreatophytes in detail, but it did acknowledge these losses are expected to be very low or nonexistent within areas of deeper water levels.

16.4 Transitional Storage Reserve for the ACME Lithium Project

The concept of TSR is highly variable and cannot be fully depended upon to predict the volume of releasable brine over time. A robust groundwater flow model substantiated with a density of high-quality data, which include site specific geologic, structural, and measured hydraulic conductivity, transmissivity, and storativity is required to accurately estimate storage coefficients and potential response to pumping throughout the entire ACME Project area.

TSR is still widely used to make inferences to define the potential extent of a lithium brine resource and the concept can be applied to provide an estimate of TSR as it affects the ACME Project without use of a high-level groundwater model. The major parameters include defining the following:

- Thickness to be dewatered.
- Area of depletion.
- Specific Yield.

16.4.1 Thickness of Lower Gravel Unit Aquifer

DH-1 was cored (HQ diameter) and intersected multiple potential productive horizons including the targeted basal gravel aquifer of the LGU at an approximate depth of 1,250 feet below ground surface (feet bgs). The LGU extended to the bottom of the DH-1 corehole to 1,460 feet bgs.

DH-1A was drilled as a twin hole to DH-1 with the objective of identifying the extent of the LGU and depth to bedrock. DH-1A was also drilled to examine the potential concentration of lithium in the LGU approaching the contact with bedrock. The Hasbrouck report, (Hasbrouck, 2021) suggested the bedrock contact at DH-1A would be between 1,800 and 2,000 feet bgs based on their interpretation of the gravity and resistivity data. This was confirmed by DH-1A, which extended the LGU from between 1,250 feet to 1,823 feet bgs.

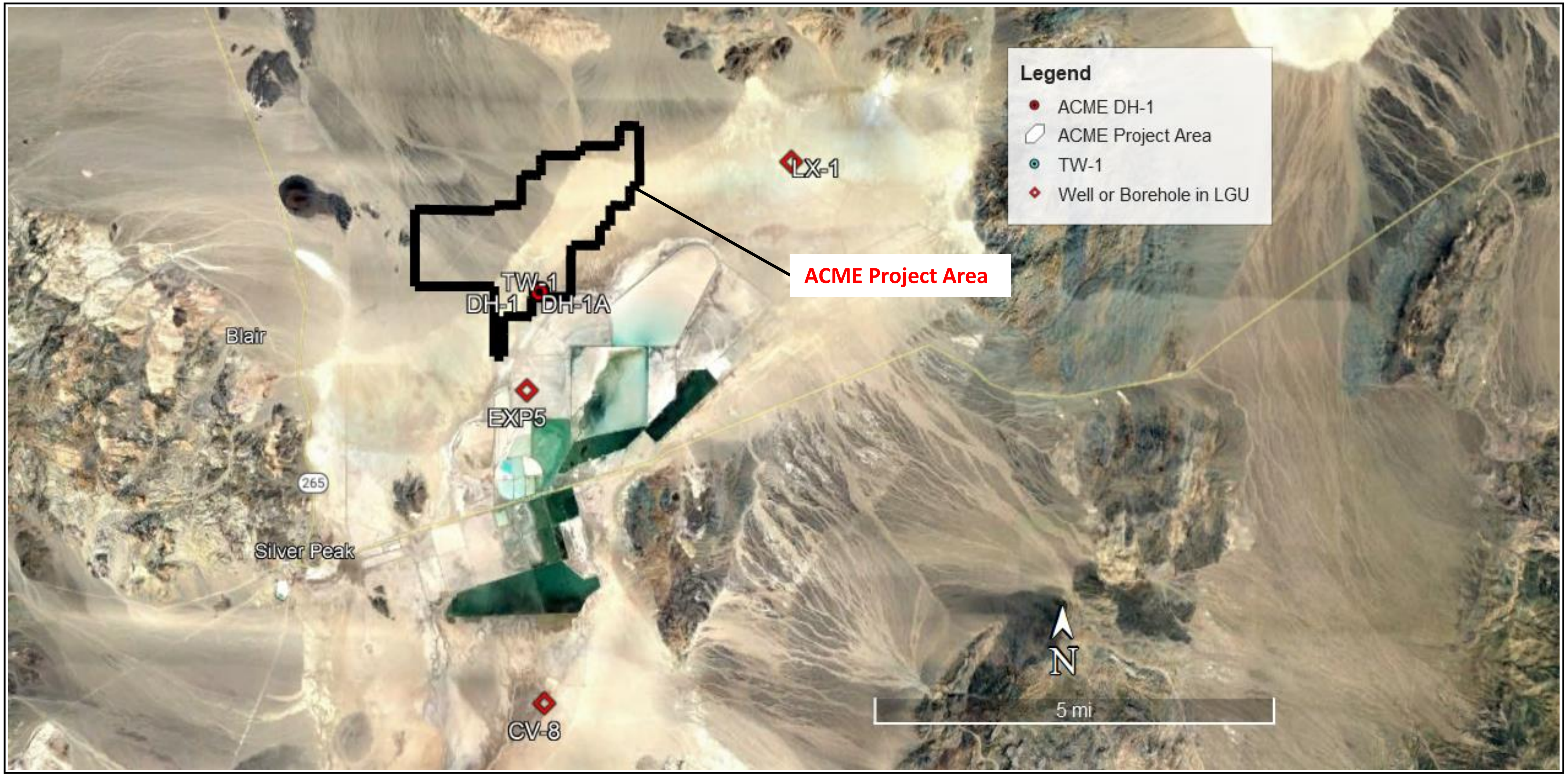
Based on DH-1A confirmatory drilling, it is reasonable to assume the Hasbrouck gravity and HSAMT modes are accurate within the constraints and limitations of the models and they can be used to infer depth to bedrock throughout the ACME Project area. A small area along the northern portion of the project may exhibit shallower depth to bedrock. However, the model indicates bedrock is greater than 550 meters (1804 feet bgs) throughout a significant portion of the ACME Project area.

An assessment of major contacts encountered in DH-1 and DH-1A as they may apply to those described in regional historical drilling in Clayton Valley, (refer to Coffey, D.M., et. al., 2021), is provided below:

- 0 to 181’ Upper Clastic Unit (UCU)
- 181 to 195’ Main Ash Unit (MAU)
- 195 to 479’ Lower Clastic Unit (LCU)
- 479 to 1,180’ Transition Between Lower Gravel and Lower Clastic Units LGU/LCU
- 1,185 to 1,250’ Airfall Ash – Lacustrine Tuff (CAU)
- 1,250 to 1,823 Lower Gravel Unit LGU

From the gravity and HSAMT models and results from DH-1A, the LGU is expected to extend from 1,250 feet to approximately 1,800 feet bgs or greater throughout a significant portion of the ACME Project area. Therefore, the thickness of the LGU aquifer is estimated to be approximately 550 feet for purposes of this inferred resource estimate. The thickness of the LGU at ACME Project DH-1A is consistent with the thickness of the basal gravels encountered in Pure Energy Minerals CV-8 and the LGU encountered in corehole EXP-5 located on Albemarle claims approximately 1.25 miles, (2.0 km) from DH-1A. The drilled stratigraphy of EXP-5 is detailed in Figure 2 of Coffey, D.M., et. al., 2021, and the stratigraphy of DH-1 and DH-1A is provided in **Appendix B**. The locations of CV-8 and EXP-5 relative to the ACME Project area are shown in **Figure 7**.

Based on the water quality analytical results presented in Section 13, the LGU aquifer exhibits the highest concentrations of lithium in brine waters at the ACME Project. Thus, the LGU aquifer is the focus of the investigation and the inferred resource estimate presented in this report.



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Area Wide Exploration Holes in LGU

Google Earth Imagery

ACME Lithium Exploration Report

Figure 7

16.4.2 Area of Depletion

The Area of Depletion was evaluated based on the following parameters.

- Extent of the claim area where extraction wells could be installed. Includes contiguous claims in Clayton Valley controlled or optioned by ACME, approximately 2,230 acres.
- Hybrid-Source Audio-Magnetotellurics (HSAMT) survey, also known as a Controlled-Source Audio-Magnetotellurics / Magnetotellurics (CSAMT / MT) over a portion of the CC, CCP, SX, and JR claims (ACME Project area).
- Water level trends from DH-1A Vibrating Wire Piezometer as described in Section 9.

Descending water level trends from the DH-1A Vibrating Wire Piezometer as described in Section 9 likely represents the transient changes in water levels in the area due to regional pumping. It is very plausible that these water levels are being influenced by brine extraction wells at the Albemarle Project. In this case, the LGU aquifer at the ACME Project would have direct continuity with the deeper regional lithium brine resource which is being extracted by Albemarle.

The resistivity footprint of the HSAMT survey was evaluated against Phase 1 and Phase 2 brine sampling and core sample assay results. The cross evaluation suggests the resistivity footprint of the brine in the LGU aquifer is between 2.5 to 3.95 ohm-meter. Lower resistivities, less than 2.5 ohm-meter are likely influenced by increased salinities and not increase in concentration of lithium brines. Higher resistivities, greater than 3.95 ohm-meter are interpreted to be influx from lower conductivity waters (fresh or brackish waters).

Based on the HSAMT survey, brine sampling, aquifer testing and the DH-1A water level trends, the brine body in the LGU aquifer has been inferred to extend throughout a significant portion of the ACME Project area, with potential continuity with the deep regional lithium brine reservoir in Clayton Valley. As such, the extent of the ACME Project area has been evaluated as the Area of Depletion. The resistivity increases along the western flank of the ACME Project in the vicinity of Line 3 of the HSAMT survey, see **Appendix A**. The resistivity decreases along Lines 2 and 4 suggesting the higher resistivity shown in Line 3 is likely confined to a small area. The Area of Depletion was truncated to account for the area of higher resistivity along Line 3 and for the area along the northern claim block boundary where depth to bedrock may be less than about 1,800 feet bgs, see Area of Depletion based on the gravity model in **Figure 3**. These areas were excluded from the Area of Depletion and the inferred resource evaluation. The truncated Area of Depletion was estimated to be approximately 1,000 acres.

16.4.3 Specific Yield

The laboratory results from DH-1 core samples submitted to GSA in Tucson Arizona for rapid brine release and Specific Yield analysis suggest the Specific Yield of the LGU is approximately 6% based on the mean value of the core tested and up to 18% in the lower ash based on mean value. As such, a (Sy) of 6% was assumed in the inferred resource evaluation for the ACME Lithium Project.

16.4.4 Estimate of TSR for ACME Lithium Project

The TSR for the ACME Project is estimated based on the following.

TSR = Area of Depletion x Thickness to be Dewatered x Specific Yield

- Area of Depletion is estimated to be approximately 1,000 acres.
- The Thickness to be Dewatered is estimated to be approximately 550 feet.
- The Specific Yield of the LGU is estimated to be 6%.

The TSR for the LGU at the ACME Project is estimated to be approximately 33,000-Acre Feet.

16.4.5 Estimate of Extractable Brine Volume for the ACME Project Area

The manner in which the TSR augments the perennial yield was evaluated by (Rush 1968 as described by Worts 1967) via the following equation:

Q = (TSR ÷ t) + (Perennial Yield ÷ 2)

Where;

Q = The pumping rate in Acre Feet per year.

TSR = Transitional Storage Reserve.

t = Time of depletion to exhaust the TSR in years.

The equation was used to estimate the yearly volume of brine which could be extracted from the TSR over a 40-year time of depletion.

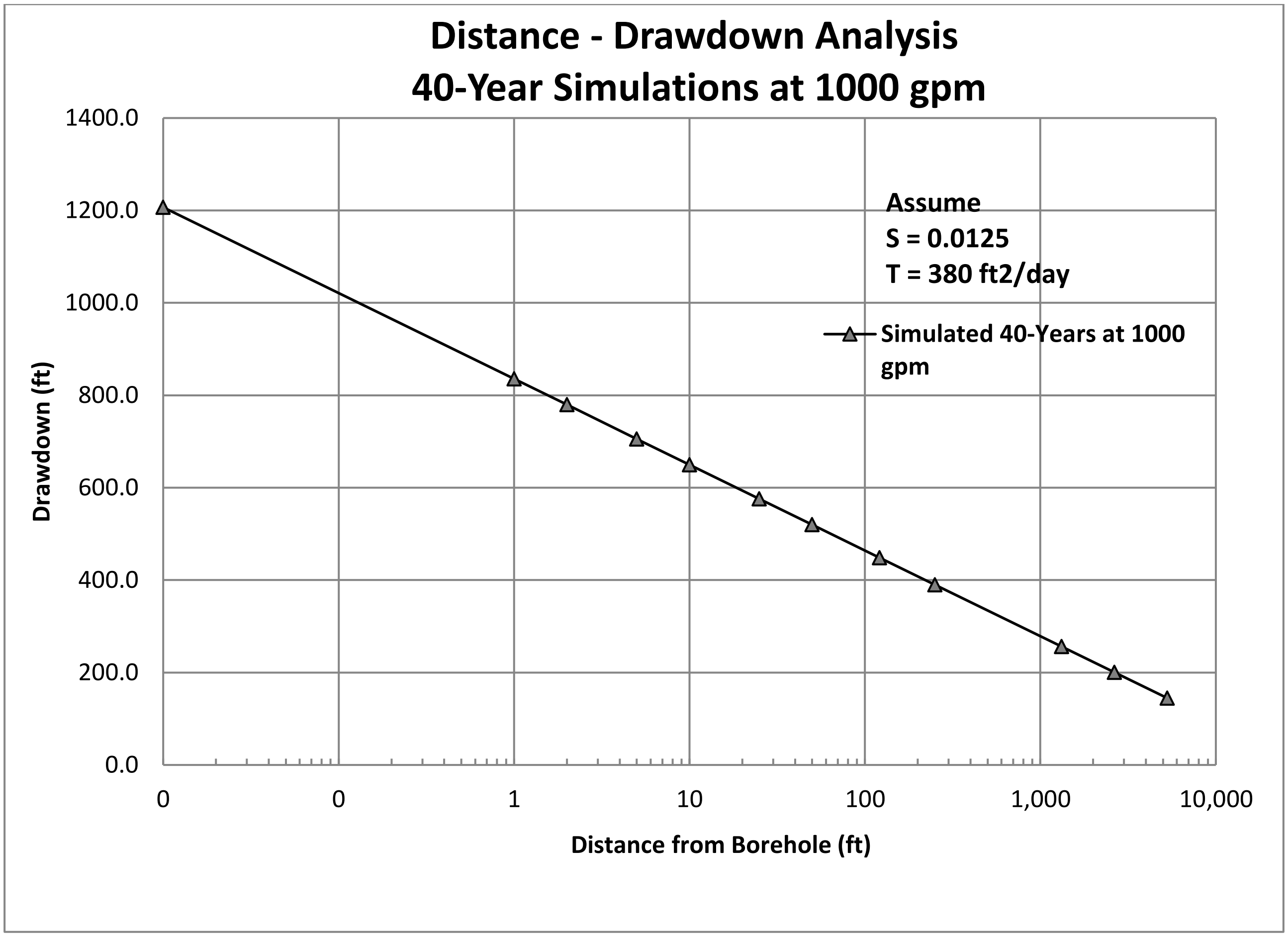
Assuming the following:

- TSR = 33,000 Acre Feet.
- Perennial Yield = 22,000 Acre Feet as defined by Rush, 1968.
- Time of Depletion = 40 years.

The estimated total volume of extractable brine from the LGU over a 40-year period is approximately 473,000-Acre Feet or approximately 11,825-Acre Feet per year. A pumping rate of approximately 7,331 gpm must be achieved from the LGU aquifer within the ACME Project area to dewater the LGU over 40 years.

The ability to physically develop 7,331 gpm from within the ACME Project area was evaluated using a Theis based analysis of distance vs drawdown over time as applied by Driscoll, Fletcher 1986. The Theis analysis assumed a Storativity value of 0.0125 and a conservative low-end transmissivity (T) value of 380 Ft^2/Day from the results of the TW-1 pumping test AQTESOLVE™ analysis. **Chart 19** provides the graphical results of the analysis. The analysis was completed for a single well pumping at a rate of 1000 gpm over 40 years. The radial drawdown over linear distance was estimated to evaluate well spacing scenarios within the ACME Project area.

Chart 19: Theis Time Based Drawdown Analysis for TW-1 Pumping over 40-Years



The results indicate at least 145 feet of drawdown would occur 1-mile from an individual well, pumping at a rate of 1,000 gpm over 40-years. Approximately 1,206 feet of drawdown would occur at the well. The estimated drawdown between two (2) wells, each located one (1) mile linear distance apart, would require assessing the sum of the drawdown response propagated between the well pairs. In this case there would be at least 1,351 feet of drawdown at each well if both wells were pumping at 1,000 gpm over 40-years. There are many assumptions with the Theis solution and a numerical groundwater flow model substantiated with additional data is required to sufficiently predict pumping response from simulated pumping centers within the ACME Project area. However, based on the depth of the LGU and available drawdown to the bottom of the LGU, the Theis solution suggests there would be potential for the basal gravels in Clayton Valley to yield rates of over 1,000 gpm from a single large diameter well, and plausible to develop a well field that yields in aggregate up-to 7,331 gpm or 11,825-Acre Feet per year within the ACME Project area, assuming the entire aquifer would be dewatered.

16.4.6 Inferred Resource Estimate for ACME Lithium Clayton Valley Project

Analytical results from the water quality samples collected from ACME Phase 1 and Phase 2 exploration programs indicated the presence of a brine package within the LGU aquifer with potential elemental lithium concentrations of up to 130 mg/L. Brine samples were collected in accordance with the methods, procedures and QA/QC protocols described in Section 7.

The results of elemental lithium analysis from the brine samples collected from the TW-1 pumping test represent the potential composite concentration of lithium which could be extracted from the LGU under pumping conditions. The results from the WET Lab dissolved lithium analysis using EPA 200.7 Methods were used in evaluating the concentration of lithium in the LGU brine package at the ACME Project. The WET Lab results were selected since WET Lab has significant experience with Clayton Valley brines and is the reporting laboratory for lithium results submitted to the EPA from the Albemarle Project (SRK, 2022). Brine samples were collected daily over the 10-day pumping test. Duplicate samples were also collected and analyzed for comparison between results. The dissolved fraction was chosen based on its applicability to estimate the concentration of elemental lithium within the samples collected. The average concentration of dissolved lithium from the pumping test samples were used to assess potential concentrations of lithium during a brine extraction scenario and are most appropriate for use in this inferred resource estimate. The average concentration of dissolved lithium from the TW-1 pumping test samples is approximately 96 mg/L.

The results of Phase 1 and Phase 2 exploration programs suggest a potential large, low grade, lithium deposit exists beneath the ACME Project. The deposit has potential direct connectivity to a larger regional resource as indicated from the water level trend analysis described in Section 9. The following provides an estimate of inferred lithium resources held within the TSR estimated for the ACME Project. The estimate is based on the results of ACME Phase 1 and Phase 2 exploration programs and the limitations and assumptions defined in this report. The inferred resource estimate assumes the average concentration of lithium within this potential reserve is approximately 96 mg/L and acknowledges the estimate does not factor in the results and interpretations from numerous samples collected within the LGU aquifer by other claim holders not available to CWR. The estimate assumes the following:

- TSR is 33,000 Acre Feet based on an (Sy) of 6%.
- Total volume of extractable brine from the LGU aquifer over a 40-year period is approximately 473,000-Acre Feet or 11,825-Acre Feet per Year.
- The composite concentration of lithium in the LGU aquifer based on the average concentration of dissolved lithium from the TW-1 pumping test is approximately 96 mg/L.

The estimate of extractable elemental lithium based on total extractable volume from TSR over 40 years is approximately 56,900 Metric Tons (units rounded). A factor of 5.323 has been assigned to convert elemental lithium to lithium carbonate equivalent (LCE) based on industry wide common conversion factors. The inferred LCE is estimated to be approximately **302,900 Metric Tons** (units rounded).

16.4.7 Assumptions and Limitations

The concept of transitional storage reserve is highly contingent on the concept of perennial yield and the recharge components to the aquifer system(s). CWR acknowledges there is not enough data available to quantify the amount of recharge occurring in Clayton Valley or the location and elevation where the recharge occurs. It is likely that the perennial yield is much lower than the extraction rates from the Albemarle project based on the long-term water level trends in Clayton Valley and results of the trends discussed in this report. The ACME Project is located along the north margin of the basin in an area where groundwater recharge is expected. The results of the chemical analysis of the brines encountered in the ACME exploration program suggest potential for brackish-freshwater interactions to exist higher in the aquifer system above approximately 800 feet bgs, (see Chart 14) which is most likely where meteoric recharge would occur. By virtue of recovery in TW-1 post testing, aquifer recharge is expected. The amount of annual recharge and concentration of dissolved lithium recharging the LGU is unknown.

The results of water quality analysis from profile sampling highly suggest low conductivity waters with low lithium concentrations exist in shallow aquifers. The lithostratigraphic conceptual model for the LGU is highly simplistic. Instead of the single aquifer model, there are likely multiple leaky aquifers present. Piezometer 4 and Piezometer 3 water levels track very closely but are both at separate elevation from Piezometer 2. This indicates there may be multiple leaky aquifers. However, under pumping stress, the slope from water levels of Piezometer 2 is dampened, suggesting the shallow aquifer system with lower lithium concentrations may have reduced hydraulic connectivity with the deeper LGU. From the water level trends between piezometers and results from the TW-1 pumping test, it is likely there are multiple aquitards limiting vertical flow to the LGU. Forward looking hydrochemical mixing analysis between aquifers under a long-term - high-capacity extraction scenario was not assessed due to lack of available hydraulic and hydrochemical data from overlying aquifers. Mixing from recharge is expected to occur along the margin of the basin, but without significant additional water quality, meteoric, water level, and well testing data to support a water balance mixing model, it is impossible to assess. Permitting limitations to include water rights preclude ACME from completing additional well testing.

The work completed by Coffey, D.M., et. al., 2021, suggests the abundance of Li-bearing sediments in the subsurface provides a continuous supply of elemental lithium available from water-rock interactions and that Clayton Valley is the largest known accumulation of lithium in a basin-fill continental setting on a global scale. This concept suggests the concentrations of lithium in some of the brine aquifers may not deviate as long as water-rock interactions occur through natural recharge and discharge to include any subsurface influence from active hydrothermal systems. The range of lithium concentration evaluated in the SRK modeled sensitivity analyses resulted in lithium concentrations potentially deviating within approximately 25 percent at the end of the 30-year reserve life. For this estimate, the concentration of lithium in solution in the LGU is expected to remain relatively consistent based on the assumptions from Coffey, D.M., et. al., 2021. However, this assumption could materially impact the estimate of brine available for extraction and associated concentrations of lithium. Until water rights permits are acquired to complete additional well testing, it is not possible to sufficiently verify potential decreases in lithium concentration over time with the data available to CWR.

Since aquifer recharge cannot be quantified in the expected capture area of the ACME Project with the data available to CWR, the published values based on The Nevada Division of Water Resources (NDWR) Basin Reconnaissance report for Clayton Valley, Basin 143 was used in the assessment of potential extractable brine volume. The report assigns a perennial yield of 22,000 Acre Feet per Year, F. Eugene, Rush, 1968, Water Resource Reconnaissance Series, Report 45. CRW is assuming this value until the NDWR adopts a new value, at which time, CWR reserves the right to revise the estimate of extractable brine. Alternatively, the flux of groundwater flow through the ACME Project area could be calculated using data collected from planned holes DH-2 and DH-3. Estimating the flux would also be useful and appropriate to refine the recharge estimate, see recommendations in Section 17.

Significant heterogeneities in basin fill deposits are expected to exist. Faults and structural geology have not been evaluated within the ACME Project area. The inferred resource estimate as evaluated using the TSR does not consider influences from boundary conditions or potential changes in aquifer dynamics. This is a limitation to the estimate of potential extractable brine. Additional drilling, testing, and groundwater modeling is required to assess the potential influences from faults and changes in aquifer dynamics over the entire ACME Project area.

Although the 10-day pumping test was useful to examine aquifer dynamics, the pumping rate was limited to the conditions of the Nevada Division of Minerals (NDOM) DMRE Well permit. The permit limited total extraction volume to 5-Acre feet. The Nevada Division of Environmental Protection Temporary Discharge Permit limited the extraction rate to 100 gpm. The data generated from the test is subject to the duration and pumping rate achieved under the conditions of the respective permits, not to the full potential capacity of well and yield of formation. In which case, long-term forward-looking solutions are forced to be made using data which is constrained by permit limitations.

This evaluation does not consider Nevada water rights or Nevada water law. The evaluation only considers basic hydrogeological parameters and principles as they apply to validating the potential for a series of deep wells at the ACME Project to dewater the aquifer based on permeability, storage, and components of annual recharge which are still being evaluated. CWR acknowledges drawdown is occurring in Clayton Valley and potential for significant interference to occur between wells. The evaluation estimates approximately 7,331 gpm could potentially be developed from a series of deep wells in the LGU within the ACME Project area but does not consider the current long-term extraction of groundwater from Albemarle wells in accordance with their water rights permits.

To better understand the cumulative drawdown and basin wide impacts across claims, a regional groundwater flow model would need to be developed to assess drawdown impacts from Albemarle wells in addition to drawdown that would occur from any additional proposed pumping from other operators. The model should also consider validated recharge estimates and water/brine disposal methods since this will likely impact water levels in the basin. Regardless, the biggest limitation to extraction of brine in Clayton Valley is acquisition of a Nevada water rights permit. A water right permit is required to divert groundwater from a well. Albemarle currently controls approximately 20,000-Acre Feet per year in water rights permits with the NDWR. In accordance with the NDWR, under the concept of perennial yield, there are no additional water rights available for appropriation and no new permits being issued. Until new water rights permits are issued, ACME will not be able to complete additional pumping tests required to fully validate the potential extent of the lithium brine resource as inferred in this report.

17 Recommendations

The following provides recommendations for additional testing and analysis for the ACME Project.

- Complete Phase 2 Exploration Program by drilling and testing DH-2 and DH-3 as proposed by CWR and GeoXplor. DH-2 and DH-3 are to be drilled HQ diameter core to bedrock to validate the HSAMT geophysical interpretation and depth of the LGU. The intent is to collect samples of intact core for additional testing of drainable porosity and complete zone brine sampling to verify lithium concentrations across the aquifers encountered. The holes are to be opened for additional NMR, resistivity and temperature logs then completed with grouted in vibrating wire piezometers to assess long-term water level trends across the ACME Project area.
- Construct a 3-D geological model using Leap Frog software based on the stratigraphy encountered in the DH coreholes.
- Continue long-term water level monitoring from piezometers to include planned DH-2 and DH-3 to assess groundwater trends and gradients at the project.
- Construct a numerical model of the hydrogeology influencing the ACME Project area. The model will require the data generated from DH-2 and DH-3 to estimate the flux of groundwater to the ACME Project area to better estimate potential extraction rates and drawdown impacts.
- Drill, install and test additional wells in the vicinity of DH-2 and DH-3. Data generated from additional pumping test will be required to calibrate a numerical groundwater model used to forward simulate the response to extraction of brines within the LGU and refine the inferred resource estimate for the ACME Project.
- Complete DLE testing to determine potential lithium cutoff grades based on metallurgy of the brine body. This will be used to direct further studies to include other aquifers in the potential inferred resource estimate.
- Continue to move forward with water right permit filings with NDWR.

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19 Certification

CWR has exercised all due care in reviewing all information collected. Opinions presented in this report apply to the site conditions and features, as they existed at the time of CWR's assessment, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this report.

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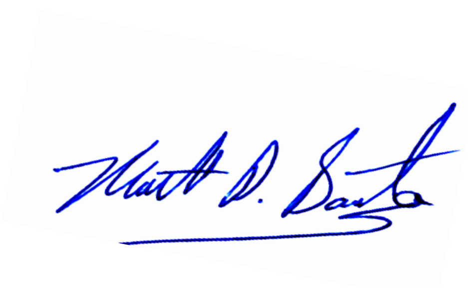
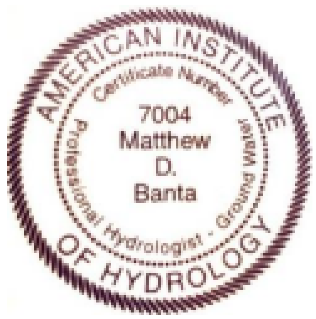
GeoXplor Corp. and
ACME Lithium Inc.

Prepared By:





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Appendix A

Hasbrouck HSAMT Survey

HSAMT Survey
CC, CCP and SX Claims, Nevada

for
ACME Lithium Inc.
Suite 300 – 2015 Burrard Street
Vancouver, BC V6J 3H4 Canada

by
Hasbrouck Geophysics, Inc.
12 Woodside Drive
Prescott, Arizona 86305 USA

October 16, 2021

Hasbrouck Geophysics, Inc.

Groundwater, Engineering, Environmental & Mining

I, James C. Hasbrouck, of Prescott, Arizona, hereby certify that:

1. I am a practicing geophysicist and reside at 12 Woodside Drive, Prescott, Arizona, 86305.

2. I am a graduate of the Colorado School of Mines, Golden, Colorado, B. Sc. Geophysical Engineering, 1974.

3. I have practiced in my profession since 1969.

4. I am a licensed Professional Geophysicist in the State of California, number GP1026.

5. I formed Hasbrouck Geophysics, Inc., an Arizona corporation, in 1996 and act as president.

6. I have conducted well over 100 geophysical surveys throughout the world, with an emphasis on the western portion of the United States, for mineral and groundwater exploration targets. Geophysical exploration for Clayton Valley, Nevada, type lithium-brine deposits involves a similar approach as when searching for groundwater. Within just the last 20 years I have designed, conducted and interpreted HSAMT surveys for over 70 groundwater and/or mineral exploration projects. Within the last twelve years I have designed, conducted and interpreted 15 HSAMT surveys in the Clayton Valley area for lithium-brine exploration.

7. I have no interest in, nor do I expect to receive any interest in, the properties or securities of ACME Lithium Inc.

Dated at Prescott, Arizona this 16th day of October 2021:

James C. Hasbrouck, B. Sc. Geophysical Engineering, Professional Geophysicist

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INTRODUCTION

This report presents the results of a detailed Hybrid-Source Audio-Magnetotellurics (HSAMT) survey, also known as a Controlled-Source Audio-Magnetotellurics / Magnetotellurics (CSAMT / MT) survey, over a portion of the CC, CCP and SX claims in Clayton Valley, Nevada, that are optioned by ACME Lithium Inc. from GeoXplor Corp. The purposes of the HSAMT survey are to acquire data at stations selected from the results of a recent gravity survey over the claims and map geologic stratigraphy and structure relative to the occurrence of lithium-bearing brine, identify conductors that are thought to be representative of lithium-bearing brine, determine the dip and thickness of those conductors, and provide information for the selection and design of additional geophysical surveys or the identification of drilling locations.

METHODOLOGY

Refer to Appendix A for a description on the methodology of HSAMT surveying.

DATA ACQUISITION AND PROCESSING

Data for this project were acquired by personnel from GeoXplor Corp. with in-field and remote supervision by Hasbrouck Geophysics, Inc. A graphical representation of the transmitting and receiver field setup of the Geometrics *Geode EM3D* system used in this project is shown in Figure 1. In essence, electric dipoles (Ex and Ey) and magnetometers (Hx and Hy) are laid out in perpendicular directions and both natural and transmitted frequencies are recorded from distant and non-polarized sources. The *Geode EM3D* records four components of time-series data at three sample rates: 48 kHz, 3 kHz and 93.75 Hz resulting in a recorded frequency range of 0.1 Hz to 20 kHz. From initial testing it was determined that all three sampling rates were necessary, with an extended recording time for the 93.75 Hz sampling rate, to reach the desired investigation depth of nominally 1,000 meters.

The regional geologic strike within the survey area is taken as N30°E representing typical basin and range orientation. If geoelectric strike (which may or may not be the same as geologic strike) is known then measured resistivities with the E field oriented parallel to strike are referred to as transverse electric (TE) mode measurements, while resistivities with the E field oriented perpendicular to strike are referred to as transverse magnetic (TM) mode measurements. For each *Geode EM3D* station, or sounding, the magnetic sensors and 100 meters long electric dipoles were oriented with a Brunton compass to N30°E for Ey and Hy, while the Ex and Hx components were at N60°W. All components in each direction were parallel (i.e., Ex and Hx were parallel to each other as were Ey and Hy). The locations of the stations were designed so that no electromagnetic noise interferences were nearby. The data were processed at the N30°E orientation thus allowing both TE and TM mode results.

To ensure good grounding and to minimize contact resistances, prior to any readings a weak mixture of table salt (NaCl) and potable water was poured on the grounding electrodes of the *Geode EM3D* EH6 box (see Figure 1) and the transmitter, and on the electrodes at each end of the electric dipoles. Contact resistance values were generally less than 1,000 ohms and often less than 50 ohms within the actual playa. Because of periodic wind, the magnetometers were buried to eliminate micropulsations that will cause signal noise. After testing, the length of time for acquisition of sampling rates for the *Geode EM3D* were selected as 10 minutes for 48 kHz, 10 minutes for 3 kHz and 15 minutes for 93.75 Hz. Gains for all sampling rates were set at 24 dB. The *Geode EM3D* transmitter, operating in 10 steps from 1.2 kHz to 16 kHz, was recorded for the 48 kHz sampling rate. The *Geode EM3D* instrument is broadband and as such will record signals of any frequencies within its operating range. The transmitter is used to augment the typically lower amplitude signals from approximately 1.2 kHz to 16 kHz. The *Geode EM3D* data were acquired with a laptop PC and stored within it.

Figure 2 is an example of raw data acquired with the *Geode EM3D* with logarithmic tensor resistivities from 0.1 to 1k ohm-meters, tensor impedance phase from -90° to 180°, and tensor impedance phase from 0 to 1.0. Under ideal circumstances and in areas with no appreciable geologic structures, the X and Y direction data should fall nearly on top of each other in the resistivity plot, have a phase close to 45º, and a coherency around 1.0.

A total of 50 separate HSAMT soundings were acquired along seven lines as shown in figure 3. Stations along all the lines were located nominally 250 meters apart, while the lines were either 250 or 500 meters apart. Initial modeling of the *Geode EM3D* data was done daily to confirm the quality of the data; however, the initial modeling was not the rigorous type done later and thus was only used as a guide. Overall, the *Geode EM3D* data were generally excellent quality above 1 Hz and good below 1 Hz.

Over a two-dimensional earth, the TE and TM modes give different apparent resistivity values and are sensitive to different aspects of the subsurface structure. The TE mode is most sensitive to conductors, whereas the TM mode is most sensitive to resistors and shallow structure. The TE mode is purely inductive, while the TM mode additionally has a galvanic component inherent in its response. This makes the TM mode higher resolution with respect to defining lateral contacts. When searching for vertical conductors the TM mode is only weakly excited, while the TE mode can show a very strong response with large spatial extent. Therefore, the interpretation weight of each mode depends on the target orientation (vertical, horizontal), the nature of the target (resistive, conductive) and the quality of the data. The data were processed and modeled in both the TE and TM modes, with the TE mode selected for display because it showed better resolution.

HSAMT data from each station are initially inspected and edited when appropriate. Editing of the data is somewhat subjective, but is based upon experience, juxtaposition of X and Y direction resistivity data, phase differences from the optimum value of 45º, and coherency. Because of the lower quality of the data below 1 Hz it was necessary to edit some of those data. Two-dimensional depth sections were modeled along profiles using Schlumberger's *WinGLink* software that calculates a two-dimensional smooth inversion using finite difference code. Each depth section consists of logarithmic resistivity versus depth along relatively straight lines. Subsequently, values for each sounding are converted into a format compatible with the *Tecplot Focus 2020* computer software and presented as two- and three-dimensional cross-sections in depth format. Additionally, data are interpolated into a rectangular cube and horizontal depth slices, referenced to the surface, are shown in movies at intervals of 20 meters from the surface to a depth of 1,000 meters.

RESULTS

Figure 3 shows the modeled bedrock depth from the recent gravity survey, the locations of the gravity stations, and the HSAMT lines and station locations. Figures 4 to 10 are the depth sections, to 1,000 meters, for lines 1 to 7, respectively. All seven lines are shown combined in a three-dimensional (3D) format, referenced to the NAD83 datum, in figures 11 and 12 in two views separated by 180°. The 3D data for all seven lines are interpolated into a rectangular cube and horizontal depth slices, referenced to the surface, are shown at depths from 100 to 1,000 meters at intervals of 100 meters in figures 13 through 22, respectively. The horizontal depth slices can be viewed at intervals of 20 meters in the movies, with and without highlighted selected contour lines.

Borehole sampling close to and east of the claims has found lithium-brine present from 85 meters to the total borehole depth of 370 meters with higher concentrations within pebble gravel logged from depths of 285 to 370 meters. It is unknown if the pebble gravel continues beyond the total depth drilled at the borehole. From the results of the nearby borehole and experience in other portions of Clayton Valley, resistivity values less than about 2.5 ohm-meters (with that contour level highlighted on the depth sections) are interpreted to correlate to zones with increased salinities and/or possible lithium-brine occurrence. Zones with resistivities less than about 2.5 ohm-meters at depths below ground surface (bgs) from about 250 to 450 meters are interpreted as brine-saturated pebble gravel, although beneath 370 meters depth it cannot be confirmed from the nearby borehole sampling if the gravel extends beyond that depth. The shallower portions of the low resistivity zone, perhaps generally less than 100 meters or so, may be evaporate minerals or possibly saturated fine-grained sand instead of a zone with increased salinities and/or possible lithium-brine occurrence. It is not possible to determine from the geophysical data where interpreted evaporate minerals or possibly saturated fine-grained sand instead of a zone with increased salinities and/or possible lithium-brine occur. However, because the nearby borehole encountered lithium-brine at slightly less than 100 meters depth then that could be considered as a possible approximate depth where evaporate minerals or sand transition into increased salinities with possible lithium-brine. Zones with resistivities between about 2.5 and 3.4 ohm-meters are interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, while between about 3.4 and 4.6 ohm-meters there may be an increased amount of clay. Both the 3.4 and 4.6 ohm-meter contour levels are highlighted on the depth sections.

Along line 1 the extent of increased salinities and/or possible lithium-brine occurrence, using the resistivity value of 2.5 ohm-meters as the cut-off, is present from about station 10 to the east end of the line at station 13 with depths bgs ranging from near the surface at about station 10 to a maximum depth of approximately 600 meters from about station 12 to 13 with the assumption that near the surface (perhaps less than about 100 meters) evaporate minerals or possibly saturated fine-grained sand may be present. Brine-saturated pebble gravel may be present from about 250 to greater than 450 meters bgs, although beneath 370 meters depth it cannot be confirmed from the nearby borehole sampling if the gravel extends beyond that depth. Resistivity values from about 2.5 to 3.4 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, are present along line 1 from about 500 to 730 meters bgs from the west to east ends, respectively. From about 800 to 920 meters bgs, resistivity values from approximately 3.4 to 4.6 ohm-meters, interpreted to have an increased amount of clay, are present from the west to east ends of the line, respectively.

Resistivities along line 2 with values less than the cut-off of 2.5 ohm-meters (interpreted as a zone of increased salinities and/or possible lithium-brine occurrence) are mostly similar to those along line 1 with depths bgs ranging from near the surface at station 16, which is due north of station 10 along line 1, to about 740 meters bgs at the east end which is slightly deeper than along line 1 although it should be noted that the easternmost stations along line 2 (20 and 21) extend farther east than the east end of line 1 and thus there is more material with resistivities less than about 2.5 ohm-meters along line 2. Resistivity values from about 2.5 to 3.4 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, are not present west of station 15 and extend from near the surface at station 15 to a maximum depth of about 860 meters bgs from stations 19 to the east end of the line. Resistivities from about 3.4 to 4.6 ohm-meters, interpreted to have an increased amount of clay, are deeper than along line 1 with depths ranging from about 700 meters bgs at the west end of the line (station 14) to greater than 1,000 meters bgs to the east beyond station 18.

Line 3 extends farther to the west than either lines 1 or 2 and according to the modeled gravity data has variable bedrock depths that are shallower near the middle of the line. Resistivities less than the cut-off 2.5 ohm-meters (interpreted as a zone of increased salinities and/or possible lithium-brine occurrence) are present from about station 42 to the east end of the line with maximum bgs depths of about 600 meters and correlate with the increased bedrock depth from the modeled gravity data. The resistivities in that zone are generally slightly higher than along lines 1 and 2. Resistivity values from about 2.5 to 3.4 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, are present from between stations 37 and 38 to the east end of the line with depths ranging from about 200 to 700 meters bgs to about station 42 and then deeper to approximately 800 meters bgs to the east end of the line. In the area from about stations 40 to near 42, where the modeled gravity data indicate shallower bedrock depths, the resistivity values are slightly higher which may indicate influence from the decreased depth of the bedrock. Resistivities from about 3.4 to 4.6 ohm-meters, interpreted to have an increased amount of clay, are present from about station 36 to the east end of the line at depths ranging generally from about 200 to greater than 1,000 meters bgs.

Line 4 is located 250 meters north of line 3 and the resistivity values are somewhat similar between the two lines with resistivities less than the 2.5 ohm-meters cut-off (interpreted as a zone of increased salinities and/or possible lithium-brine occurrence) near the east end, a zone of slightly increased resistivities near the middle of line 4 that correlates to the decreased bedrock depths from the modeled gravity data, and slightly lower resistivities from about Base 8 to station 52 that correlates to increased bedrock depths. The zone with resistivities less than about 2.5 ohm-meters along line 4 are generally slightly higher and less extensive than along line 3. Resistivity values from about 2.5 to 3.4 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, are present along almost the entire line with depths ranging from about 250 to almost 900 meters bgs from about Base 8 to station 51, around 680 meters bgs centered around station 55, and near 780 meters bgs at the eastern end of the line. Resistivities from about 3.4 to 4.6 ohm-meters, interpreted to have an increased amount of clay, are present from near the surface near station 52 to almost 300 meters bgs at the western end of the line and extend beyond 1,000 meters bgs over the entire length of the line.

Line 5 is relatively short and is located to investigate the small zone of increased bedrock depth from the modeled gravity data. No resistivities less than the 2.5 ohm-meters cut-off (interpreted as a zone of increased salinities and/or possible lithium-brine occurrence) are present along line 4, while resistivities less than about 3.4 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, occur from between stations 75 and 232 to the east end of the line, which correlates to the increased bedrock depths from the modeled gravity data, with depths ranging from about 300 to 700 meters bgs. Resistivity values between about 3.4 and 4.6 ohm-meters, interpreted to have an increased amount of clay, are present from about 200 or 300 meters bgs to greater than 1,000 meters bgs along the entire length of the line.

Line 6 is along the same axis as line 5 but farther east and is also located to investigate a small zone of increased bedrock depth from the modeled gravity data. A limited zone with resistivities less than the 2.5 ohm-meters cut-off (interpreted as a zone of increased salinities and/or possible lithium-brine occurrence) is present from stations 82 and 83 (east end of the line) at depths to about 340 meters bgs. The resistivities in this zone are less than those seen in lines farther to the south. Resistivities from about 2.5 to 3.4 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, extend from near the surface at station 234 to beneath about 400 meters bgs at the western end of the line with a maximum depth extent of approximately 750 meters bgs near the middle of the line which generally correlates with the increased modeled bedrock depth. Resistivity values between about 3.4 and 4.6 ohm-meters, interpreted to have an increased amount of clay, are present from near the surface at about station 81 to beneath approximately 200 meters bgs at the western end of the line and from about 600 or 750 meters bgs to greater than 1,000 meters bgs along the entire length of the line.

Line 7 is very short (only two stations) and is located to investigate a small zone of increased bedrock depth from the modeled gravity data. There are no zones with resistivities at the highlighted 2.5 and 3.4 ohm-meters contours as seen along the other lines. Resistivities less than about 4.6 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with an increased amount of clay, are present beneath about 400 or 450 meters bgs to greater than 1,000 meters bgs along the entire length of the line.

Referencing the 3D depth sections (figures 11 and 12) and the movies, with the recognition that data are interpolated between the stations that are nominally separated by 250 meters and lines that are nominally separated by either 250 or 500 meters (the distances between lines 2 to 3 and 4 to 5 are nominally 500 meters, while between the other lines they are 250 meters). As seen in the individual depth sections for each line, zones with resistivities less than the 2.5 ohm-meters cut-off (interpreted as a zone of increased salinities and/or possible lithium-brine occurrence) are primarily present only in the east and southeast portions of the claims area and cover a larger area from near the surface to around 340 meters bgs. Zones with those resistivities are still present in the east and southeast portions of the claim area to approximately 740 meters bgs although areal coverage decreases beyond about 340 meters bgs. A small area with resistivities less than about 2.5 ohm-meters is present near the north-central portion of the claims area (stations 50 and 51 along line 4) at depths greater than about 360 meters bgs and extending to approximately 600 meters bgs.

Resistivities from about 2.5 to 3.4 ohm-meters, interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, have a width of between about 250 and 500 meters from the surface to around 100 meters bgs in about the eastern one-third of the claims area. From about 100 to 400 meters bgs the areal coverage increases to almost all of the claims area. Beyond about 400 meters bgs, this resistivity zone begins to separate into essentially two areas with a distinct ridge at about 680 meters bgs which correlates well with the modeled bedrock depths from the gravity survey (note that the HSAMT survey does not include the predominantly shallow zones in the middle and along both the east and west sides of the claims area). This 2.5 to 3.4 ohm-meters resistivity zone is only slightly present below about 840 meters bgs.

Resistivities from about 3.4 to 4.6 ohm-meters, interpreted to have an increased amount of clay, are about 250 meters wide at the surface slightly east of the middle of the claims area and progressively increase in width to near 800 meters from the western edge of the claims area at 220 meters bgs. From about 220 to 680 meters bgs this zone is primarily present along the southwestern and western portions of the claims area, while at about 680 meters bgs the ridge separating the two lower resistivity areas becomes apparent. A large portion of the claims area is covered with resistivities between about 3.4 and 4.6 ohm-meters at depths from about 840 to 900 meters bgs, after which the areal coverage of those resistivities decreases to where at 1,000 meters bgs almost one-half of the claims area has resistivities above about 4.6 ohm-meters.

CONCLUSIONS AND RECOMMENDATIONS

From the results of a nearby borehole and experience in other portions of Clayton Valley, resistivity values less than about 2.5 ohm-meters are interpreted to correlate to zones with increased salinities and/or possible lithium-brine occurrence. Zones with resistivities less than about 2.5 ohm-meters at depths from about 250 to 450 meters are interpreted as brine-saturated pebble gravel, although beneath 370 meters depth it cannot be confirmed from the nearby borehole sampling if the gravel extends beyond that depth. The shallower portions of the low resistivity zone, perhaps generally less than 100 meters or so, may be evaporate minerals or possibly saturated fine-grained sand instead of a zone with increased salinities and/or possible lithium-brine occurrence. It is not possible to determine from the geophysical data where interpreted evaporate minerals or possibly saturated fine-grained sand instead of a zone with increased salinities and/or possible lithium-brine occur. However, because the nearby borehole encountered lithium-brine at slightly less than 100 meters depth then that could be considered as a possible approximate depth where evaporate minerals or sand transition into increased salinities with possible lithium-brine. Zones with resistivities between about 2.5 and 3.4 ohm-meters are interpreted to indicate possible increased salinities and/or lithium-brine occurrence with some amount of clay, while between about 3.4 and 4.6 ohm-meters there may be an increased amount of clay.

Zones with resistivities less than the 2.5 ohm-meters cut-off are present primarily in the east and southeast portions of the claims area and cover a larger area from near the surface to around 340 meters bgs. Zones with those resistivities are still present in the east and southeast portions of the claims area to approximately 740 meters bgs although areal coverage decreases beyond about 340 meters bgs. A small area with resistivities less than about 2.5 ohm-meters is present near the north-central portion of the claims area (stations 50 and 51 along line 4) at depths greater than about 360 meters bgs and extending to approximately 600 meters bgs.

Using the results of this HSAMT survey and depending upon access, it is recommended that drill holes be located as follows:

- At or near station 18 (448920 easting, 4183948 northing, NAD83 meters) to a depth of approximately 500 meters
- At or near station 44 (449170 easting, 4184448 northing, NAD83 meters) to a depth of approximately 500 meters
- At or near station 50 (447420 easting, 4184698 northing, NAD83 meters) to a depth of approximately 500 meters

The recommended drill holes at or near stations 18 and 44 will investigate the large area with resistivities less than the 2.5 ohm-meters cut-off from the surface to at least 500 meters bgs. The recommended drill hole at or near station 50 will investigates zones with both resistivities less than 2.5 ohm-meters, at depths greater than about 360 meters bgs, and between about 2.5 and 3.4 ohm-meters, at depths from the surface to about 360 meters bgs, to determine what influence on lithium-brine occurrence is present from the interpreted increased amount of clay in the zone above about 360 meters bgs.

To more accurately map the pebble gravel interval and other stratigraphy it is recommended that reflection seismic data be acquired along at least two lines:

- Seismic line 1 = 250 meters northwest of HSAMT station 50 to 250 meters southeast of HSAMT station 18, for an approximate length of 2.2 km
- Seismic line 2 = HSAMT stations 11 to 18 to 44 to 83, for an approximate length of 1.8 km

LIMITATIONS OF INVESTIGATION

This investigation was performed using the degree of care and skill ordinarily exercised, under similar circumstances, by an experienced and licensed geophysicist practicing in this or similar locations. No warranty, expressed or implied, is made as to the conclusions and professional advice included within this report.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can and do occur with the passage of time, whether they be due to natural processes or the work of people on this or adjacent properties. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside of our control. Therefore, this report is subject to review and revision as changed conditions are identified.

APPENDIX A: HSAMT SURVEYING METHODOLOGY

The true resistivity of earth materials is dependent upon several factors including composition, grain size, water content and physical characteristics. In general, fine-grained materials such as clays and silts have lower resistivities than coarse-grained materials such as sands and gravels. Unweathered and unfractured hard rocks such as lithified sedimentary rocks (limestone, dolomite, sandstone, chert, etc.), volcanic rocks, plutonic rocks, and some metamorphic rocks generally have high resistivities. The presence of fracturing and weathering lowers the resistivity of these rocks. Additionally, the occurrence of groundwater will greatly reduce the resistivity of all rocks and sedimentary materials (through electrolytic conduction). Clay is also very conductive (low resistivity) as a result of surface-conduction processes. If appreciable amounts of clay occur in an area, low-resistivity anomalies that resemble the presence of groundwater may be present.

HSAMT is an electromagnetic (EM) geophysical method commonly used in the exploration industry. It determines the earth's subsurface electrical resistivity distribution by measuring time dependent variations of the earth's natural electric (E) and magnetic (H) fields, as well as the electric and magnetic fields resulting from high frequency induced waves. The resistivity information is generally used to determine subsurface geologic and hydrogeologic conditions and structure. The HSAMT method is designed to investigate from depths of approximately 10 meters to 1 kilometer, or greater, depending upon subsurface resistivity values. Lower resistivity values will decrease the investigation depth while higher values will generally result in greater depths of investigation.

A graphical representation of the field setup of the HSAMT instrument used in this project is shown in figure 1. In essence, electric dipoles and magnetometers are laid out in perpendicular directions (i.e., Ex, Ey, Hx and Hy) and both natural and transmitted frequencies are recorded from distant and non-polarized sources (i.e., the measured EM fields will impinge upon the earth as uniform plane waves). EM waves from sources that are too close will have spherical wave fronts that will not be uniform within a survey area and waves polarized in one direction will limit the type of measurements that can be made in addition to possibly introducing bias. Distance for EM waves is conveniently specified in terms of wavelength. Where EM waves penetrate conductors, one radian is used as the standard distance and is termed skin depth (also defined as the depth at which the amplitude of a plane wave has been attenuated to 1/e or 37%). Since wavelength $\lambda = 2\pi/k$ (where k = wave number) then one skin depth $\delta = 1/k$. Since $k = [\omega\mu_0\sigma/2]^{1/2}$ where ω = angular frequency, μ_0 = permeability of free space, and σ = conductivity, then $\delta = [2/\omega\mu_0\sigma]^{1/2} = [1/4\pi^2 10^{-7}]^{1/2}[\rho/f]^{1/2} \approx 503[\rho/f]^{1/2}$ in meters where ρ = apparent (measured) resistivity in ohm-meters and f = signal frequency in Hz. From both experimental results and numerical simulations, at distances greater than 3 skin depths the uniform and plane portion of EM waves are dominant and at 6 to 7 skin depths the EM waves are completely uniform and plane relative to the precision to which they can be measured. Natural sources will be far removed (greater than 7 skin depths) and therefore will be uniform and plane. However, when sources are measured from artificial transmitters, the distance between the transmitter and receiver must be at least 3 skin depths for EM waves to be uniform and plane.

HSAMT measurements may be made in either the tensor or scalar mode. Tensor measurements use all four tensor impedance components (Zxx, Zxy, Zyx and Zyy) and are best utilized in areas where the structure is very complex, when soundings are far apart relative to the size of geologic features under investigation, or where regional anisotropy is strong. The impedance components are defined as follows:

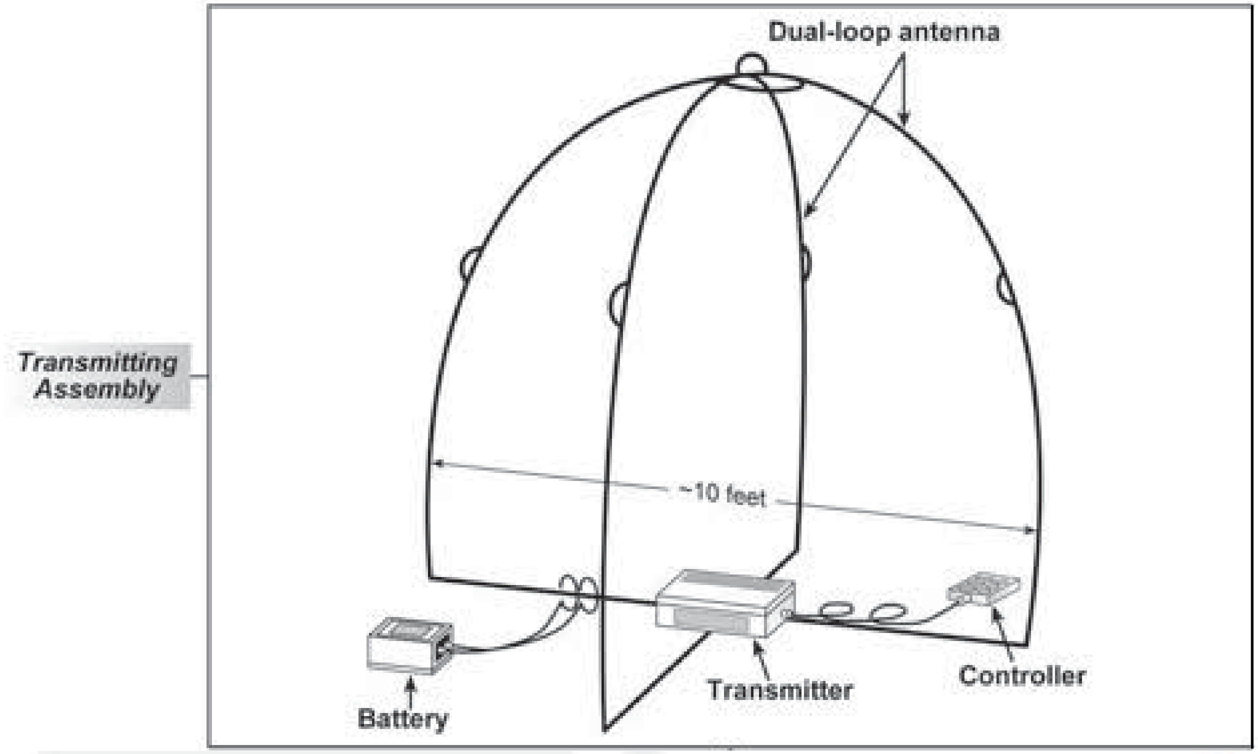
Zxx = [(ExH*x)(HyH*y)- (ExH*y)(HyH*x)]/[(HxH*x)(HyH*y)-(HxH*y)(HyH*x)]
Zxy = [(ExH*x)(HxH*y)- (ExH*y)(HxH*x)]/[(HyH*x)(HxH*y)-(HyH*y)(HxH*x)]
Zyx = [(EyH*x)(HyH*y)- (EyH*y)(HyH*x)]/[(HxH*x)(HyH*y)-(HxH*y)(HyH*x)]
Zyy = [(EyH*x)(HxH*y)- (EyH*y)(HxH*x)]/[(HyH*x)(HxH*y)-(HyH*y)(HxH*x)]
Where * is a complex value formed from real and imaginary parts

Scalar measurements use only two components (ρ_x and ρ_y), [where $\rho_x = (0.2/\text{frequency}) * E_x^2/H_y^2$ and $\rho_y = (0.2/\text{frequency}) * E_y^2/H_x^2$], and are generally adequate in one-dimensional (1D) layered environments or more complex areas if measurements are dense. If geoelectric strike (which may or may not be the same as geologic strike) is known then measured resistivities with the E field oriented parallel to strike are referred to as transverse electric (TE) mode measurements while resistivities with the E field oriented perpendicular to strike are referred to as transverse magnetic (TM) mode measurements. Ideally, one would prefer the use of tensor measurements in most areas especially if the direction of strike is unknown or difficult to determine; however, the presence of polarized noise or low signal amplitude often dictates the use of scalar measurements.

HSAMT measurements are adversely influenced by the presence of EM noise caused by overhead or underground power lines, grounded metal fences, metallic pipelines, other underground or aboveground utilities, and structures that contain metal (such as reinforced concrete). The influence of these EM noise sources on HSAMT data may be minimized by orienting the E and H field components at approximately 45º to the sources; however, noise may still be present within the data thus scalar measurements must be used rather than the preferred tensor mode.

The electric and magnetic data from either tensor or scalar HSAMT measurements are used to assess surface impedance and estimate subsurface resistivity at various frequencies. Surface impedance *Z* is the ratio of electric to magnetic fields ($Z_{ij} = E_i/H_j$) and is the basis for defining apparent resistivity $\{\rho_{ij} = [1/\omega\mu_0]|Z_{ij}|^2 = [0.2/f]|Z_{ij}|^2\}$ and impedance phase $\{\varphi_{ij} = \tan^{-1}[\mathrm{Im}(Z_{ij})/\mathrm{Re}(Z_{ij})]\}$. HSAMT field data consist of sounding curves that are logarithmic plots of apparent resistivity versus frequency. Apparent resistivities at high frequencies correspond to generally shallow investigation depths, and apparent resistivities at low frequencies correspond to deeper investigations. Apparent resistivities are bulk resistivities with contributions from different heterogeneous materials. Model transformations of the data calculated with forward and inverse computer software are good first-order approximations of the resistivity structure / layering beneath each station or sounding and are presented as cross sections of subsurface resistivity. These cross sections are used for interpretation of geologic and hydrogeologic conditions and can be combined into three-dimensional representations of the data if sufficient and appropriately spaced data are acquired. In general, HSAMT data have shown a 10% to 15% variation between the actual depths to the anomalies, as verified by test hole drilling, and the depth predicted by the models.

Typical field setup of Geometrics Geode EM3D HSAMT System



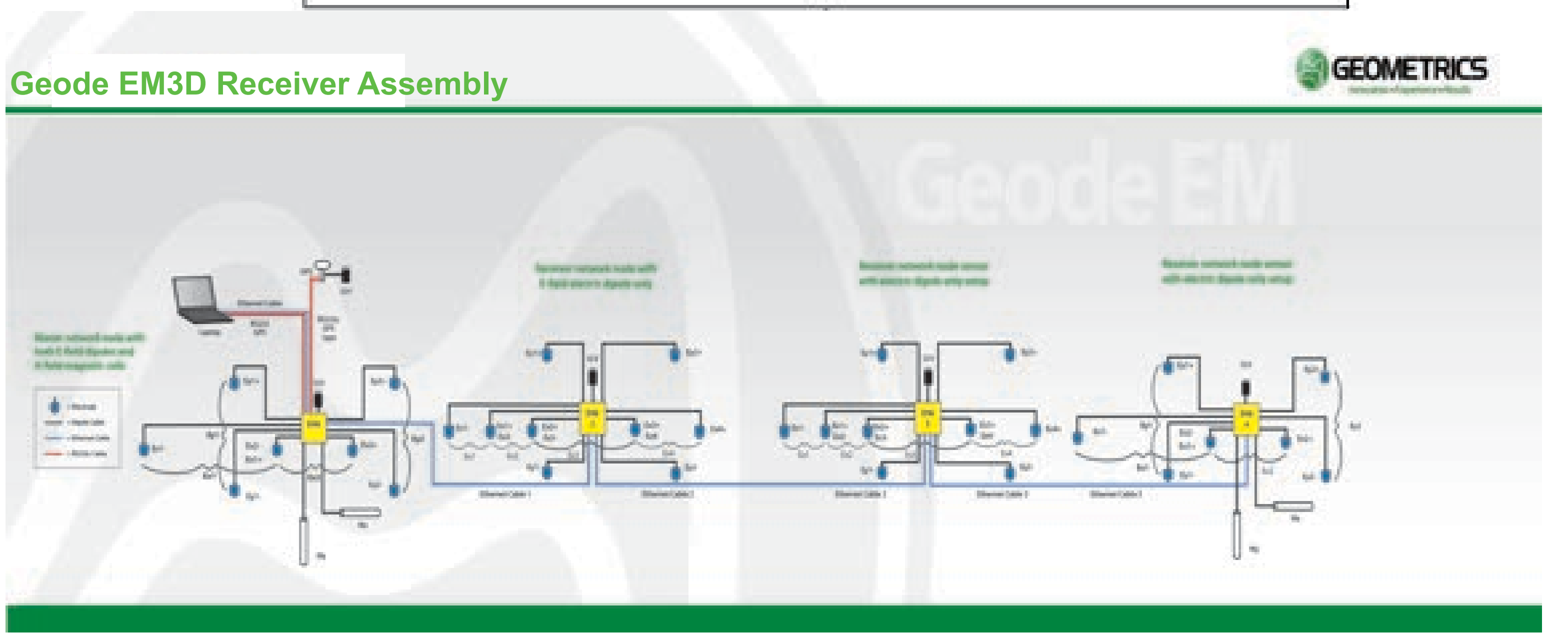
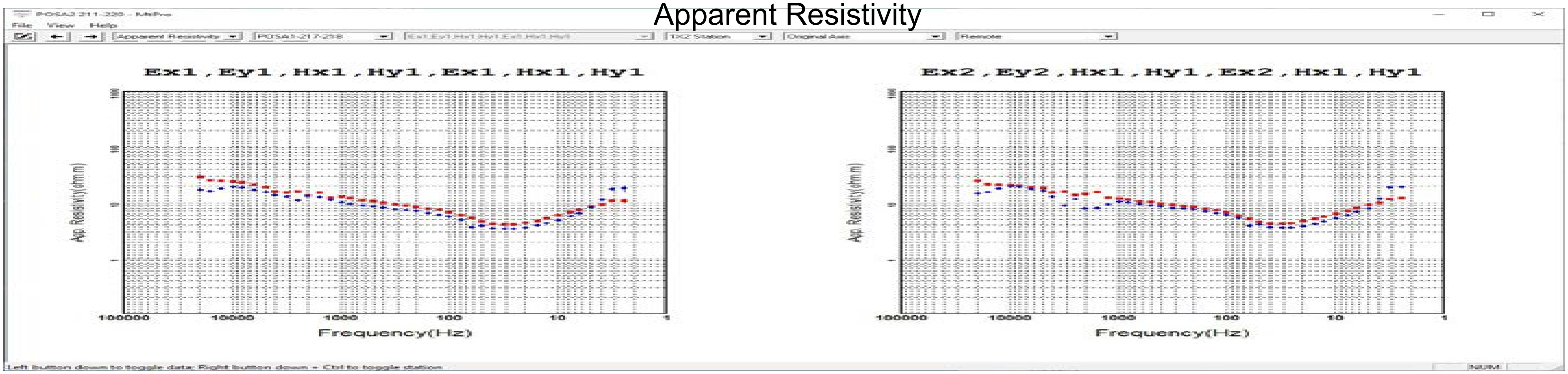


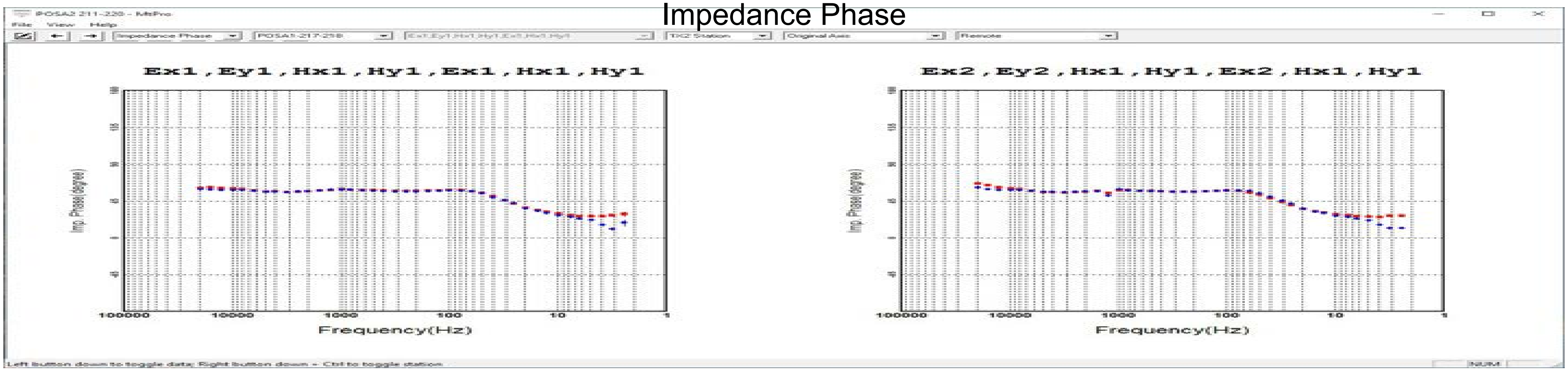
Figure 1

Geometrics Geode EM3D Data Examples

Apparent Resistivity



Impedance Phase



Impedance Coherency

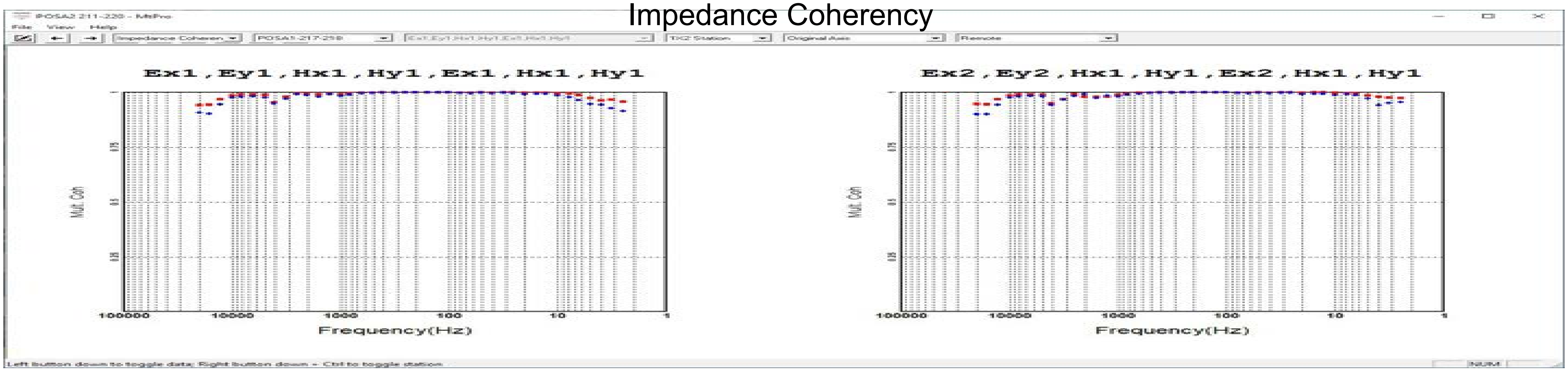
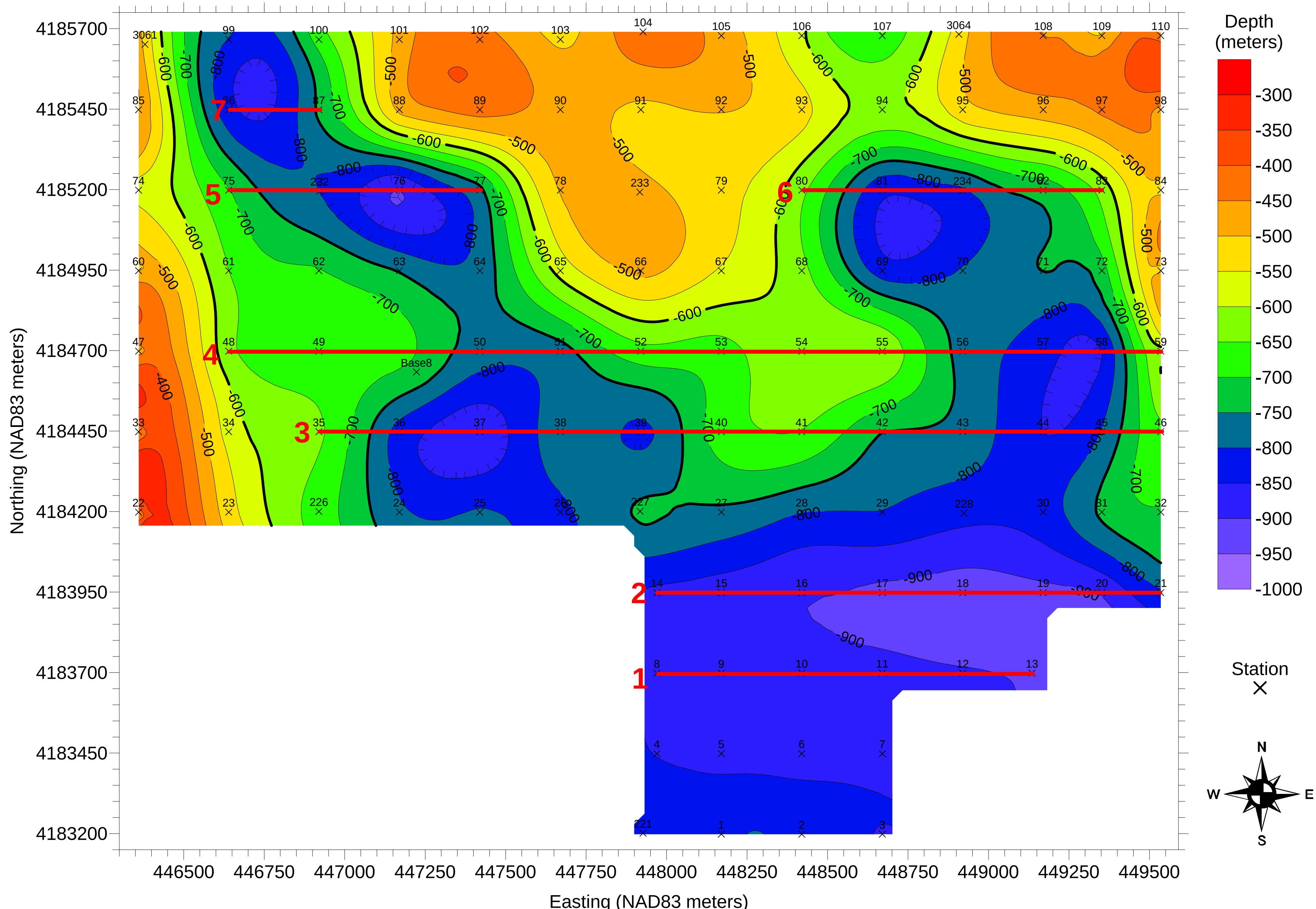


Figure 2

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Modeled Bedrock Depth from Gravity Survey and HSAMT Survey Line Locations



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HSAMT Survey Line

Figure 3

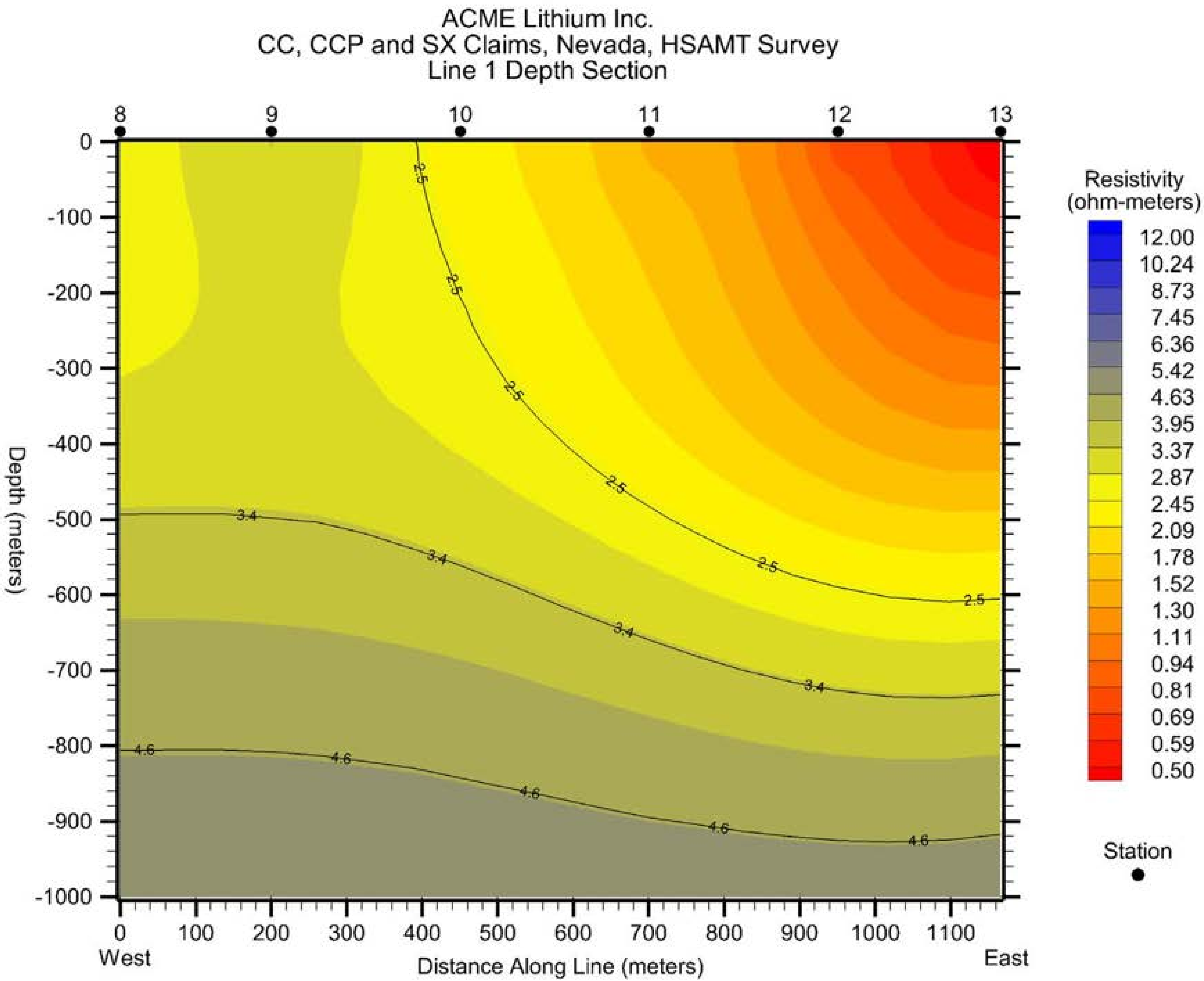

Figure 4

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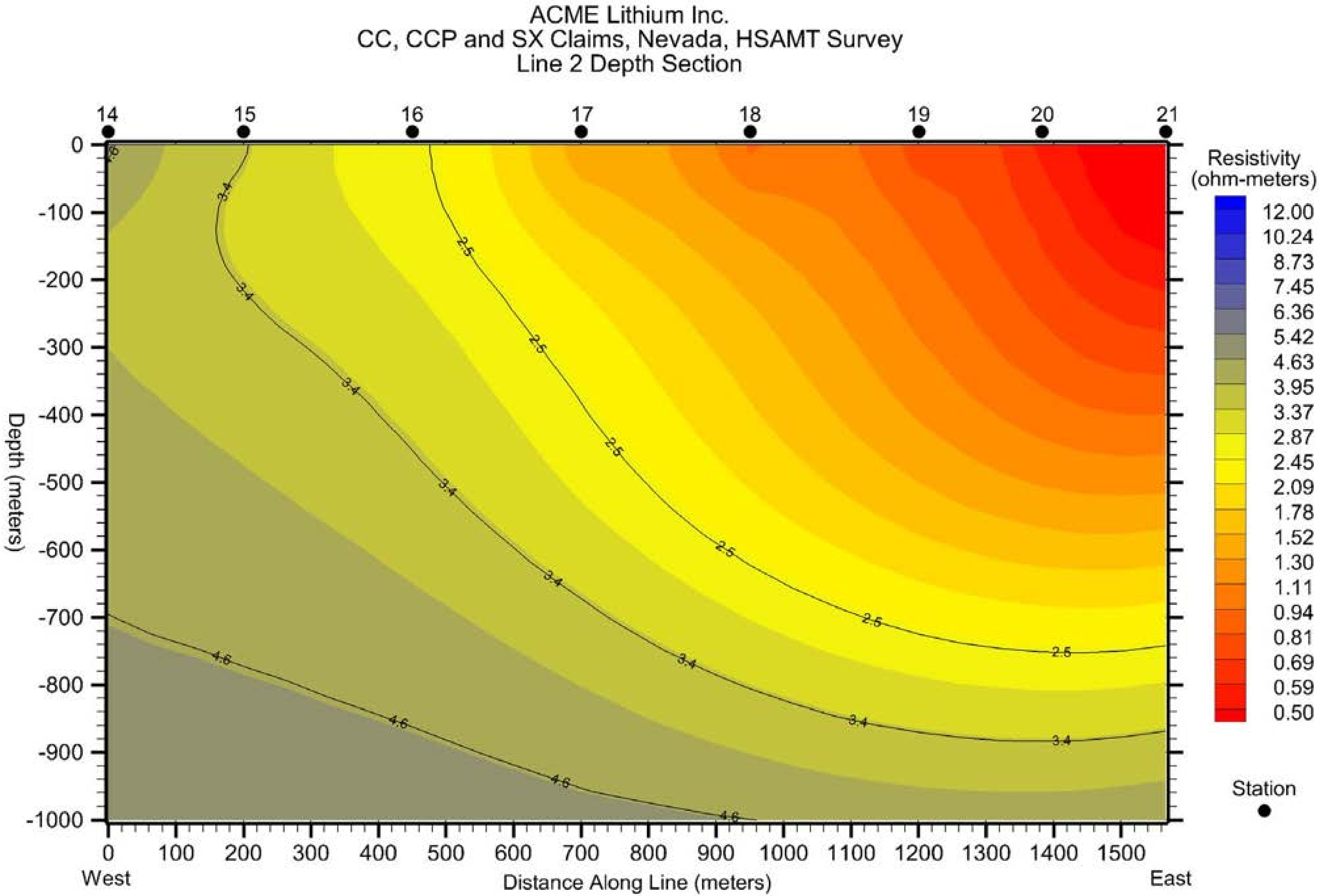

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Figure 5

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Line 3 Depth Section

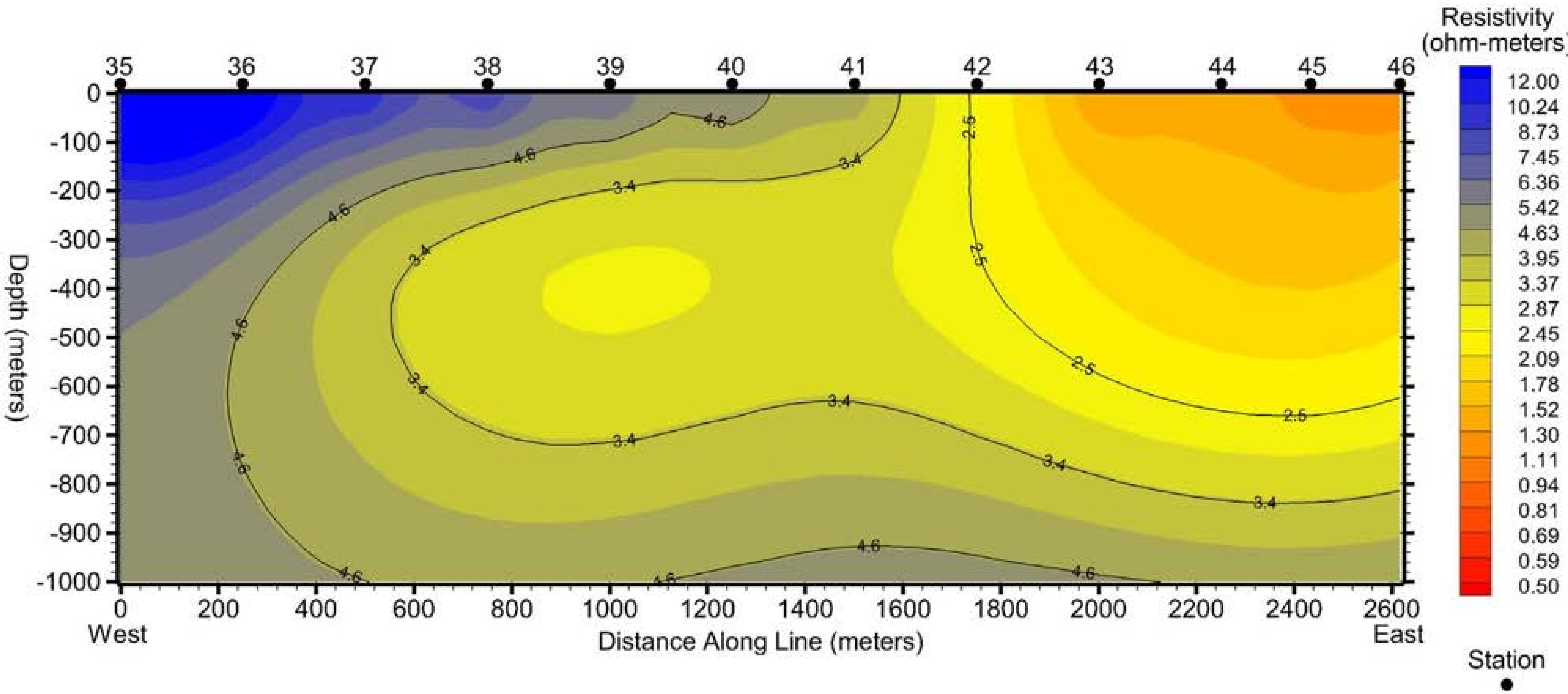

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Figure 6

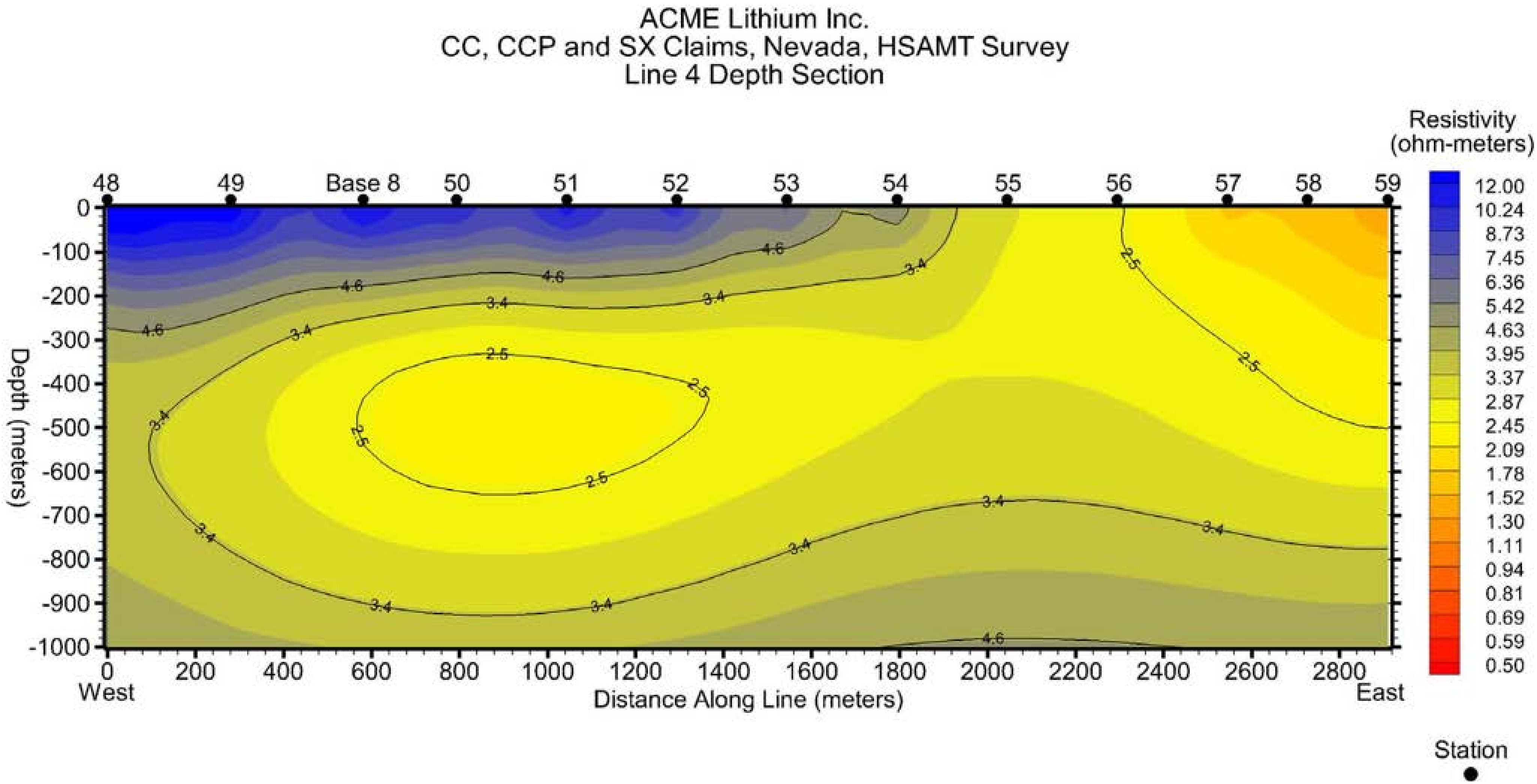

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Figure 7

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Line 5 Depth Section

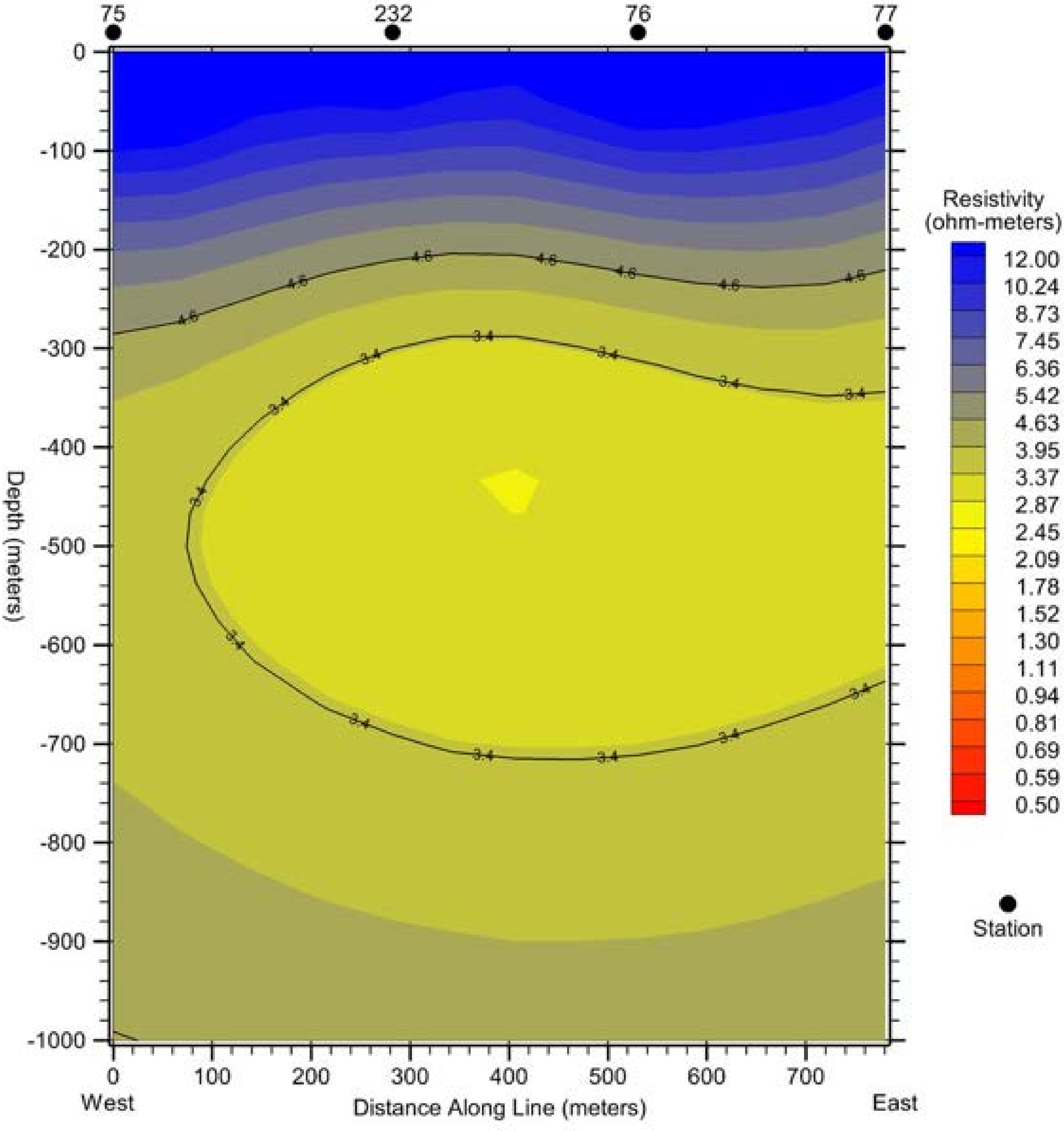

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Figure 8

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Line 6 Depth Section

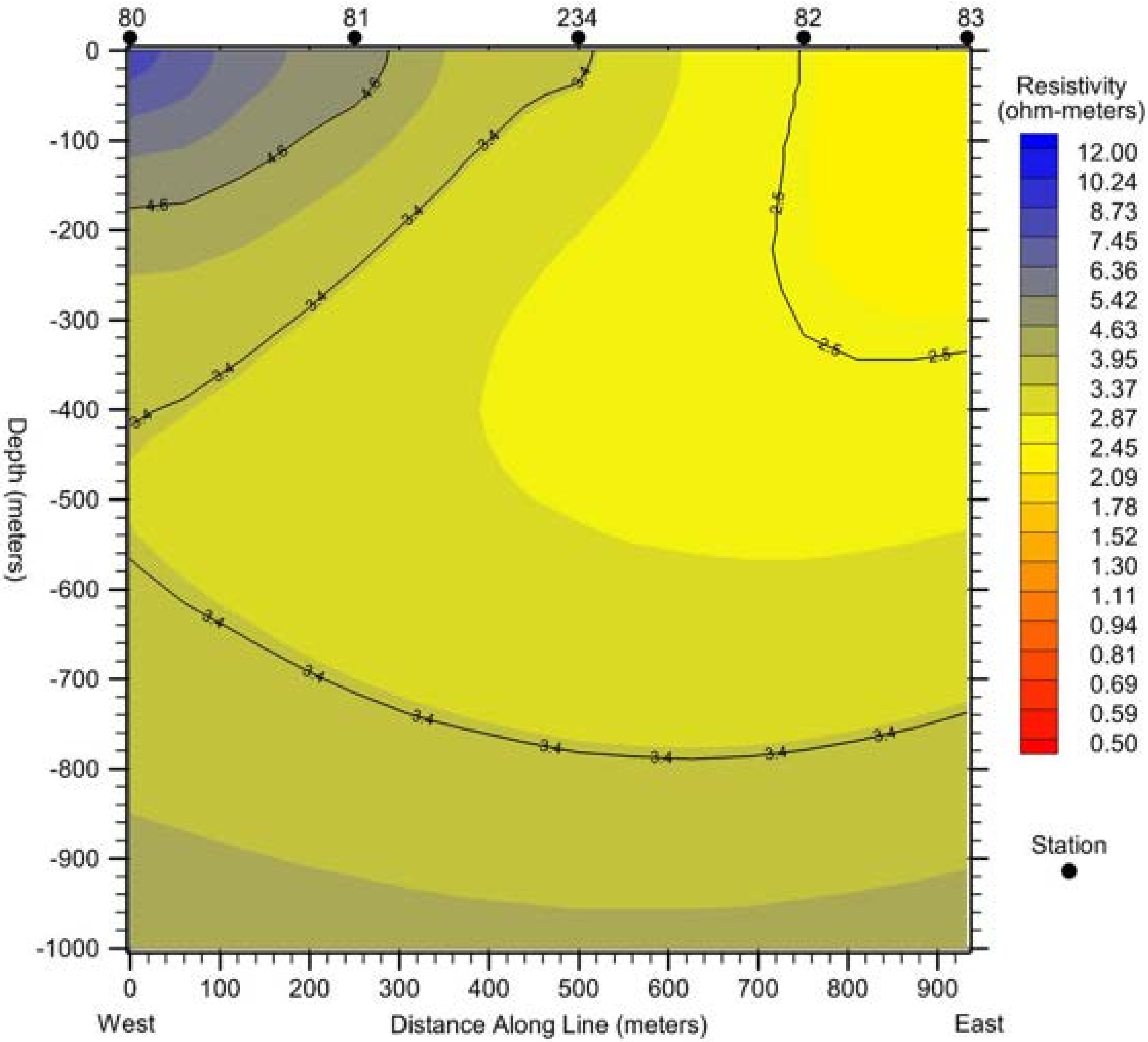

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Figure 9

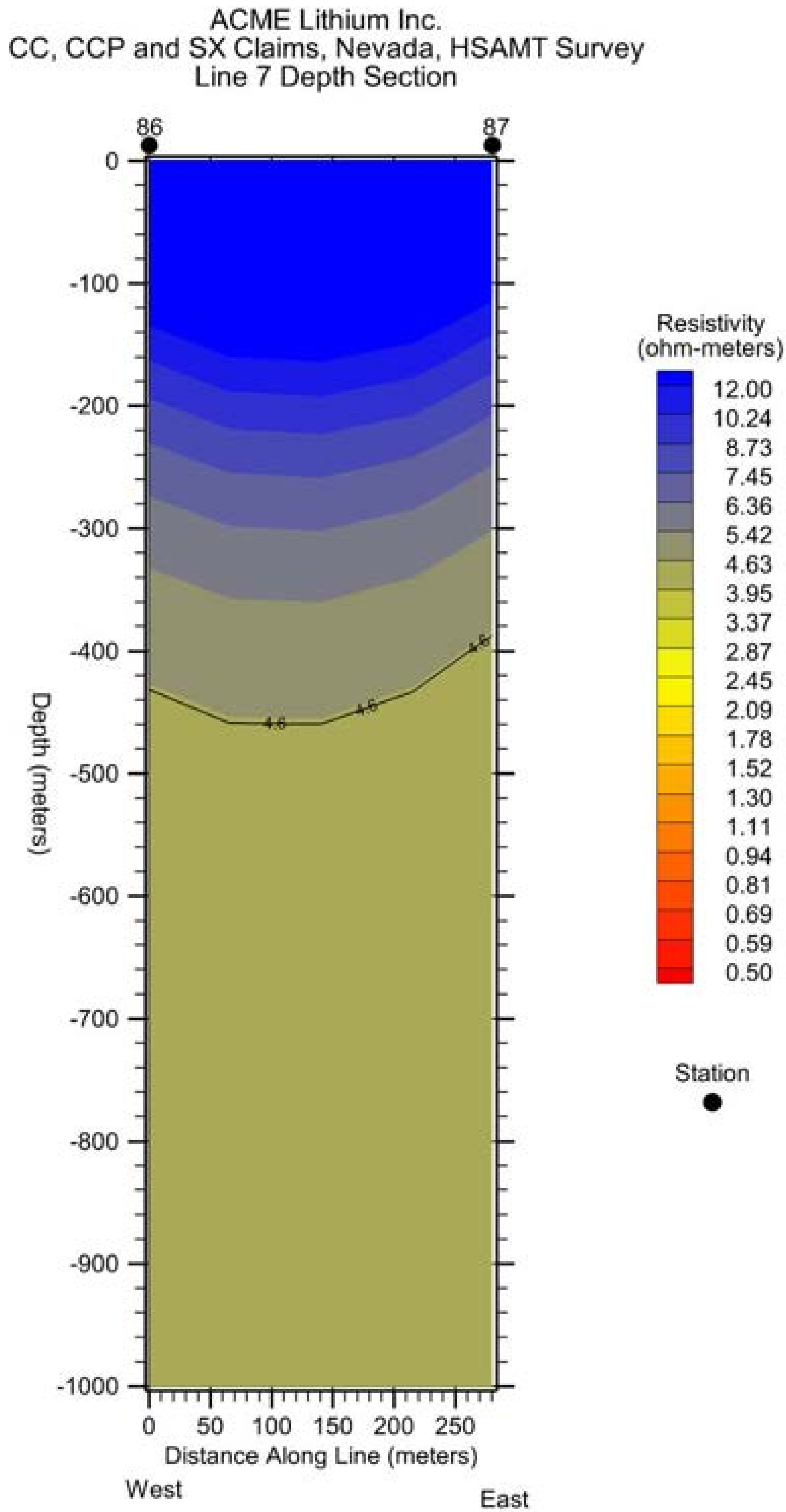

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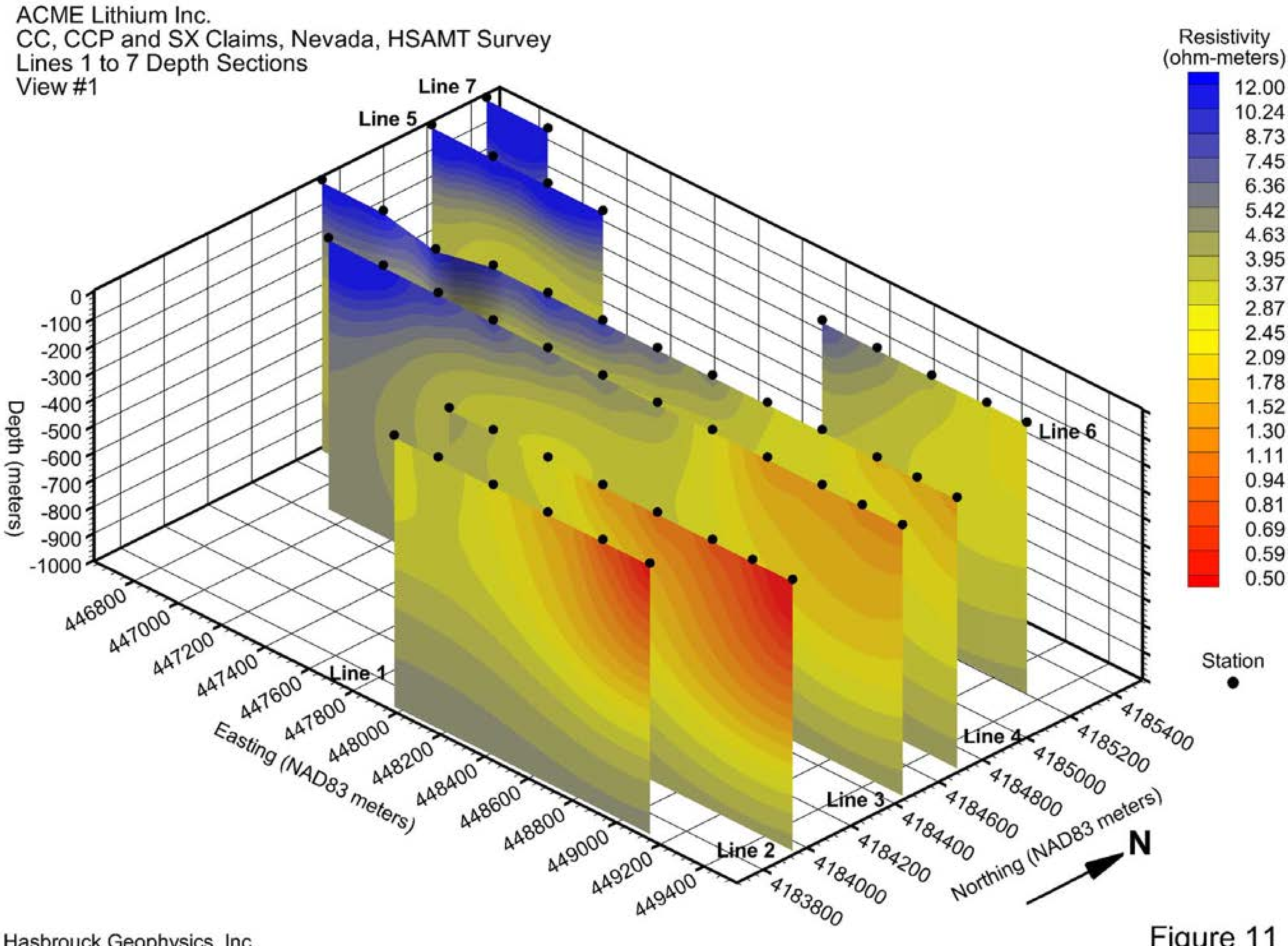
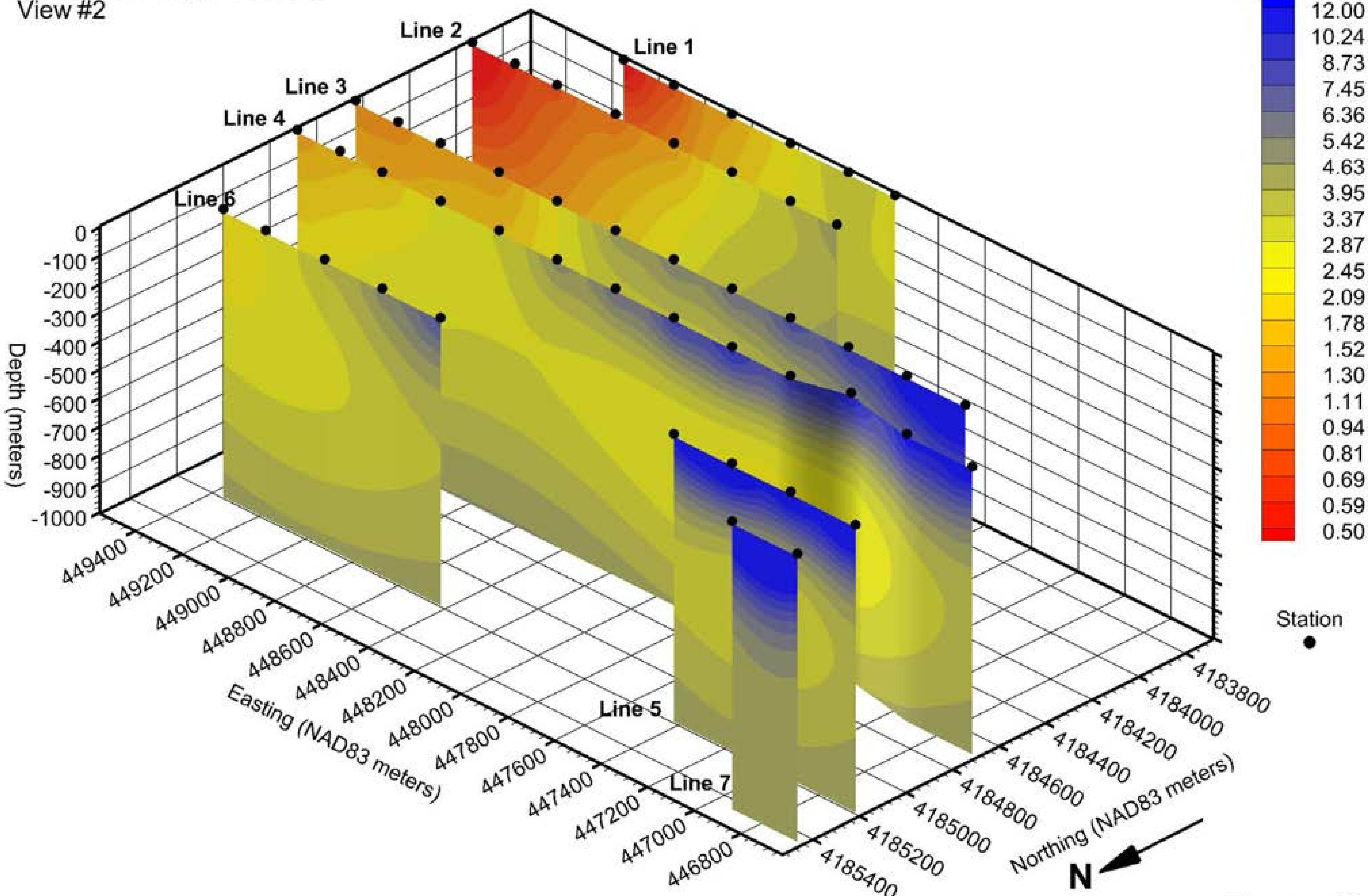
Figure 10

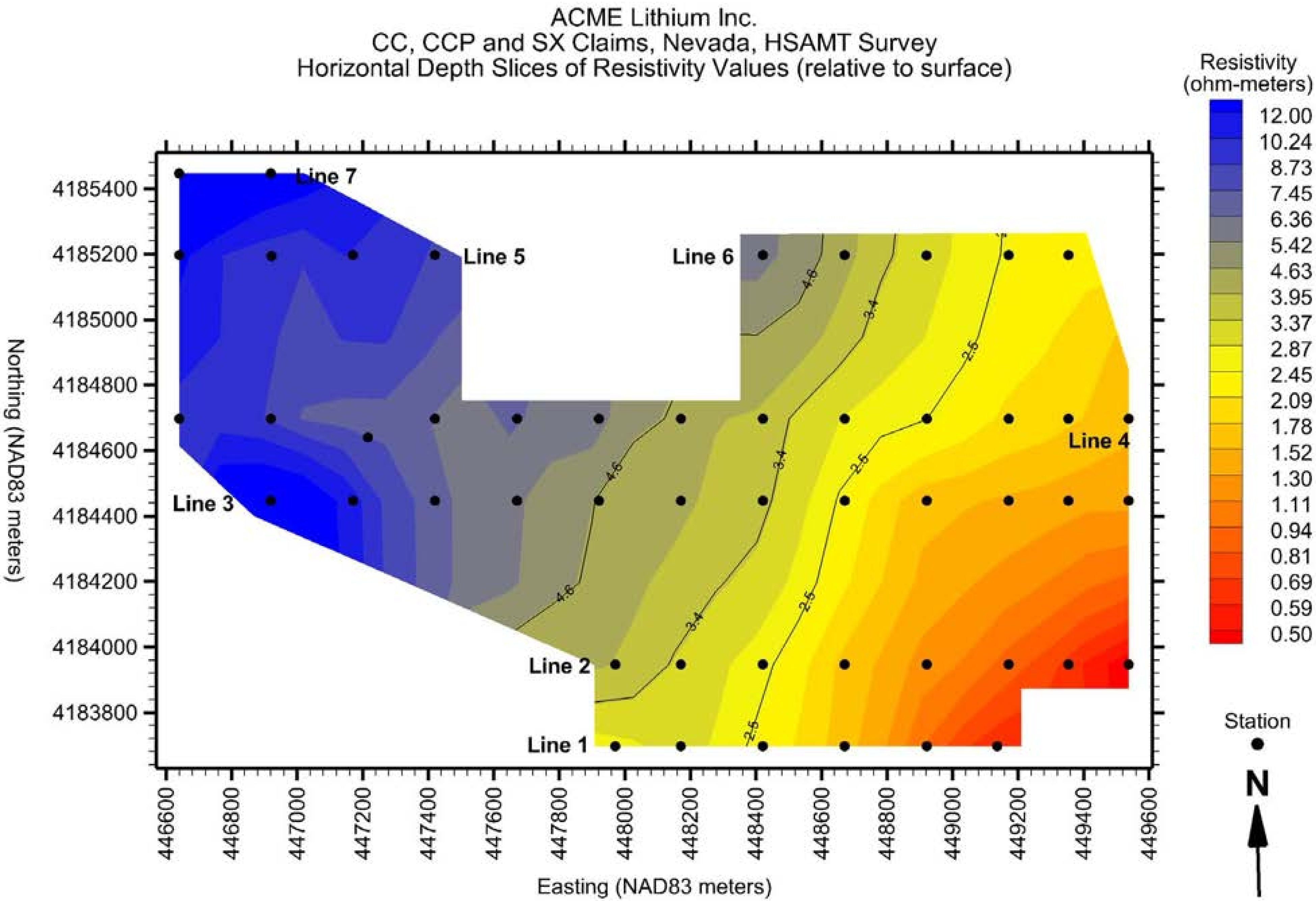

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Lines 1 to 7 Depth Sections
View #1
Resistivity (ohm-meters)
12.00
10.24
8.73
7.45
6.36
5.42
4.63
3.95
3.37
2.87
2.45
2.09
1.78
1.52
1.30
1.11
0.94
0.81
0.69
0.59
0.50
Line 7
Line 5
Line 6
Line 1
Line 4
Line 3
Line 2
Depth (meters)
0
-100
-200
-300
-400
-500
-600
-700
-800
-900
-1000
446800
447000
447200
447400
447600
447800
448000
448200
448400
448600
448800
449000
449200
449400
Easting (NAD83 meters)
4183800
4184000
4184200
4184400
4184600
4184800
4185000
4185200
4185400
Northing (NAD83 meters)
N
Station
Hasbrouck Geophysics, Inc.
Figure 11

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Lines 1 to 7 Depth Sections
View #2



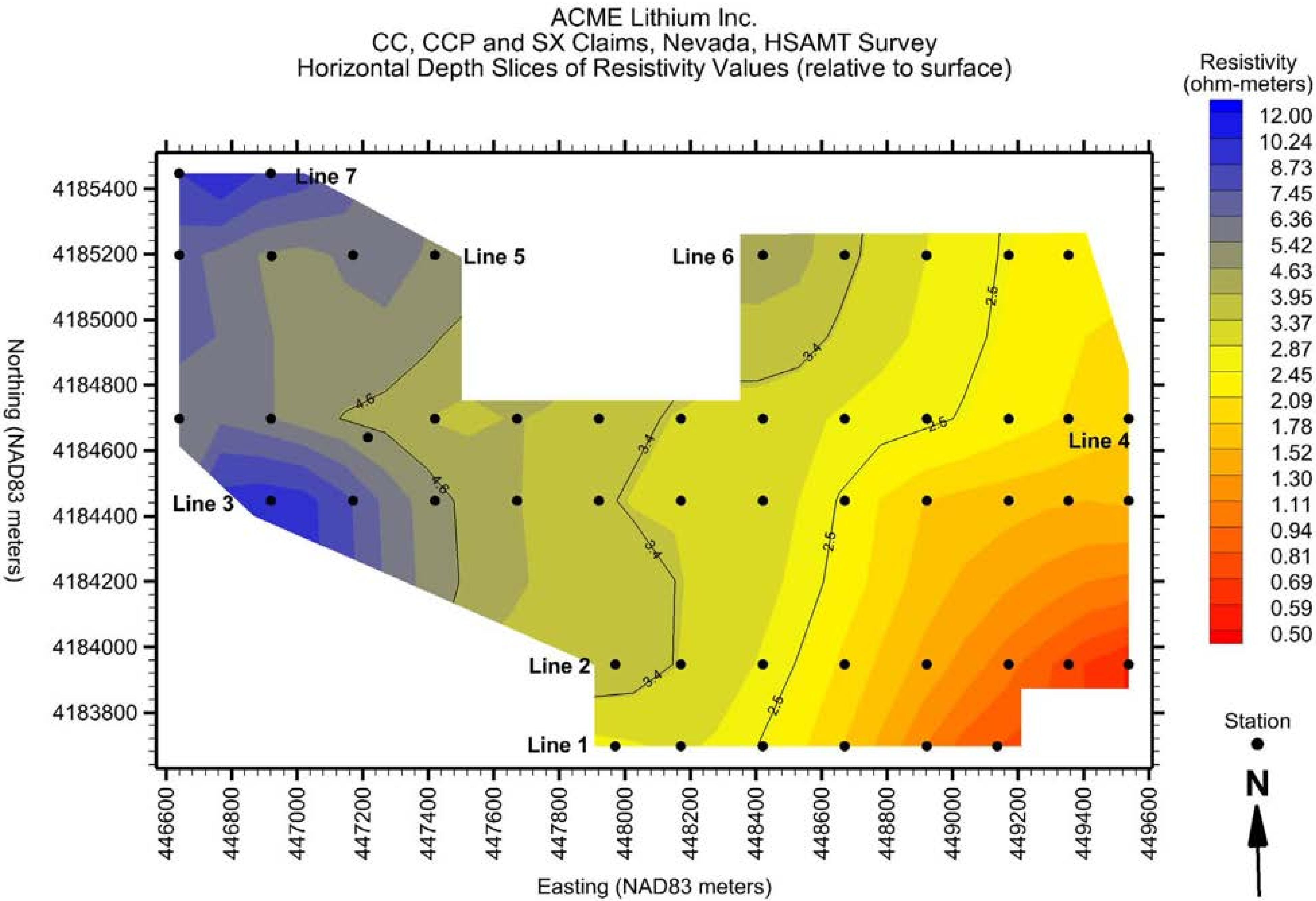
Hasbrouck Geophysics, Inc.

Figure 12



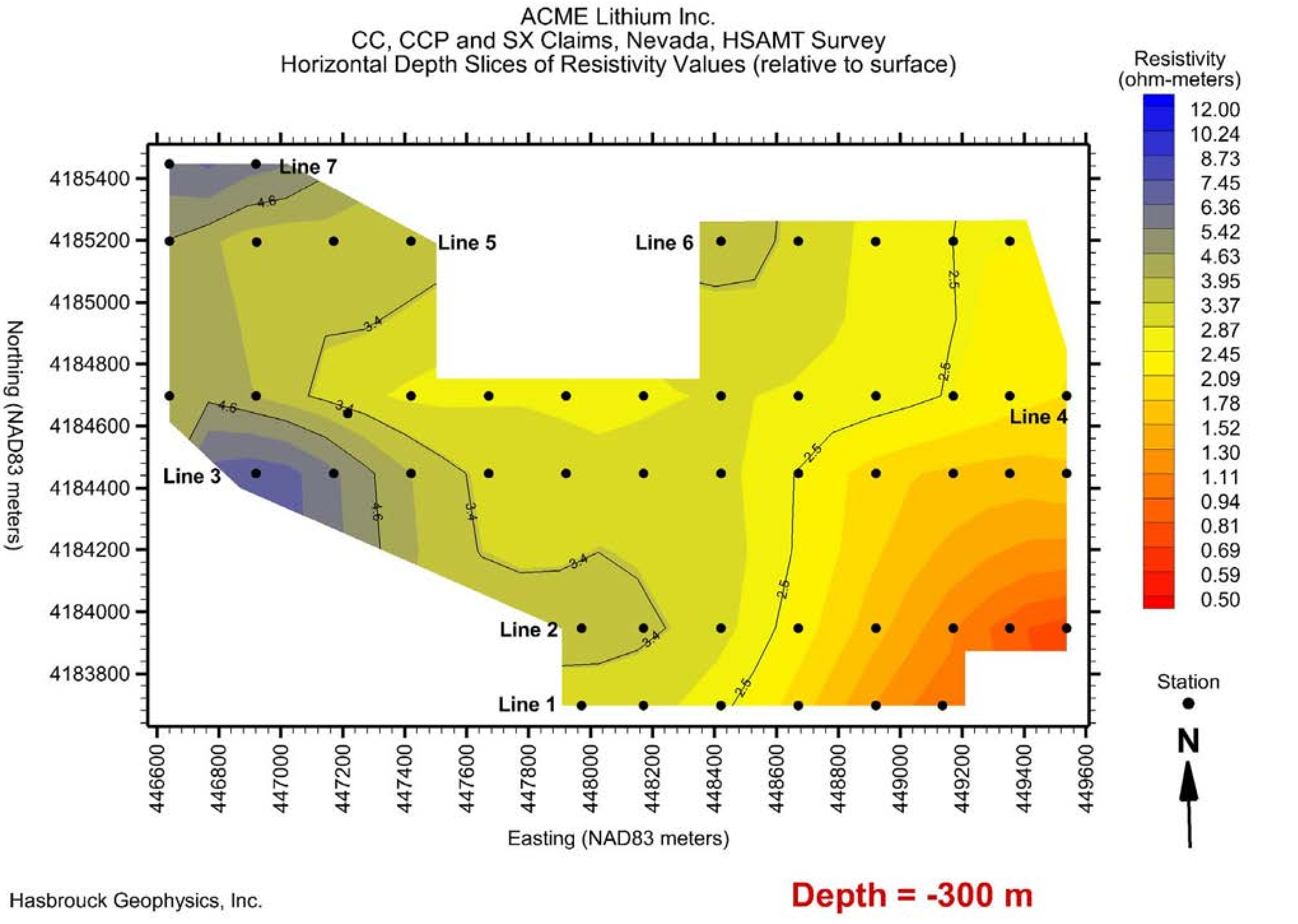
Hasbrouck Geophysics, Inc.

Depth = -100 m

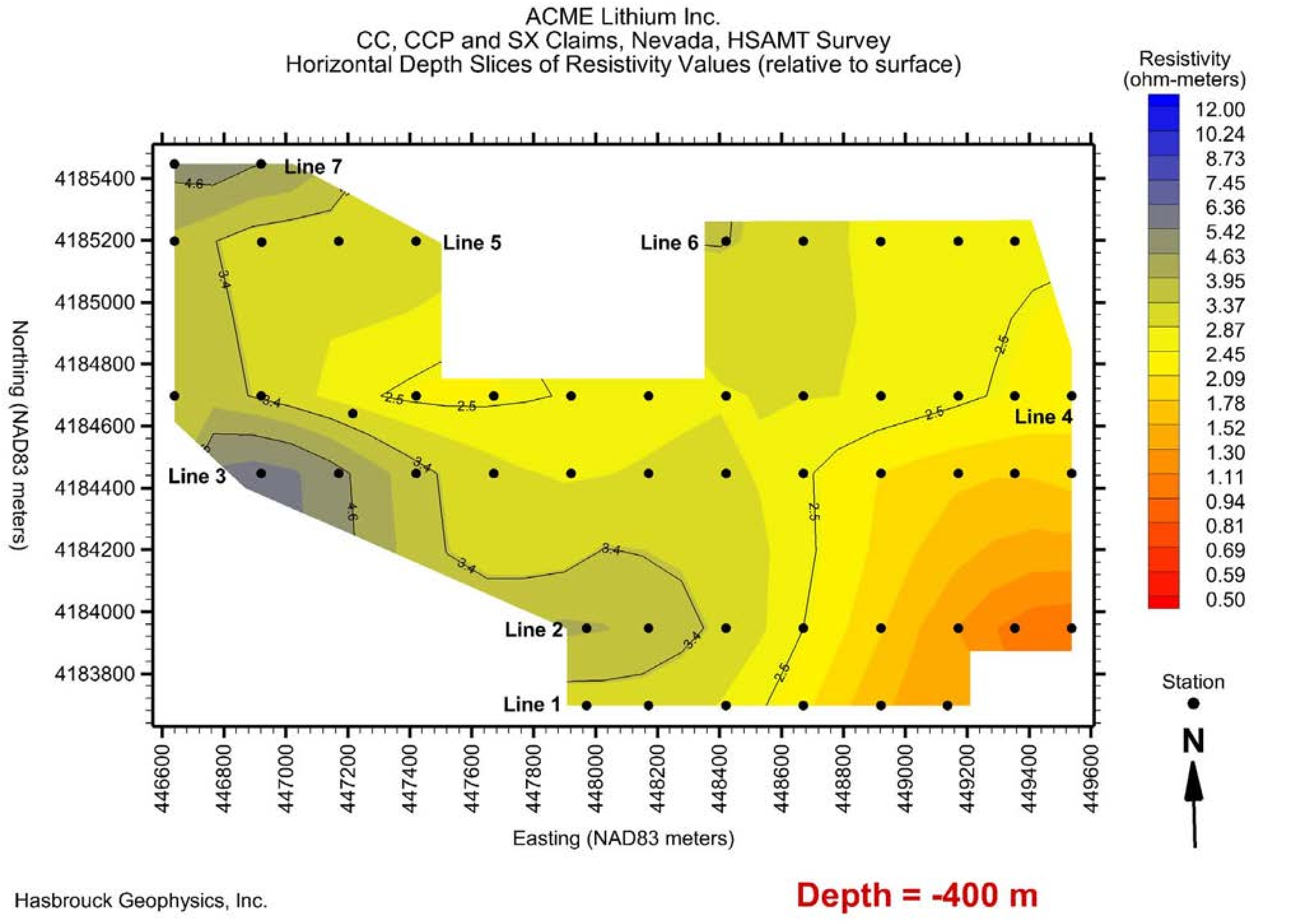


Hasbrouck Geophysics, Inc.

Depth = -200 m



ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Horizontal Depth Slices of Resistivity Values (relative to surface)
Resistivity (ohm-meters)
12.00
10.24
8.73
7.45
6.36
5.42
4.63
3.95
3.37
2.87
2.45
2.09
1.78
1.52
1.30
1.11
0.94
0.81
0.69
0.59
0.50
Line 7
Line 5
Line 6
Line 4
Line 3
Line 2
Line 1
4.6
3.4
2.5
Northing (NAD83 meters)
4185400
4185200
4185000
4184800
4184600
4184400
4184200
4184000
4183800
Easting (NAD83 meters)
446600
446800
447000
447200
447400
447600
447800
448000
448200
448400
448600
448800
449000
449200
449400
449600
Station
N
Hasbrouck Geophysics, Inc.
Depth = -300 m



ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Horizontal Depth Slices of Resistivity Values (relative to surface)
Resistivity
(ohm-meters)
12.00
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8.73
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3.95
3.37
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Line 4
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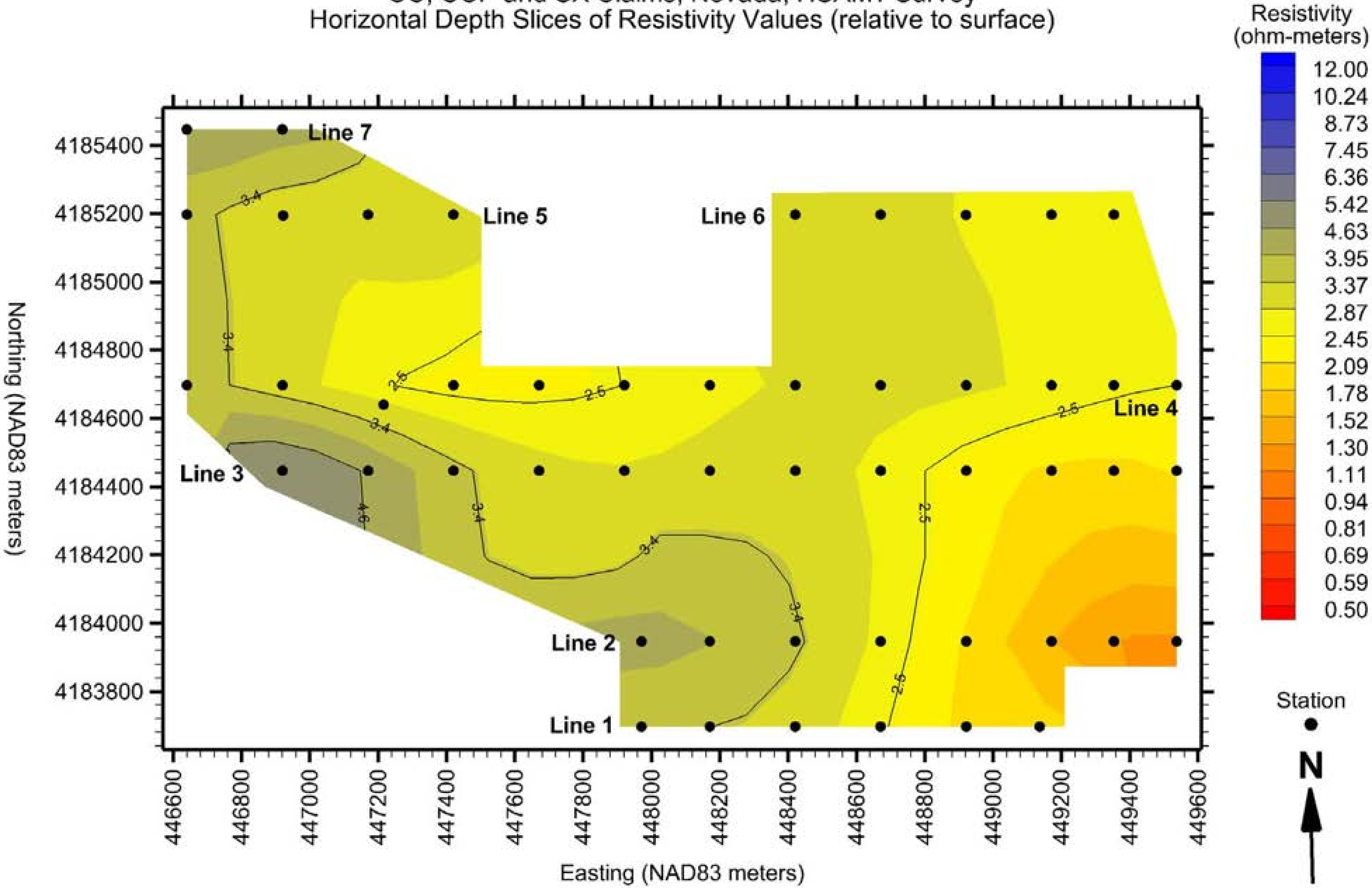
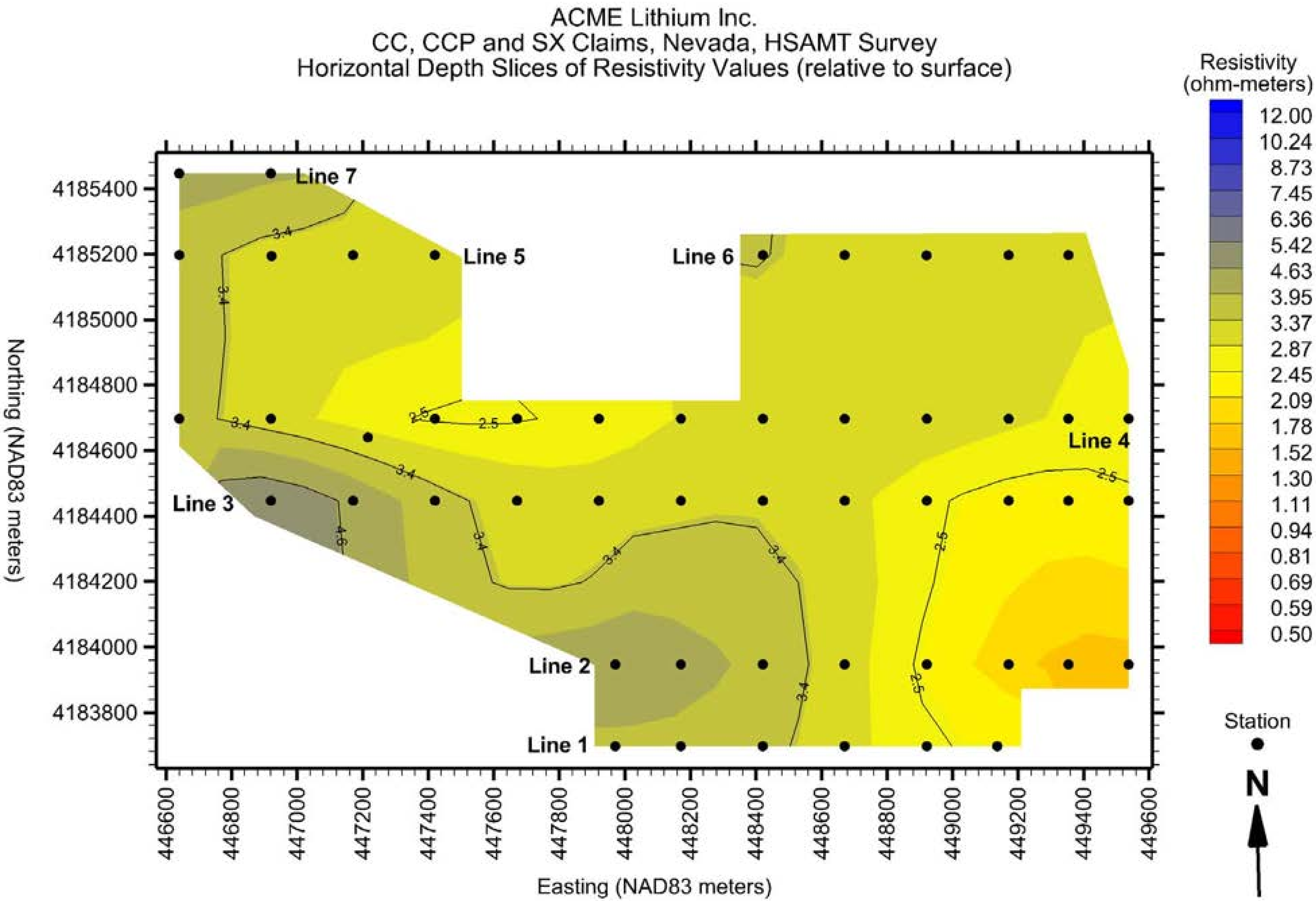
4185400
4185200
4185000
4184800
4184600
4184400
4184200
4184000
4183800
Northing (NAD83 meters)
446600
446800
447000
447200
447400
447600
447800
448000
448200
448400
448600
448800
449000
449200
449400
449600
Easting (NAD83 meters)
Station
N
Hasbrouck Geophysics, Inc.
Depth = -400 m

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Horizontal Depth Slices of Resistivity Values (relative to surface)



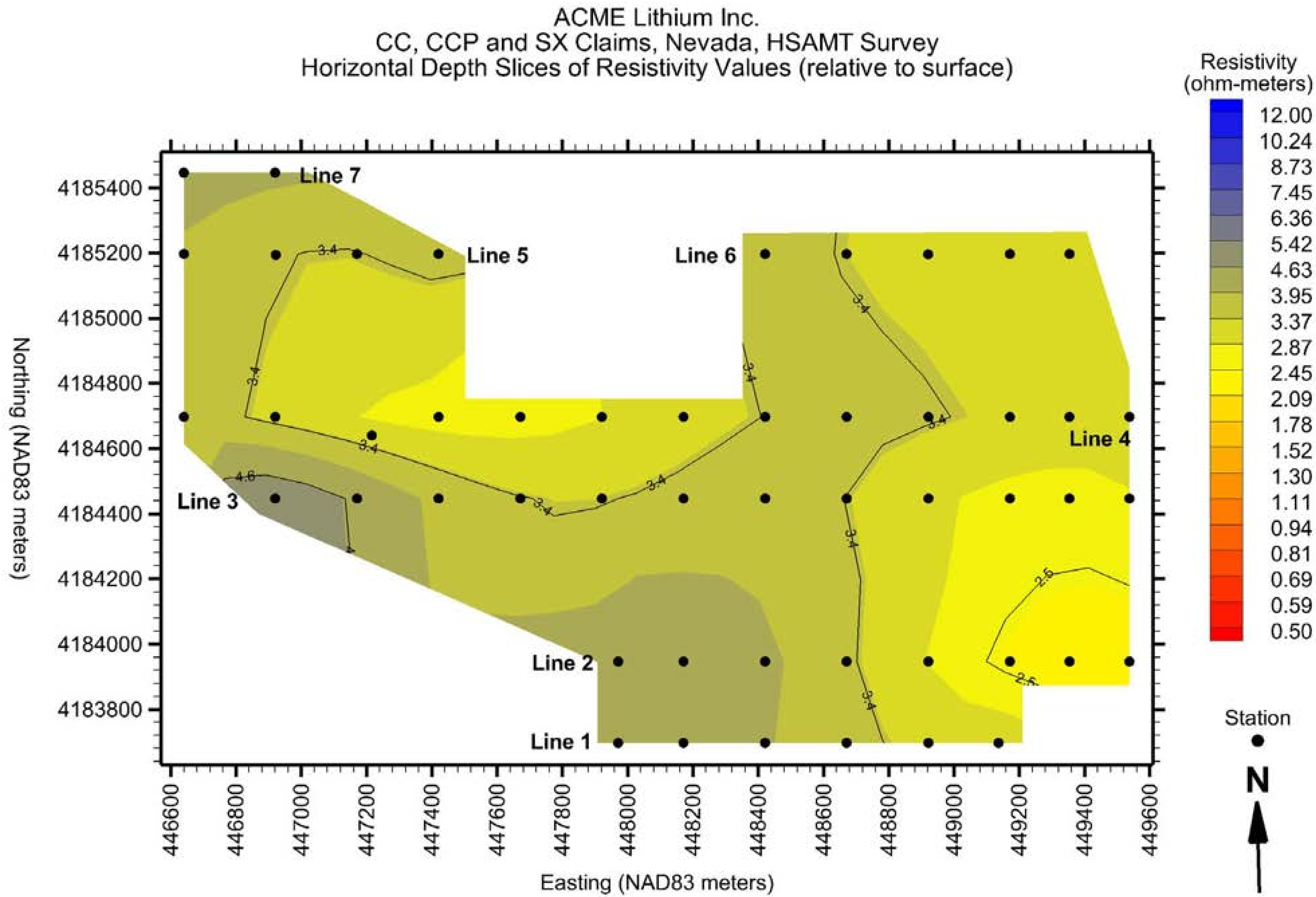
Hasbrouck Geophysics, Inc.

Depth = -500 m



Hasbrouck Geophysics, Inc.

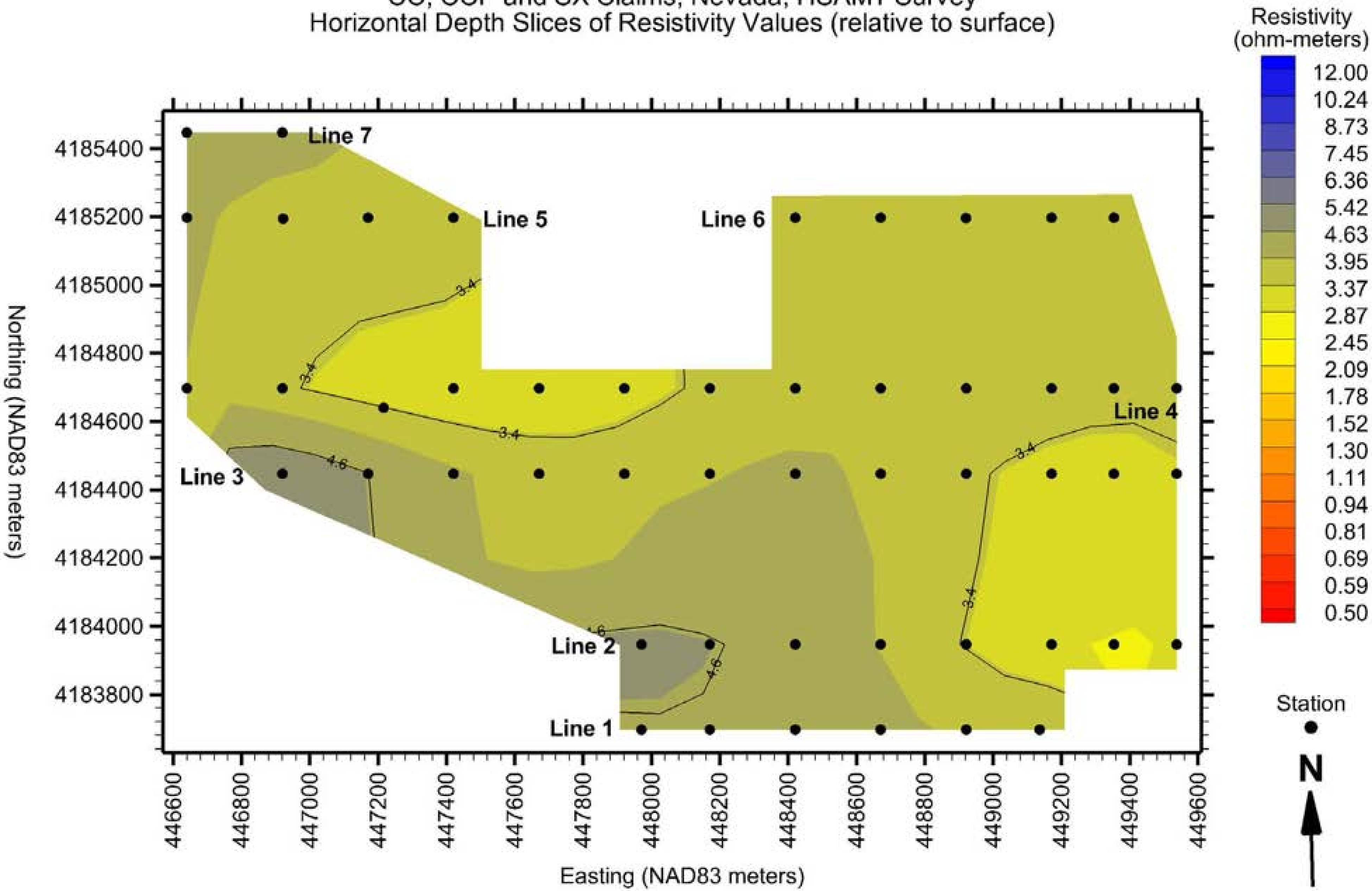
Depth = -600 m



Hasbrouck Geophysics, Inc.

Depth = -700 m

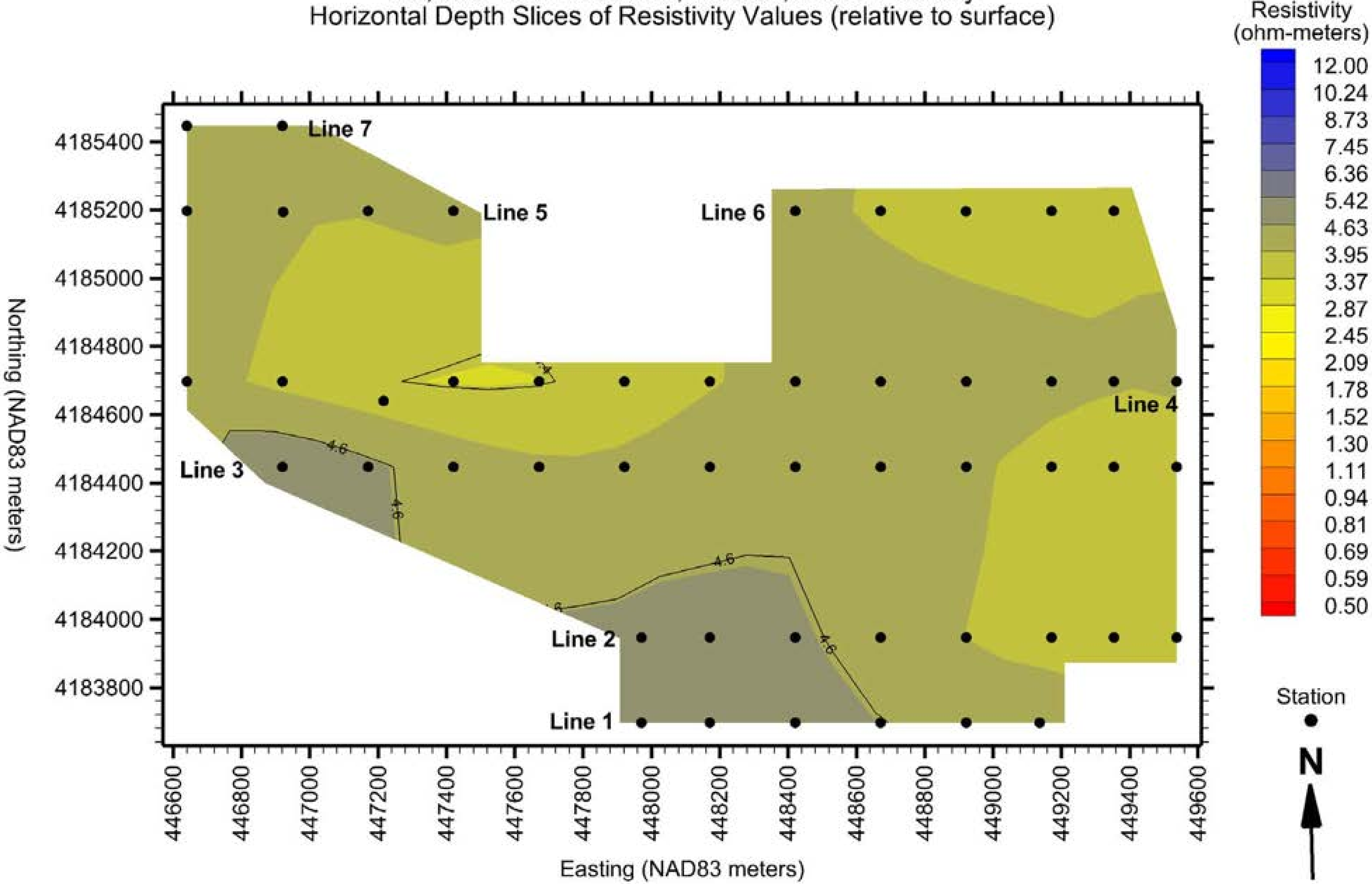
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Horizontal Depth Slices of Resistivity Values (relative to surface)



Hasbrouck Geophysics, Inc.

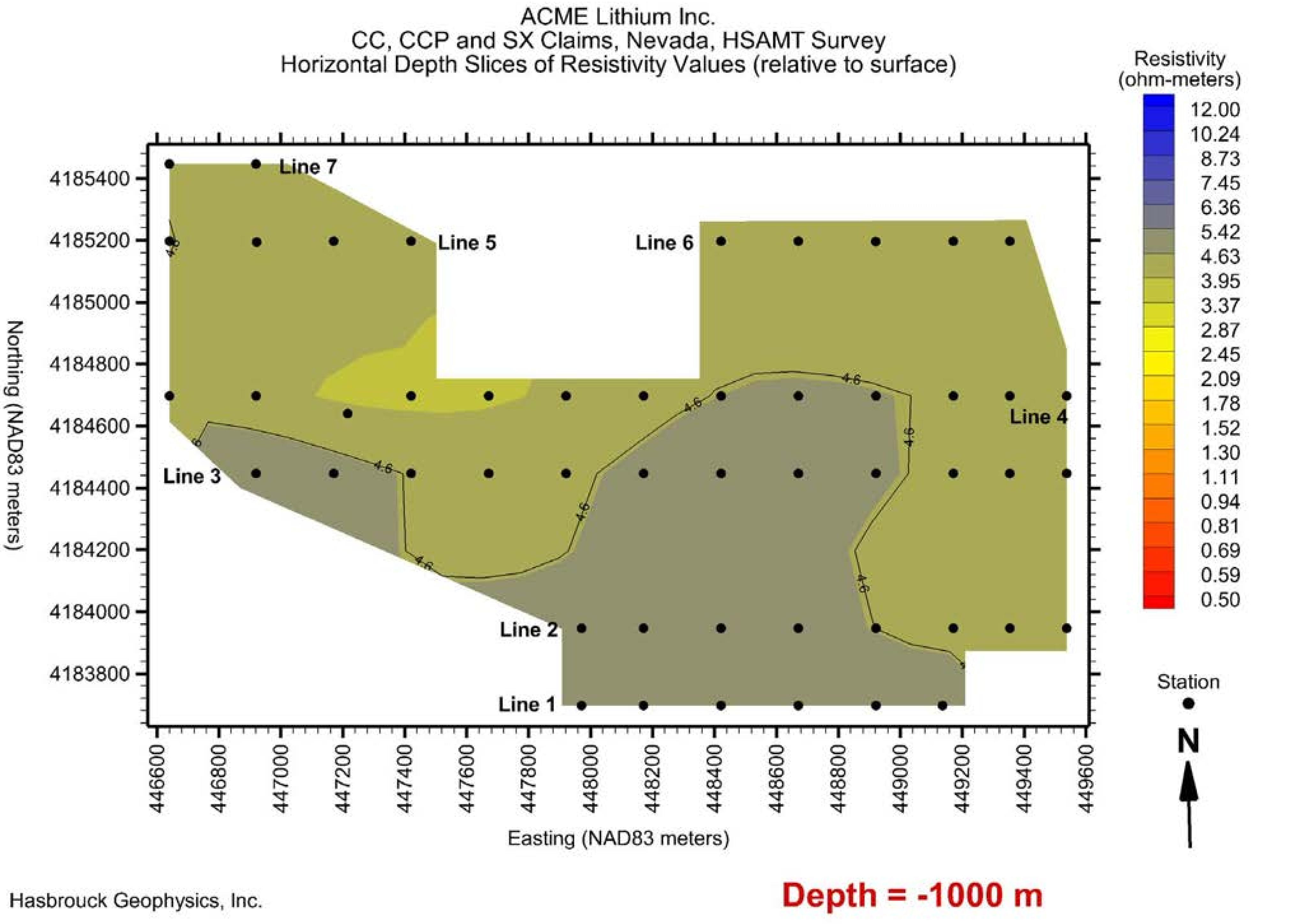
Depth = -800 m

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Horizontal Depth Slices of Resistivity Values (relative to surface)



Hasbrouck Geophysics, Inc.

Depth = -900 m



ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, HSAMT Survey
Horizontal Depth Slices of Resistivity Values (relative to surface)
Resistivity (ohm-meters)
12.00
10.24
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4183800
Easting (NAD83 meters)
446600
446800
447000
447200
447400
447600
447800
448000
448200
448400
448600
448800
449000
449200
449400
449600
Station
N
Hasbrouck Geophysics, Inc.
Depth = -1000 m

Hasbrouck Geophysics Inc

Gravity Survey Conducted for Lithium Brine Exploration

Over The CC, CCP And SX Claims in Clayton Valley in West-Central Nevada

Prepared for Geoxplor Corp.

TABLE OF CONTENTS

FIGURES

ADDITIONAL PLOTS

INTRODUCTION

This report presents the results of a gravity survey conducted for lithium brine exploration over the CC, CCP and SX Claims in Clayton Valley in west-central Nevada that are optioned by ACME Lithium Inc. from GeoXplor Corp. The purposes of the surveys are to map depth to bedrock or thickness of sediments, map geologic structure relative to the occurrence of lithium-bearing brine, and to provide information for the selection and design of additional geophysical surveys.

METHODOLOGY

Refer to Appendix A for a description on the methodology of gravity surveying.

DATA ACQUISITION AND PROCESSING

Gravity data were acquired over the CC, CCP and SX claims area with a leased LaCoste & Romberg Model G gravity meter (serial number 546). The LaCoste & Romberg gravity meter essentially consists of a suspended "zero length" quartz spring with a lever system used to balance a mass on a beam to a null reading point. A zero length spring is defined as one in which the tension is proportional to the actual length of the spring (i.e., if all external forces were removed the spring would collapse to zero length). The advantage of such a system is that it can be in equilibrium over a small range of values and it can theoretically be adjusted to infinite period. Consequently, highly accurate reading can be obtained (±0.01 milliGals [mGals] for a standard G meter) over a worldwide range of values (7000 mGals). Typically instrumentation drift rate is less than 1 mGal per month through the use of a heater and thermostat.

A total of 120 gravity stations at nominal intervals of 250 meters were acquired along eleven lines separated by 250 meters and also, for quality control purposes, at existing locations previously surveyed by Sierra Geothermal Power Corporation and GeoXplor Corp. as shown in Figure 1. Additional quality control procedures involved acquisition of several repeat station readings. The station locations were first located on a topographic map, uploaded to a hand-held Global Positioning System (GPS), and then staked in the field. Locations and elevations of the stations were acquired in the field with a Trimble GeoXH GPS unit. A local gravity base station established in a previous gravity survey (Base8) was used and that local base station was tied into a U.S. National Imagery and Mapping Agency (NIMA) referenced to absolute gravity station #0455-1 (used in previous gravity surveys) so that data from this survey can be combined with data from other surveys.

Data were acquired between local base readings at times nominally less than two to four hours apart, depending upon logistics. That is, a reading was taken at the local base, several new station readings were taken within a period of less than two to four hours, and then another reading was taken at the local base. The repeated base readings allowed for calculation of the instrument drift. The overall quality of the data is very high with repeat readings of new stations ranging between 0.01 and 0.02 mGals, while the spread for base readings (both field and absolute) is between 0.01 and 0.03 mGals.

The gravity data were processed using the *GravMaster* (version 1.30) computer program from Geotools Corporation following the processing outline described in the Appendix A. Initially the field data were converted to mGal values using a table supplied by the instrument manufacturer.

Data for each observation (date, time, latitude, longitude, elevation and value) were then entered into the processing program. Next, the instrument and tide drifts were calculated, and then an absolute gravity value was calculated from the local base to the referenced absolute gravity base station #0455-1. Using the referenced absolute gravity value for each station, both the theoretical (using the NIMA 1998 formula) and free-air gravity values were computed. From previous surveys conducted in the general area by the author and other investigators, a Bouguer slab density of 2.67 g/cm^3 was chosen to process the data. This density value and reference of the field data to an absolute gravity station enables the data to be combined with public-domain data if warranted.

Compartment elevation differences for terrain corrections were estimated in the field for Hammer zones B (2.0 to 16.6 meters radius) and C (16.6 to 53.3 meters radius). Compartment elevation differences for each station for zones from 53.3 to 21,943 meters (Hammer zones D through M) were determined from high resolution Digital Elevation Models (DEMs). Terrain corrections ranged from 0.75 to 1.00 mGals. Using data from all these Hammer zones and a Bouguer slab density of 2.67 g/cm^3, complete Bouguer gravity values were calculated.

Modeling of the gravity data was conducted using Interpex Ltd.'s *IX2D-GM* (version 1.04) computer program. *IX2D-GM* is capable of interactive forward and inverse modeling in 2½-dimensions (i.e., the models can extend both along and perpendicular to profiles) based upon polygonal models. The forward modeling algorithm is based upon the Rasmussen and Pedersen method, while an Inman-style ridge regression is used for nonlinear least-squares fitting in the inversion modeling.

RESULTS

Gravity exploration is a potential field method and as such the modeling of the data produces a non-unique solution. Consequently, variations in density contrasts and thicknesses of subsurface bodies can result in the same model fit to the field data. For example, in a two-layer case if one decreases the density of the upper layer (increases the density contrast) then the thickness of the upper layer must also be decreased for a proper model fit. As another example, if an additional layer is added with a density value in between the original upper and lower layers then the depth to bedrock must be increased for a correct model. Therefore, without geologic data from wells there can be several models that fit the data.

The complete Bouguer gravity map shown in Figure 2 is contoured from the total 120 stations using Golden Software's *Surfer* computer program (64-bit version 21.2.192) and a Bouguer slab density of 2.67 g/cm^3. From results of previous modeling conducted in the general area by the author and other investigators, a density contrast between valley fill sediments and Paleozoic bedrock of 0.5 g/cm^3 is chosen to best represent a two-layer case. Four modeled lines (1 through 4) are extended to outcrop to the west utilizing existing Sierra Geothermal data, thus the depth to bedrock at the outcrop stations is considered zero and is used as a constraint for modeling purposes since no other modeling constraints (i.e., drill hole information) are available within the survey area. The remaining lines were modeled with input from the extended lines. The models are located in the *Additional Plots* section of this report. The models are presented using Golden Software's *Grapher* computer program [64-bit version 17.4.481]), and calculated bedrock depth from each of the modeled lines are compiled and presented using Golden Software's *Surfer* computer program as three-dimensional contour maps. The bedrock depth map can be thought of as a thickness of sediments map.

There are two main factors that must be considered regarding target areas for lithium mineralization and concentration: 1) where is the source of the lithium, and 2) does a basin environment exist for the concentration of the lithium transported by meteoric water from the source? In the Clayton Valley region it is thought that lithium enriched volcanics that outcrop in the area are the source of lithium. Once lithium has been liberated into the water system it remains highly mobile and movement of the lithium with surface water and groundwater will follow basic hydrological principles. Hydrologic basins in Nevada consist of basin fill underlain by either low-permeability or permeable rock with water movement through the basin fill, permeable rock and along faults. Nothing more complex than a topographic low or closed basin is required to concentrate lithium-bearing water. For topographic lows with larger catchment areas there is a greater opportunity to accumulate lithium from wider sources. The water trapped in these lows may move through dipping aquifers until it reaches an impermeable barrier such as a fault scarp.

The predominant features within the modeled bedrock depth map (Figure 3) are a relatively long bedrock low that extends from near the northwest edge of the surveyed area (centered near station 99) towards the south-southeast, another relatively long bedrock low extending south and centered near station number 107 and a general area of deeper bedrock from about the eastern half of line 5 and including lines 4 through 1. Arbitrary depths of 600 and 750 meters are highlighted on the bedrock depth map to indicate what are interpreted as more significant topographic bedrock lows that may concentrate lithium-bearing water.

RECOMMENDATIONS

To identify conductors that are thought to be representative of lithium-bearing brine aquifer units, to map the continuity, thickness, dip and extent of those units, and to map geologic structure, it is recommended that a hybrid-source audio-magnetotellurics (HSAMT) survey be conducted. It is recommended that at least seven HSAMT lines of data (50 stations at intervals of 250 meters) be acquired as follows:

1. Line 1 from gravity stations 8 to 13 to investigate the general southern area of deeper modeled bedrock.
2. Line 2 from gravity stations14 to 21 to further investigate the general southern area of deeper modeled bedrock.
3. Line 3 from gravity stations 35 to 46 to investigate the approximate southern extents of the relatively long bedrock lows and to determine if conductors are present at modeled depths of less than 700 meters.
4. Line 4 from gravity stations 48 to 59, including near Base 8, to further investigate the approximate southern extents of the relatively long bedrock lows and to determine if conductors are present at modeled depths of less than 700 meters.
5. Line 5 from gravity stations 75 to 77, including station 232, to investigate an anomalous bedrock low along the western elongated low.
6. Line 6 from gravity stations 80 to 83, including station 234, to investigate an anomalous bedrock low along the eastern elongated low.
7. Line 7 at gravity stations 86 and 87 to investigate an anomalous bedrock low near the northern end of the western elongated low.

HSAMT data for the nominal total of 50 proposed stations at 250 meter intervals along seven lines will be acquired with a leased Geometrics *Geode EM3D* system operating from 0.1 Hz to 20 KHz. Because of anticipated extremely low resistivities at many of the HSAMT stations it will be necessary to acquire data down to 0.1 Hz in order to investigate to depths greater than 200 to 300 meters. Several successful HSAMT surveys have been conducted in and near the Clayton Valley area and experience gained from those surveys will be applied to this survey.

LIMITATIONS OF INVESTIGATION

This investigation was performed using the degree of care and skill ordinarily exercised, under similar circumstances, by an experienced and licensed geophysicist practicing in this or similar locations. No warranty, expressed or implied, is made as to the conclusions and professional advice included within this report.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can and do occur with the passage of time, whether they be due to natural processes or the work of people on this or adjacent properties. Accordingly, the findings of this report may be invalidated wholly or partially by changes outside of our control. Therefore, this report is subject to review and revision as changed conditions are identified.

APPENDIX A: GRAVITY SURVEYING METHODOLOGY

Gravity is the attractive force between two bodies with the strength of the force depending upon the masses of the bodies and the distance between them. The force of the Earth's gravity field is not constant everywhere and its measurement changes based upon many known and predictable factors including elevation, latitude, instrumentation drift and tides. Additionally, gravity changes are related to lateral differences in the densities of subsurface rock. Lateral density changes are useful in exploration because many types of rocks have characteristic densities and thus are distinct from other rock types. By taking very careful measurements of the Earth's gravity field at the surface and then removing all the predictable effects, subsurface density variations can be modeled into a meaningful geologic picture of the subsurface.

From Newton's law, the formula for the force of gravity between two masses (m_1 and m_2) separated by a distance r is $F = (Gm_1m_2)/r^2$, where G is the universal gravity constant. For gravity exploration we are interested in the acceleration of gravity rather than the force of gravity. Since force is mass times acceleration, the acceleration due to gravity becomes $a = G(m_1/r^2)$. The Earth's gravitational acceleration is approximately 980,000 milliGals (mGals) while anomalies less than one part per million, or less than one mGal, of the Earth's gravity field often have significance in exploration. Exploration using the gravity method focuses on the relative change in gravity instead of the absolute value of the earth's gravitational field.

Since the purpose of collecting gravity data is to determine the location and nature of buried geologic bodies, factors not related to those bodies must be removed from the data. Essentially we have *Gravity Anomaly = Observed Gravity – Earth Model*. Observed gravity represents the "real" gravity value (the actual acceleration) at any point on the earth's surface. However, this real value does not come directly from an instrumentation measurement but involves numerous corrections. Absolute gravity is defined as the exact vertical acceleration due to gravity. This can be measured in a number of ways such as accurately timing a falling body over a known distance. Through such means, absolute gravity at a given location can be determined. By using high precision absolute gravity meters, a network of tied stations where the absolute gravity is known has been established and is known as the International Gravity Standardization Net 1971 (IGSN71). Most gravity surveys are designed to include at least one station where the absolute gravity value is known. The difference between the gravity reading acquired at the known base station (after applying all the corrections as discussed below) and the published absolute gravity value for that station results in how much all the observed gravity values must be shifted in order to make them absolute gravity values.

The Earth Model is what we would measure if we were dealing with a simple and virtually homogeneous Earth. The largest contribution to the Earth Model comes from the Theoretical Gravity, or Gravity Reference Field. This is a mathematical model of the Earth's worldwide gravity field and, in differential form, is known as the latitude correction. The U.S. National Imagery and Mapping Agency (NIMA) published the most recent (and recommended) version of the formula is 1998. According to this new formula, the theoretical gravity (γ) obtained from the gravity field of the World Geodetic System (WGS84) reference ellipsoid is:

$$\gamma = (978032.53359)*[(1+0.00193185265241\sin^2(\varphi))/(\sqrt{1-0.00669437999014\sin^2(\varphi)})] \text{ mGals}$$

where φ is the geodetic latitude. The latitude correction is approximately 0.812 sinφ mGals/km. The maximum value occurs at 45° latitude where the correction amounts to 0.01 mGals per 12.2 meters.

The theoretical gravity formula accounts for three major phenomena that impact gravity measurements: 1) the Earth spins at different angular velocities at different latitudes thus producing different outward accelerations (resulting in a gravity reading different than that produced by a non-spinning body), 2) the Earth's ellipsoidal shape, and 3) the ellipsoidal bulges contain rock. Because of these effects, gravity measurements can vary considerably. The range goes from about 978,000 mGals at the equator to about 983,000 mGals at the poles for a total change of approximately 0.5%. Obviously, the formula involves some simplifying assumptions, including: 1) the Earth is homogeneous in lateral density distribution, 2) the observation point is static (not moving with respect to the Earth), and 3) the observation is made at sea level. The first assumption is, of course, wrong in the local sense since inhomogeneities are what we want to exploit when analyzing an area's geology. The second and third assumptions are the reasons it is necessary to make Eotvos (for marine and airborne surveys) and elevation corrections. In an attempt to make up for the incorrect assumptions made in the Earth Model it is necessary to make a series of corrections to gravity data.

The tidal correction is the factor applied to the gravity reading that compensates for the gravitational attraction of the Sun and Moon. The tide correction is a complex function with approximately twelve hours between peaks. The waveform is complex because it contains components that peak with periods of 12 hours, 24 hours, 14 days, and six months. The maximum peak to trough variation is about 0.3 mGals.

A drift correction is required because, over time, components within a gravity meter change their basic configuration slightly. Although these effects are very small, they should be removed whenever possible by re-measuring the gravity value at the same location at different times. Meter drift is assumed to occur in a linear or nearly linear manner over time, and it is usually recommended that repeat base station reading should be made on the order of every three or four hours.

Elevation is a critical factor in the measurement of gravity. The acceleration of gravity is highly dependent upon the distance from the center of mass of the Earth. Small elevation changes can result is relatively large variations in gravity compared to the gravity anomalies of interest. The free-air correction accounts for the fact that the gravity measurement was not made at sea level and is the derivative of a (acceleration of gravity) with respect to the station elevation h as follows:

$$\delta_{fa} = [(-2E_G h)/R_E]*[1-(3h/2R_E)]$$

where E_G is the average Earth gravity and R_E is the average Earth radius. This formula can be simplified to 0.09406 mGals/foot or 0.3086 mGals/meter. The free-air gravity value is calculated by adding the free-air correction and subtracting the theoretical gravity value from the absolute gravity value.

The free-air correction assumes that there is nothing (except air) between the observation point and sea level. Of course, this is not true. Thus a Bouguer correction is made to replace the "air" in the free-air correction with rock. The space between the gravity reading and the reference surface (generally sea level) is filled with an infinite horizontal slab of rock. The Bouguer correction formula for an infinite horizontal sheet is as follows:

$$\text{Bouguer Correction} = 2\pi G\rho h$$

Where G is the universal gravity constant, ρ is density in g/cm^3, and h is elevation in meters. The correction can also be expressed in differential form as:

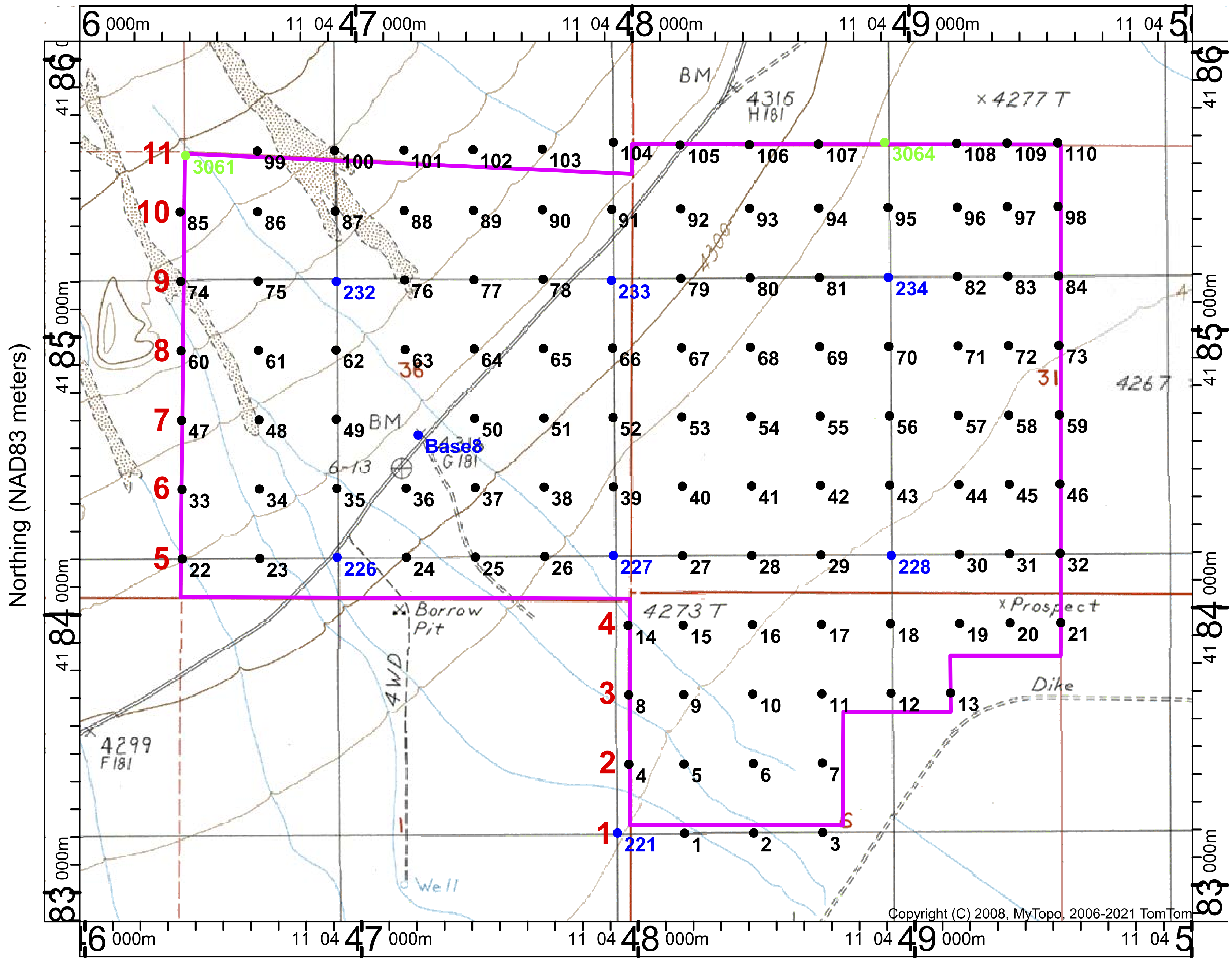
$$\delta g = 0.01278\rho \text{ mGal/foot or } \delta g = 0.04193\rho \text{ mGal/meter}$$

Two major assumptions are made: 1) that the elevation difference can be filled in with an infinite horizontal sheet, and 2) that the fill has a uniform mass (i.e., slowly varying density) distribution. The density of the Bouguer slab correction is generally chosen using what is termed the Nettleton method wherein the gravity data are reduced multiple times using different densities. The density that has the least correlation to the observed topography is taken as the best estimate of the density of the slab.

The terrain correction is an attempt to make the infinite slab assumption more realistic. The Bouguer correction assumes a perfectly flat infinite horizontal slab, while the terrain correction tries to account for the local topography. Since these variations can be very close to the observation point and their effect varies by the square of the distance, terrain corrections can be important in high relief areas. There are two forms of the Bouguer correction: with the terrain correction (complete Bouguer) and without the terrain correction (simple Bouguer). Mountains, that are positive departures from the plane, reduce the observed gravity because they pull the gravity meter's sensor upward. Similarly, valleys reduce the observed gravity because they fail to pull the meter's sensor downward as strongly as the assumption predicts.

Terrain corrections are made using a chart (*Hammer Chart*) that consists of a series of concentric zones (termed zones B through M). Each zone is divided into 4 to 16 compartments and each compartment is assigned a value that represents the difference between the station elevation (at the center of the chart) and the average elevation of the compartment. In relatively open areas, compartment elevation changes out to about 53 meters (Hammer zones B and C) from the observation point are generally estimated in the field. In areas with good digital elevation model (DEM) coverage, compartment elevations are estimated from about 53 to 22,000 meters (Hammer zones D through M) using those models.

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey Station Locations



Easting (NAD83 meters)

0 100 200 300 400 500 600 700 800
Meters

Existing Sierra Geothermal Gravity Station

Existing GeoXplor Corp. Gravity Station

New Gravity Station

Claim Outline   Line Number

Figure 1

N W E S

Hasbrouck Geophysics, Inc.

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Complete Bouguer Gravity

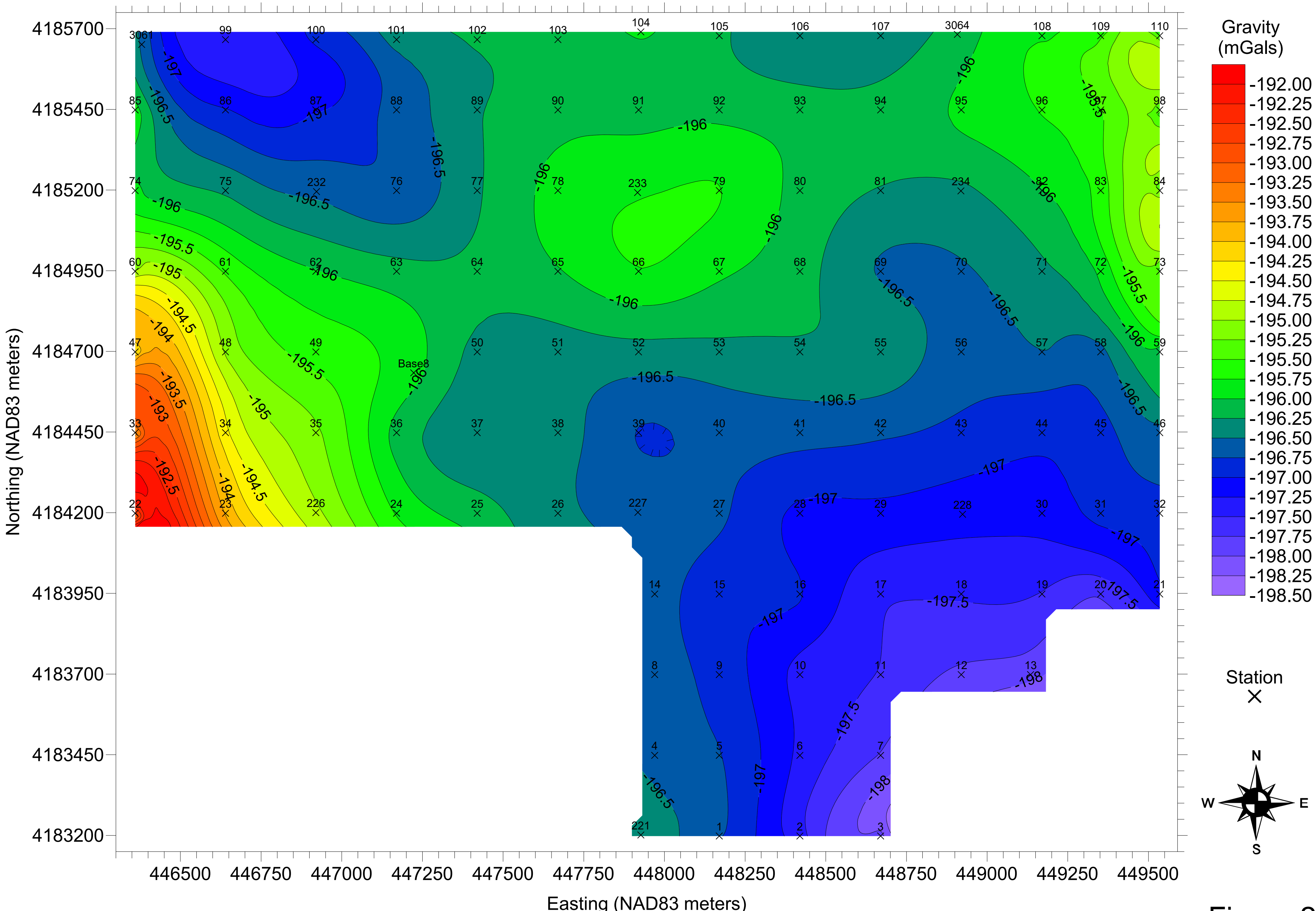


Figure 2

Hasbrouck Geophysics, Inc.

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Modeled Bedrock Depth

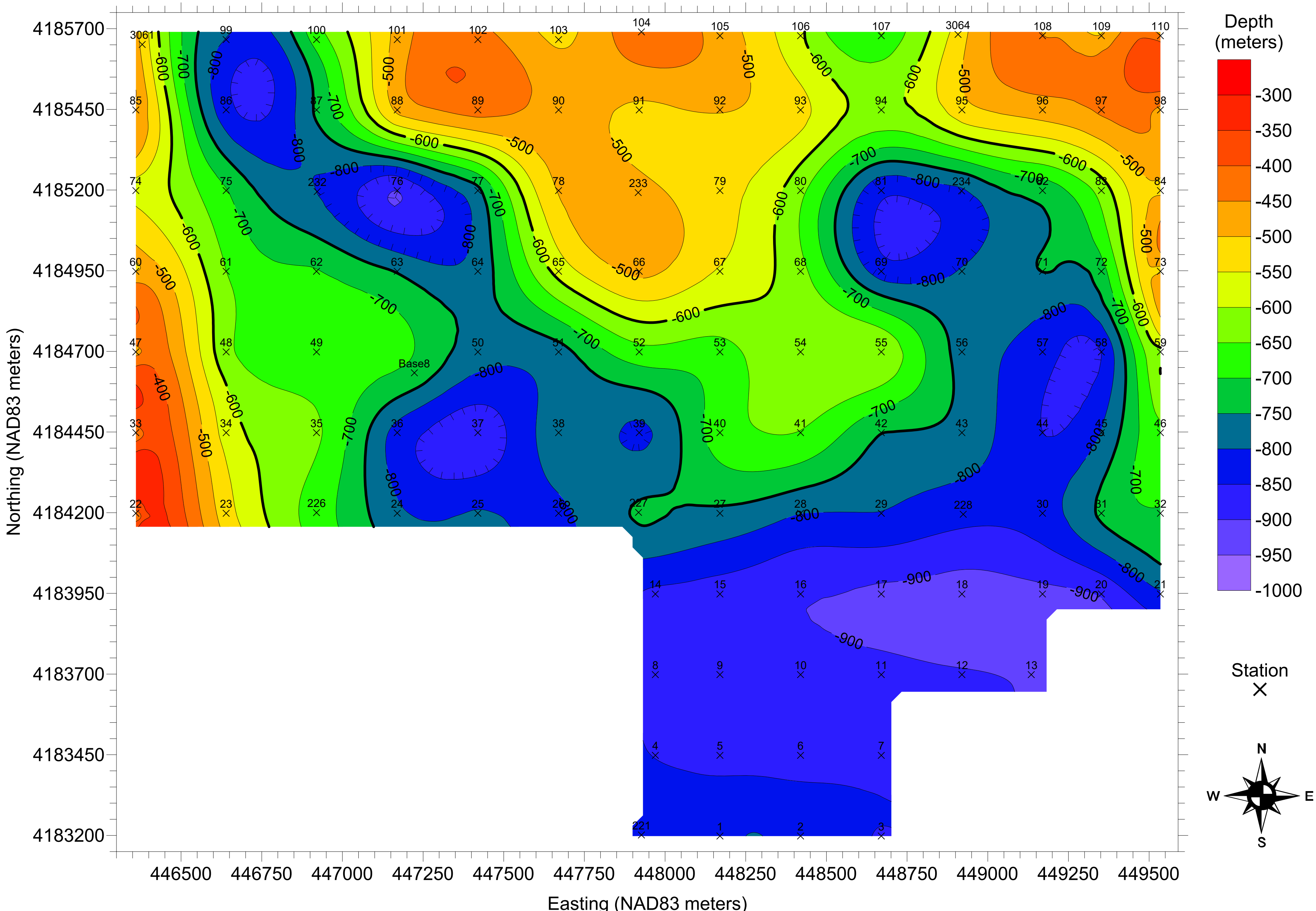
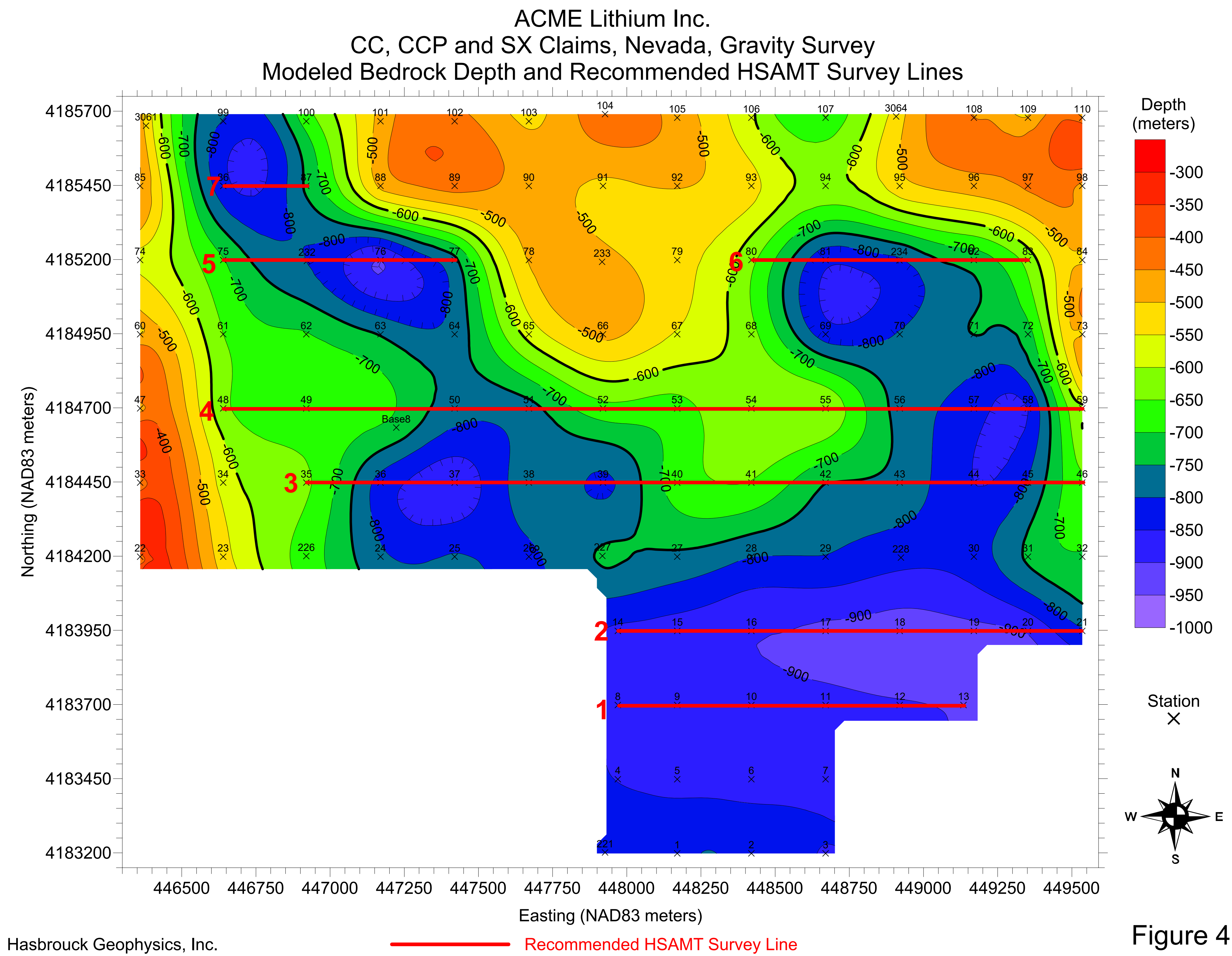


Figure 3

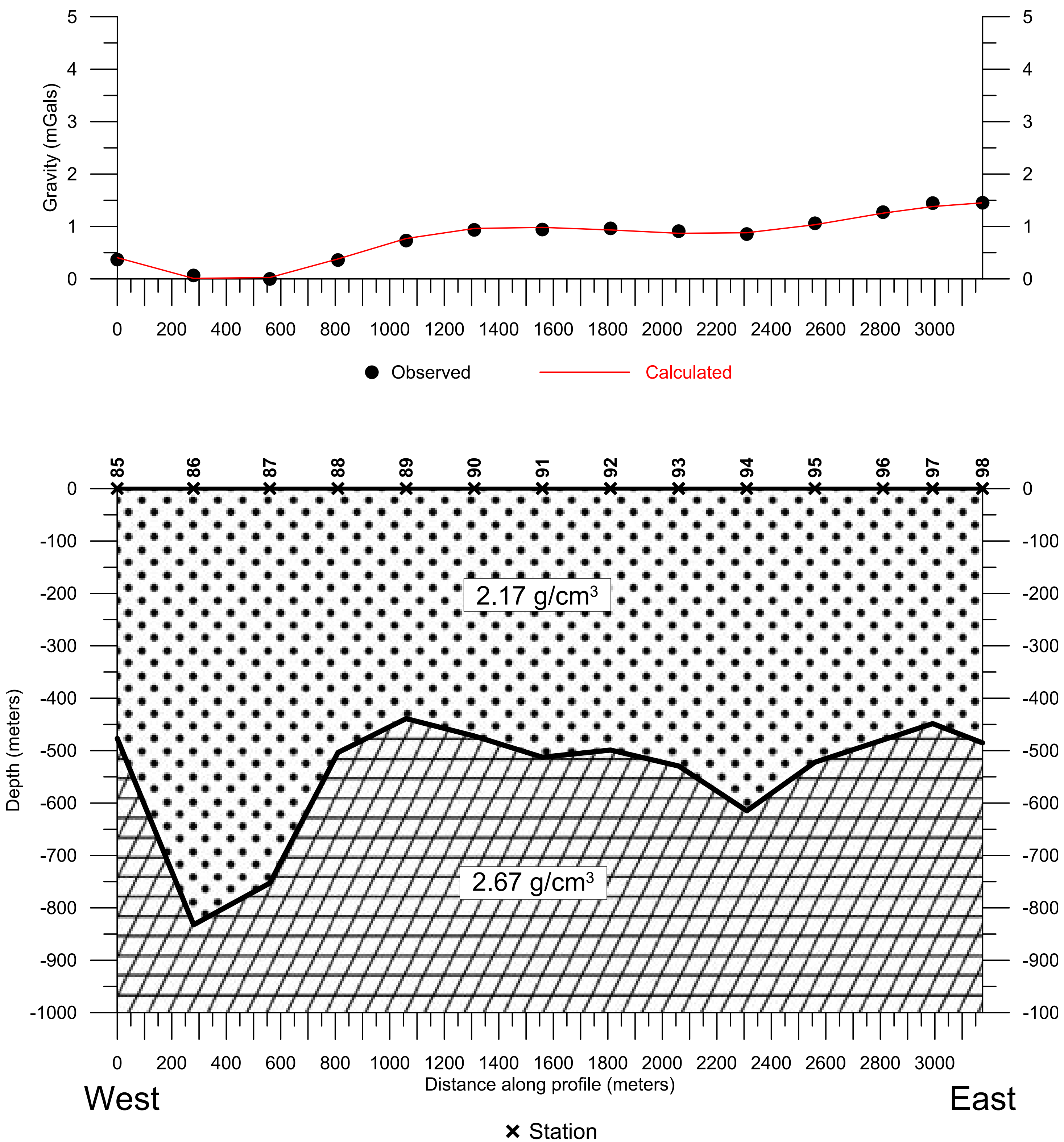
Hasbrouck Geophysics, Inc.



ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Modeled Bedrock Depth and Recommended HSAMT Survey Lines
Northing (NAD83 meters)
Easting (NAD83 meters)
Depth (meters)
-300
-350
-400
-450
-500
-550
-600
-650
-700
-750
-800
-850
-900
-950
-1000
Station
N
S
E
W
Hasbrouck Geophysics, Inc.
Recommended HSAMT Survey Line

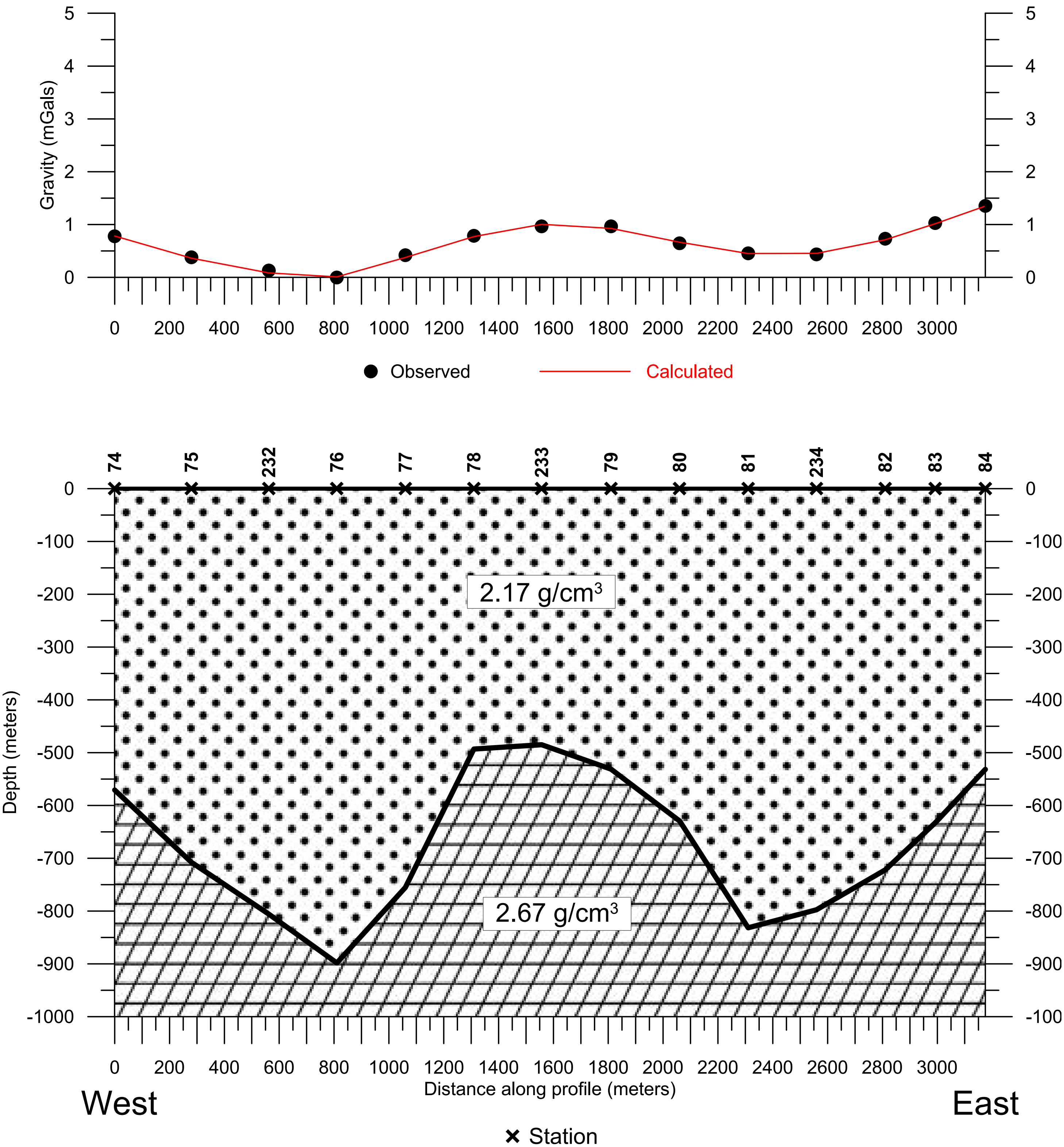
Figure 4

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 10 Complete Bouguer Gravity and Modeled Depth Profile



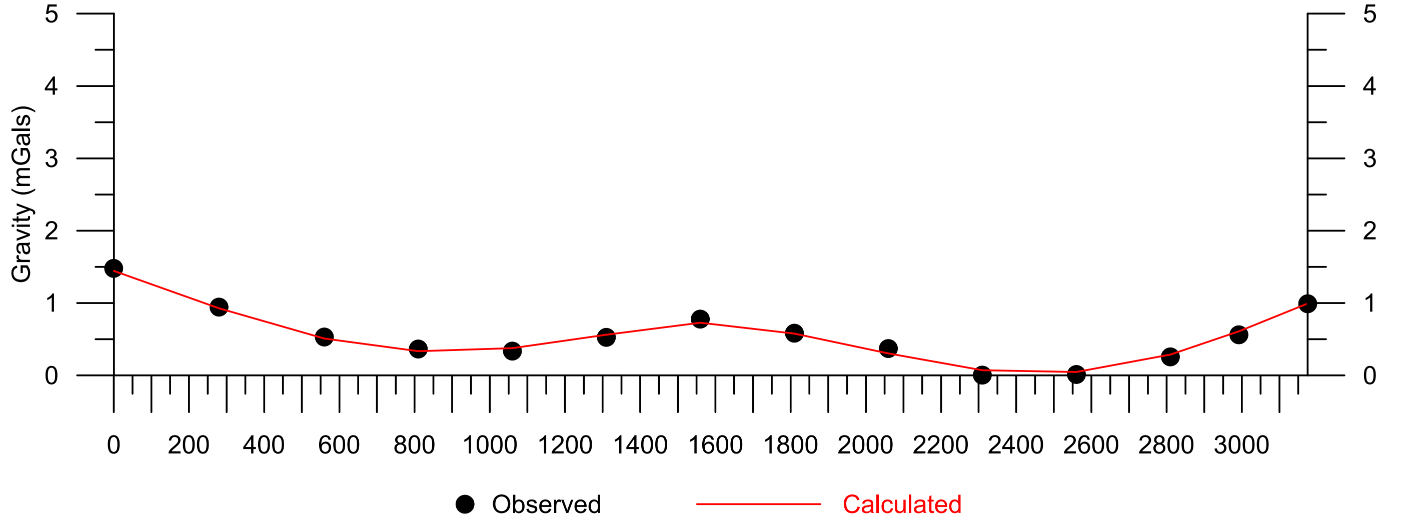
Hasbrouck Geophysics, Inc.

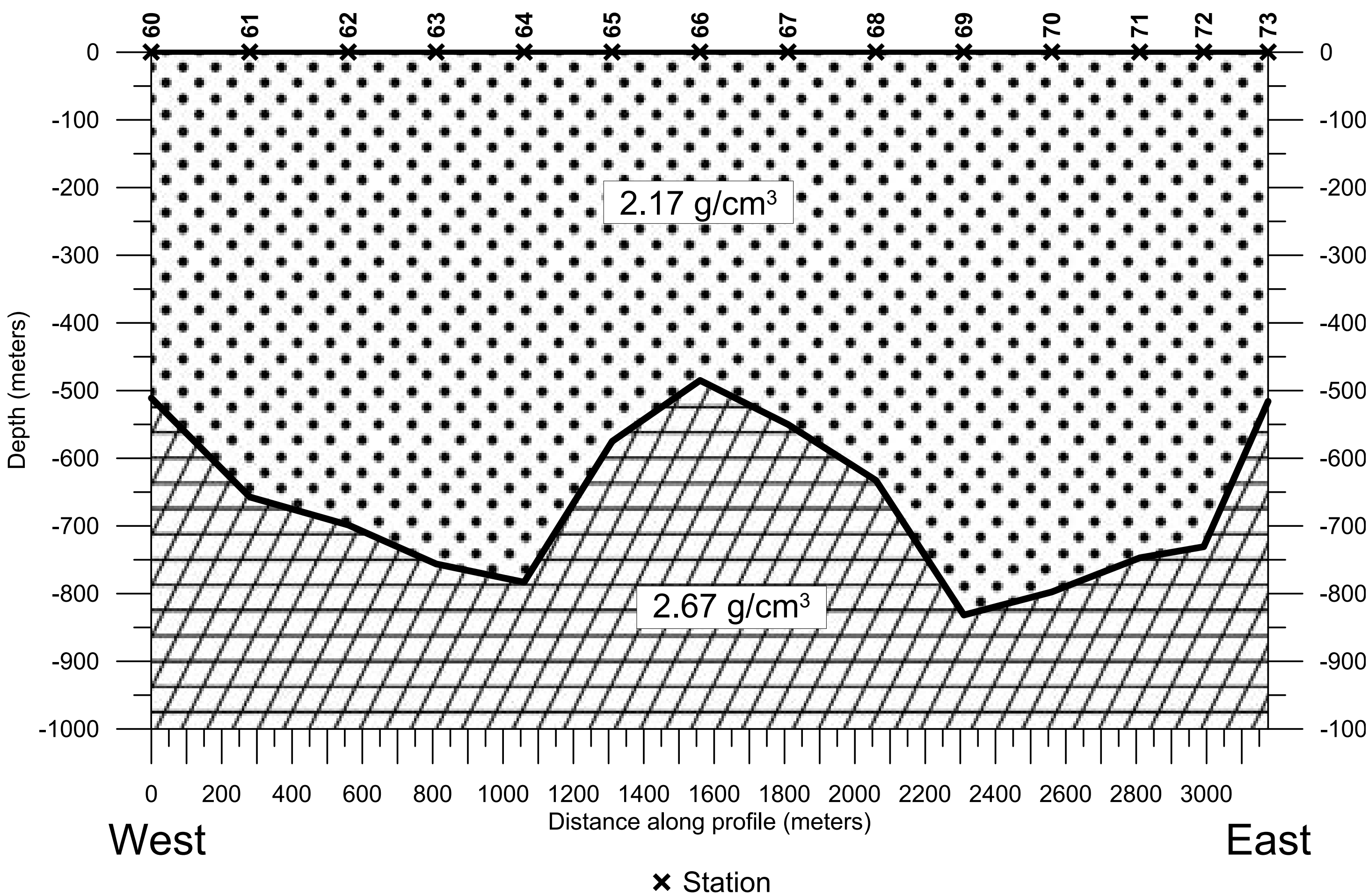
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 9 Complete Bouguer Gravity and Modeled Depth Profile



Hasbrouck Geophysics, Inc.

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 8 Complete Bouguer Gravity and Modeled Depth Profile





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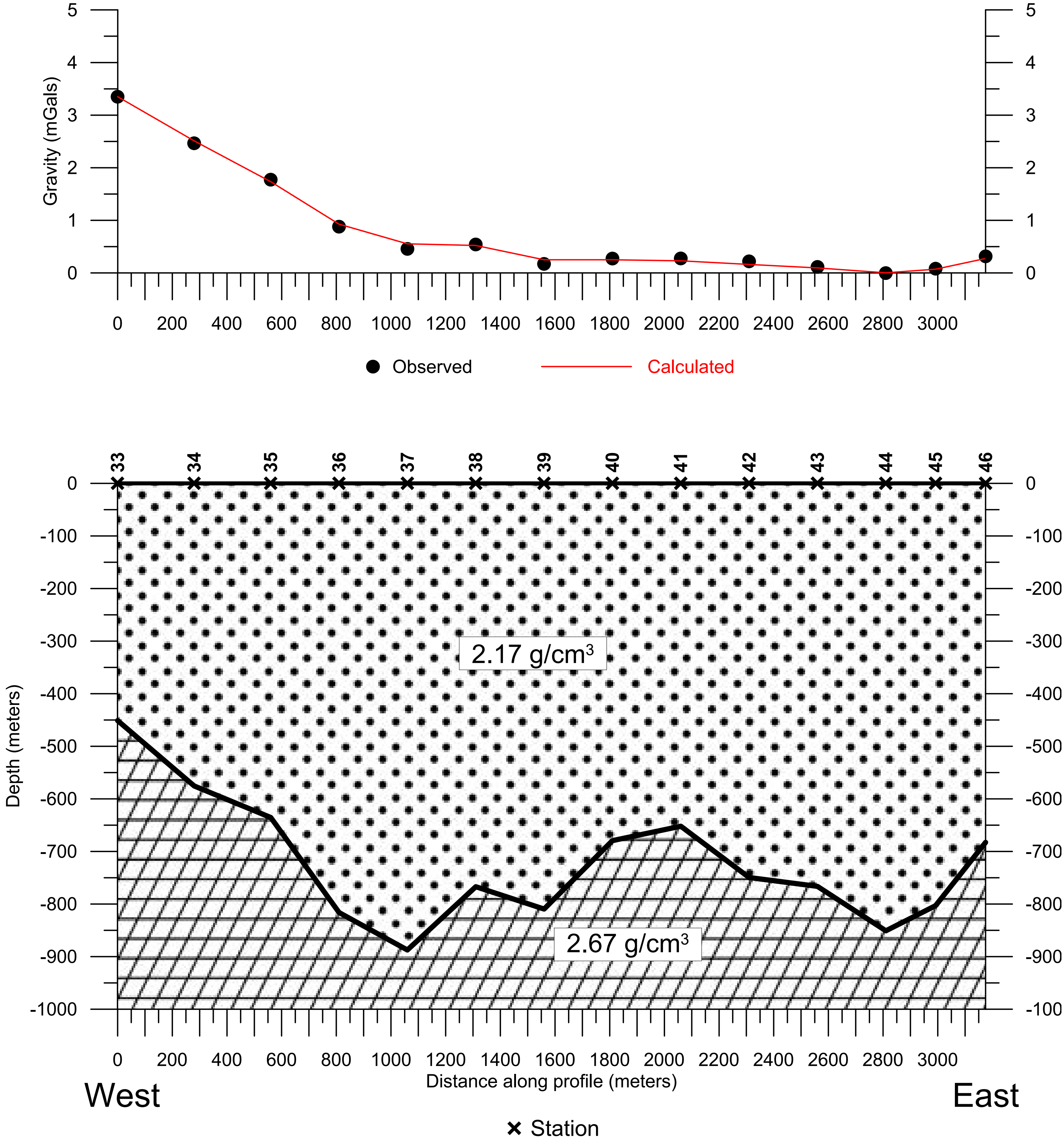
Line 6 Complete Bouguer Gravity and Modeled Depth Profile



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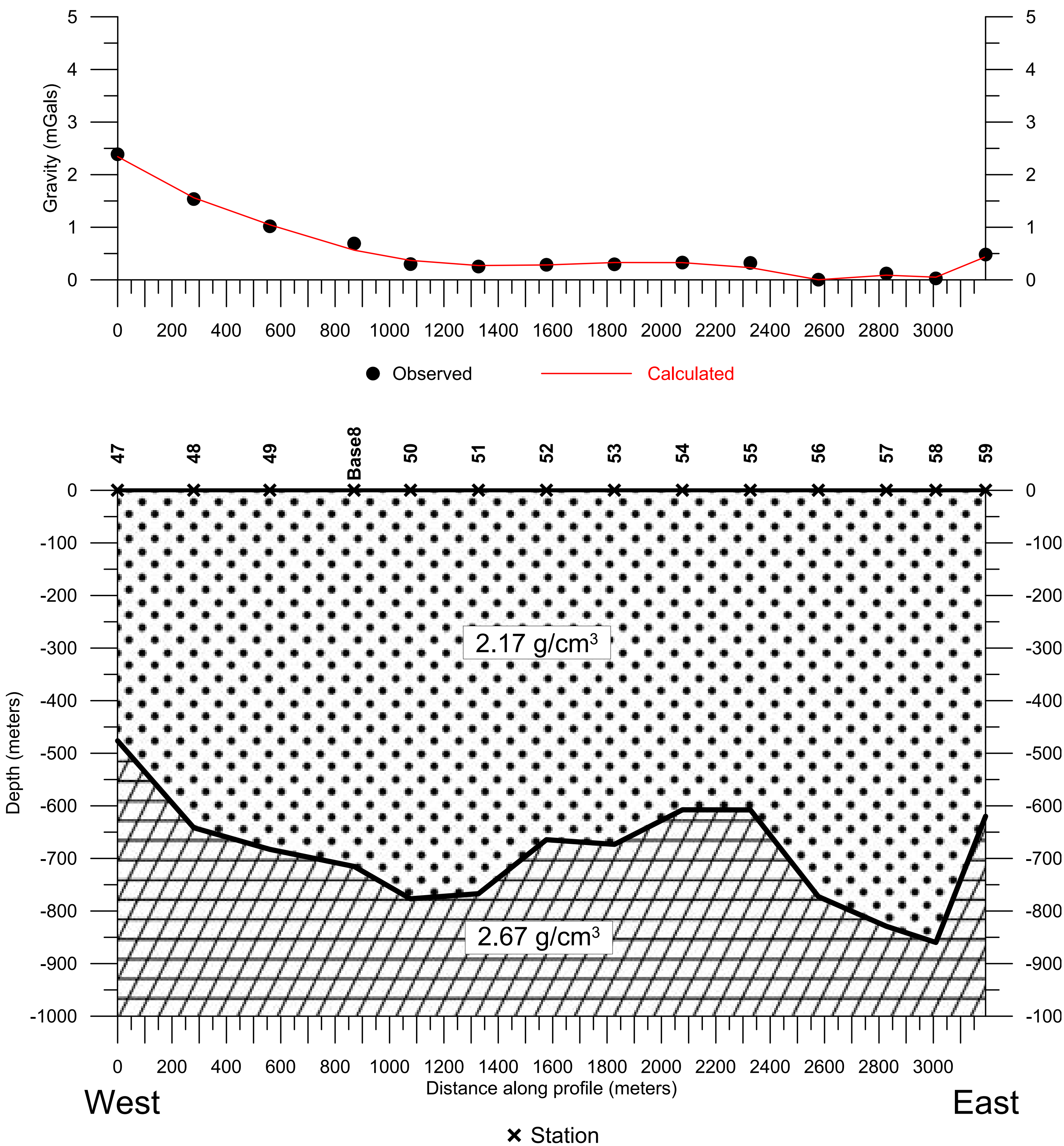
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 7 Complete Bouguer Gravity and Modeled Depth Profile



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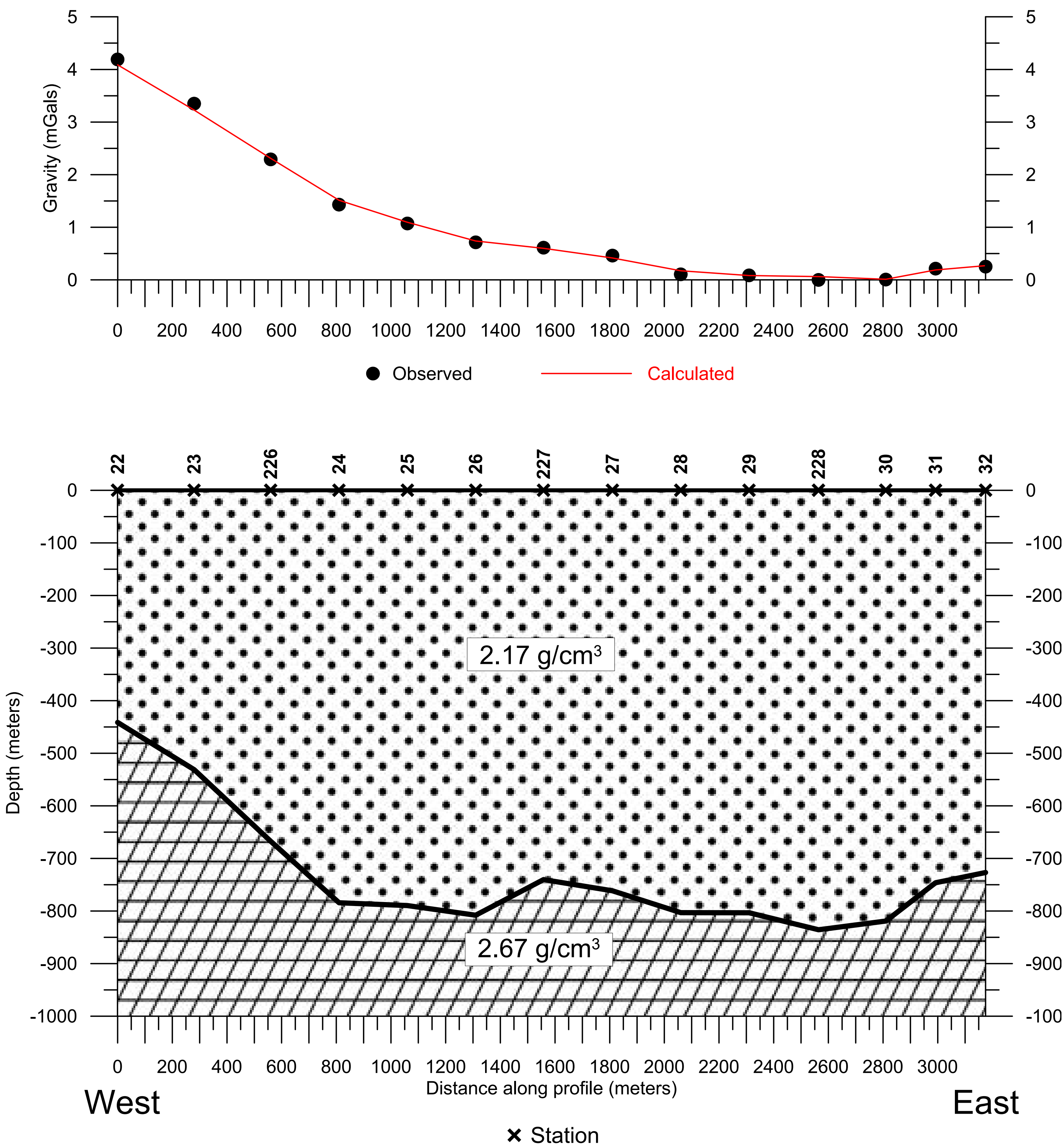
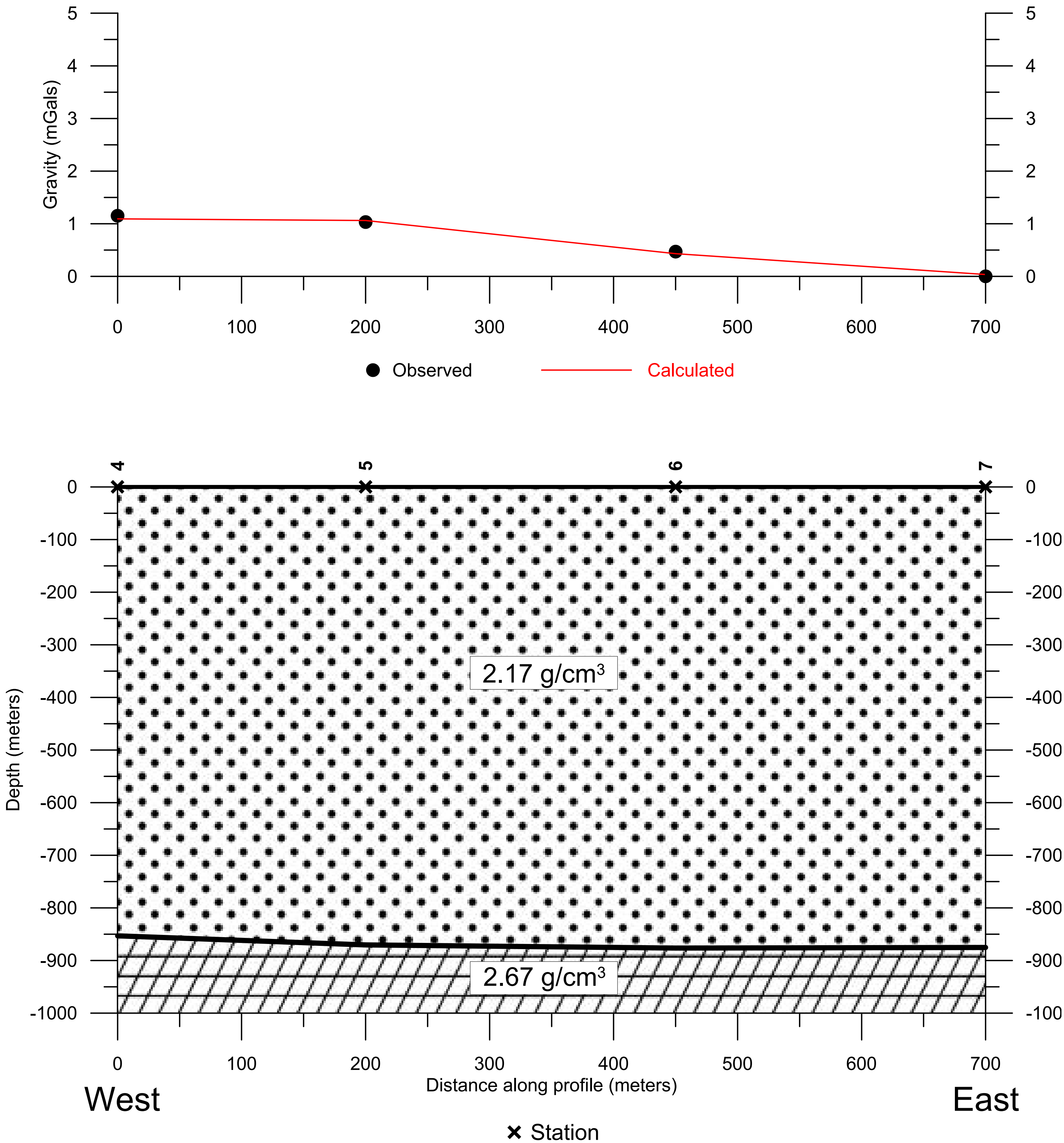
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 5 Complete Bouguer Gravity and Modeled Depth Profile



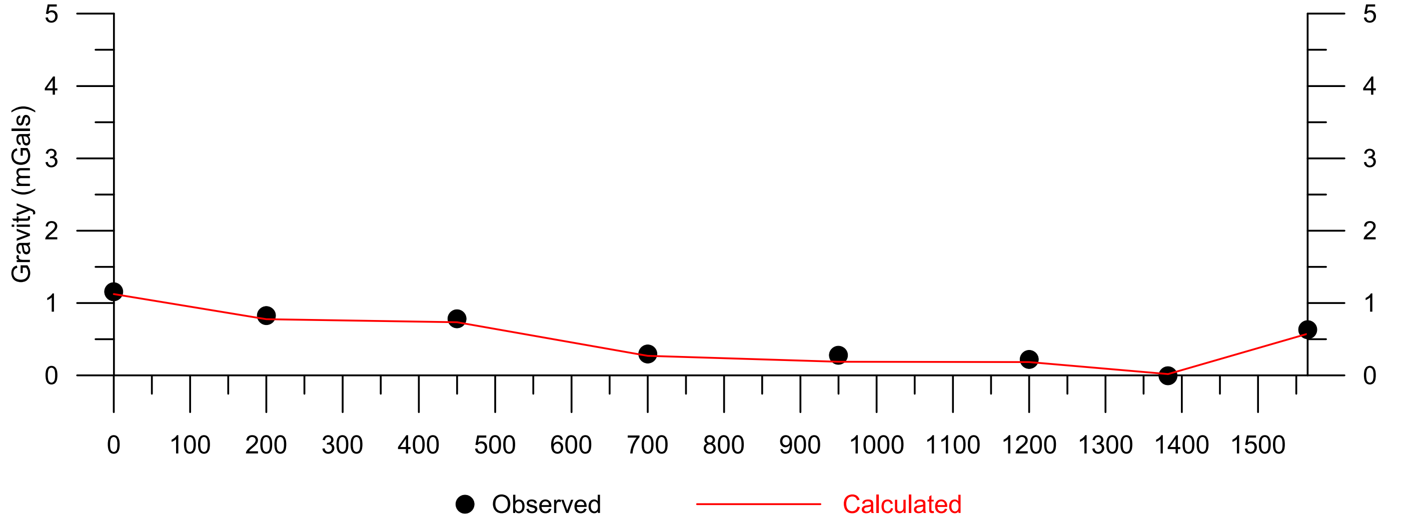
Hasbrouck Geophysics, Inc.

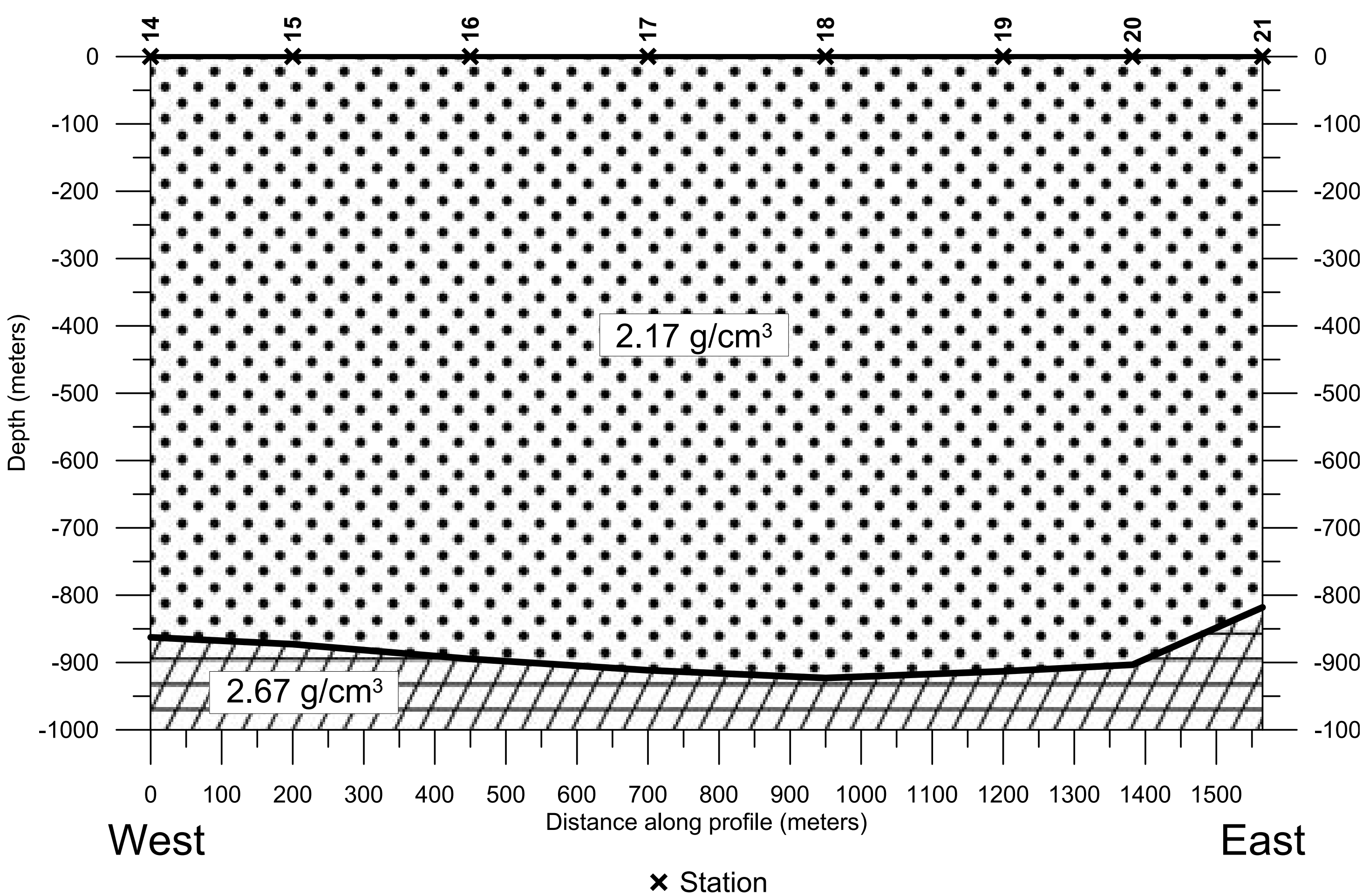
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 2 Complete Bouguer Gravity and Modeled Depth Profile



Hasbrouck Geophysics, Inc.

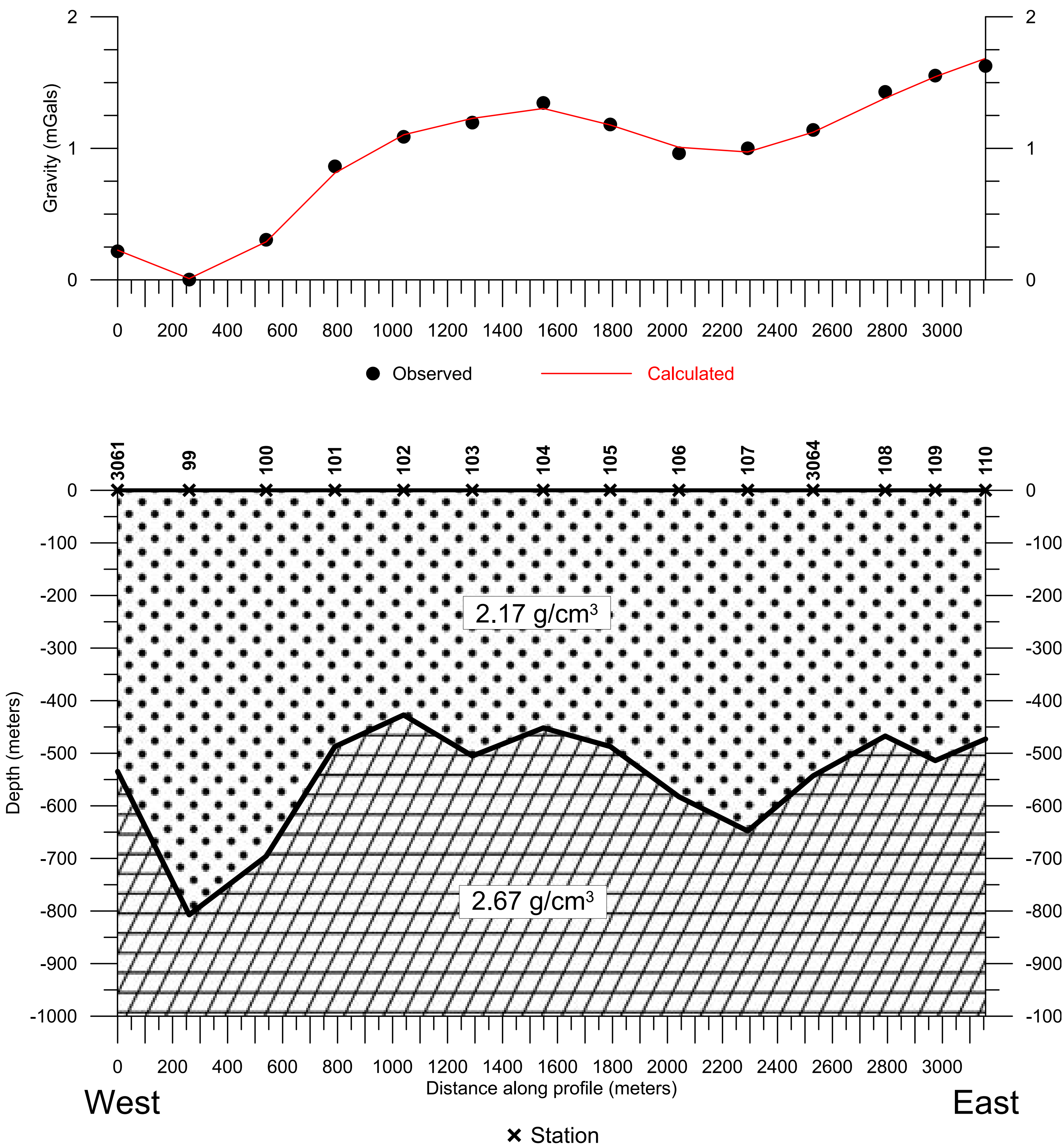
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 4 Complete Bouguer Gravity and Modeled Depth Profile





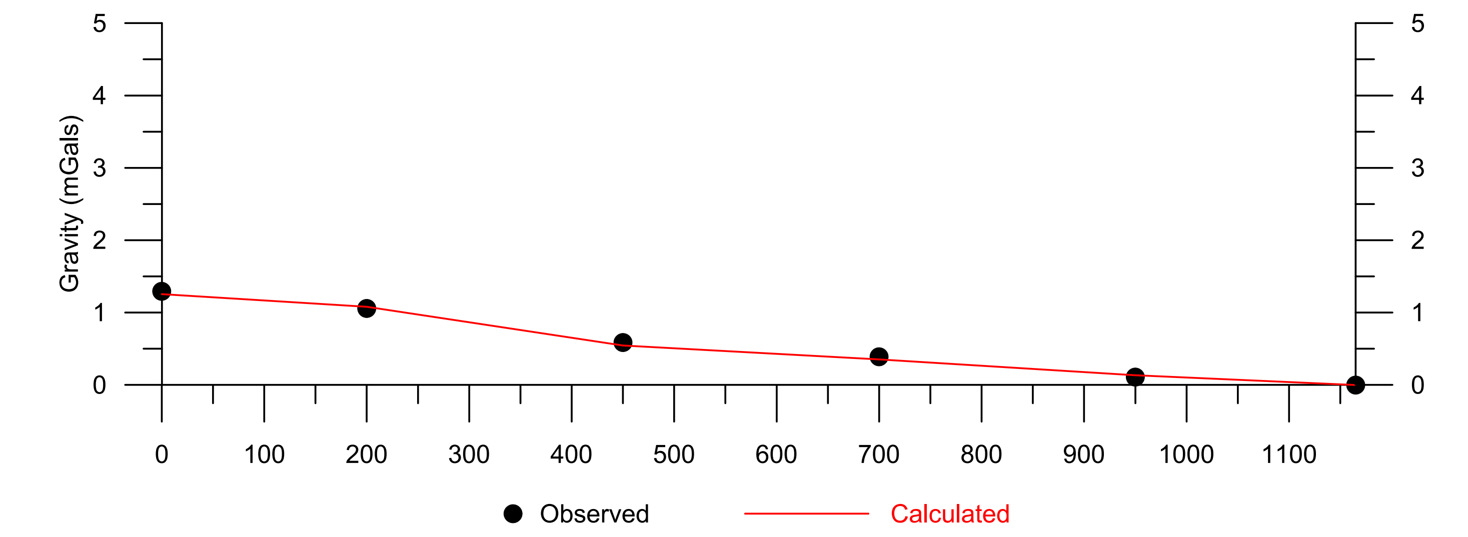
Hasbrouck Geophysics, Inc.

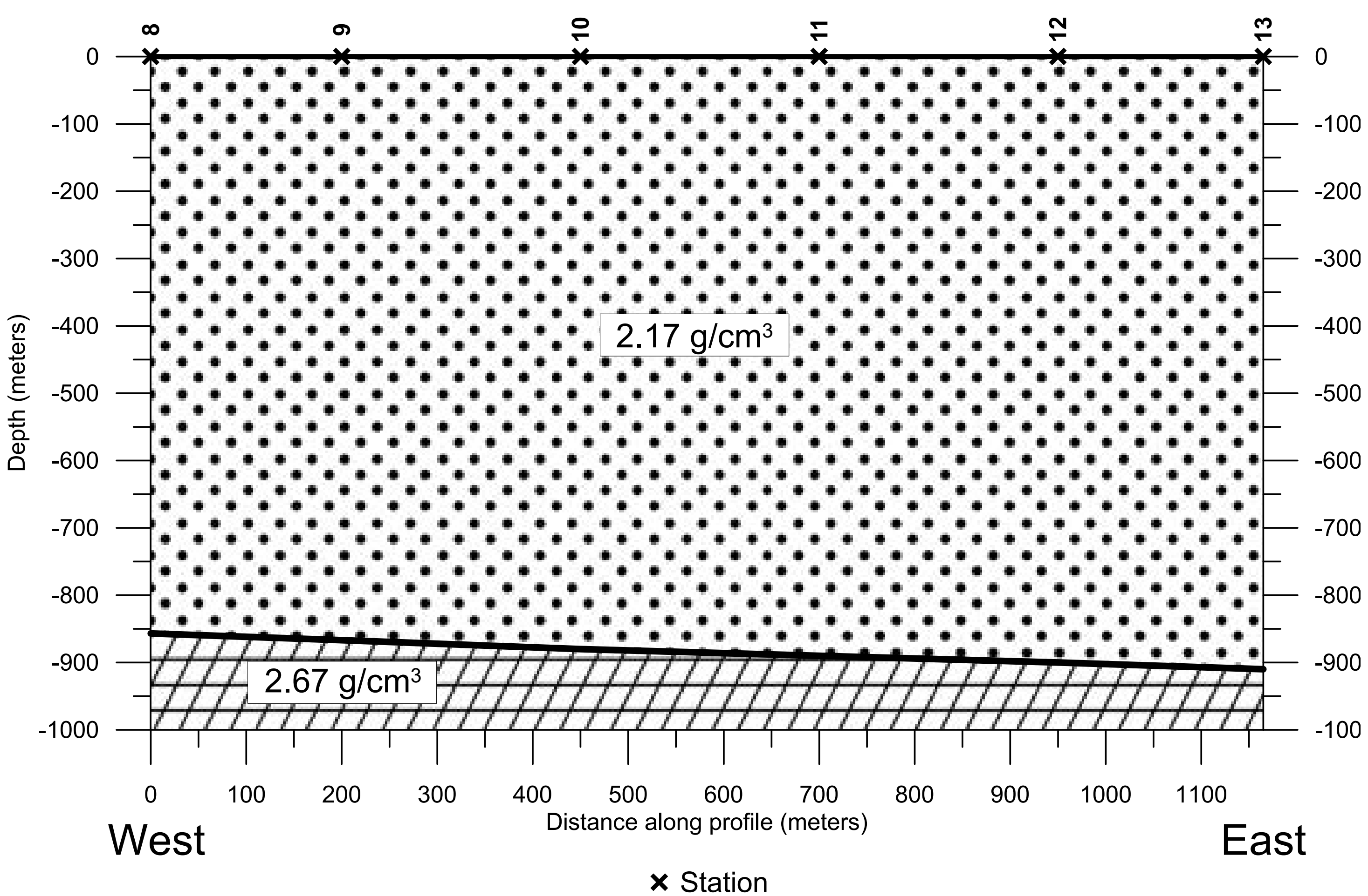
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 11 Complete Bouguer Gravity and Modeled Depth Profile



Hasbrouck Geophysics, Inc.

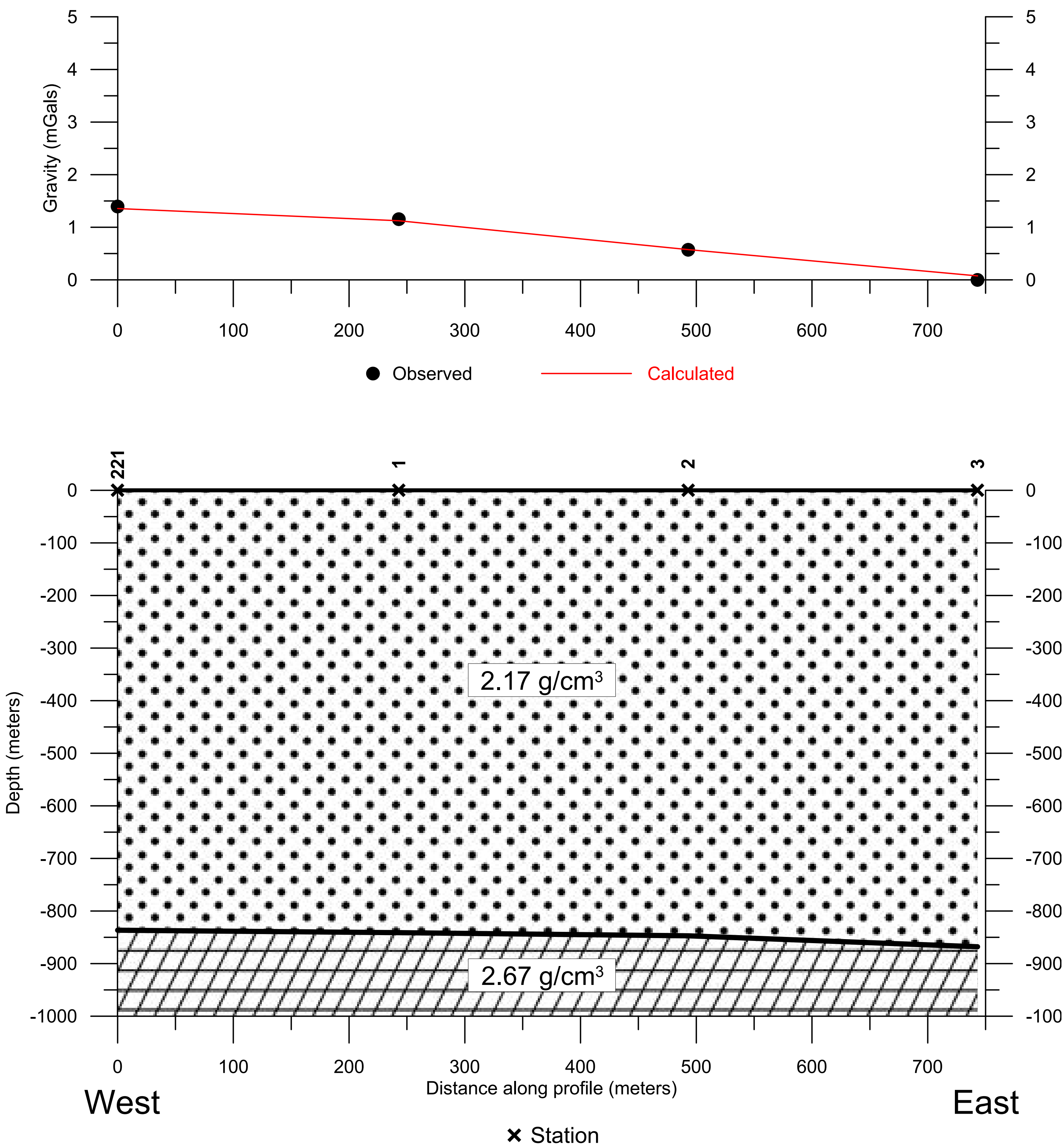
ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 3 Complete Bouguer Gravity and Modeled Depth Profile





Hasbrouck Geophysics, Inc.

ACME Lithium Inc.
CC, CCP and SX Claims, Nevada, Gravity Survey
Line 1 Complete Bouguer Gravity and Modeled Depth Profile



Hasbrouck Geophysics, Inc.

Appendix B

Stratigraphic Logs

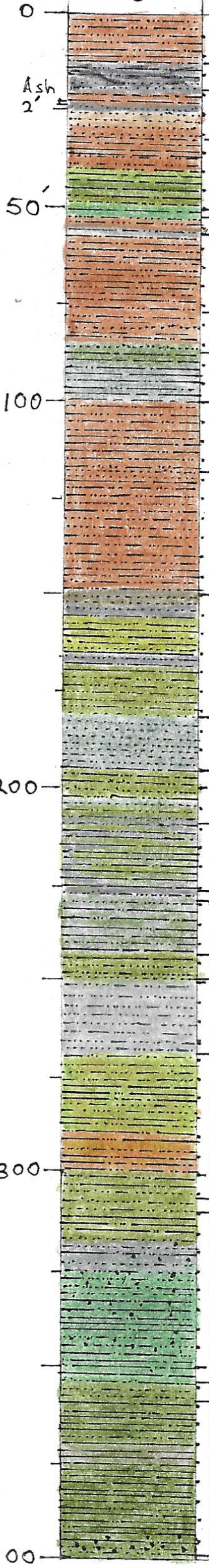
ACME Lithium Inc. Drill Hole # 1
Clayton Valley, Esmeralda Co., NV

logged by: N Barr/Laura Millan
GeoXplor Corp.

Collar elev. 4260 ft
NAD 83 448920 E
4183948 N
Lat. 37.801483 N
Long. 117.580231 W

Drilling Summary:
HQ core, start 6/2/2022
finish 6/14/2022 @ 1400' T.D.
90 deg. 8" steel casing to 204 ft.

Graphic log	Notes	Lithology	Core water infiltration test (field) wk / mod / stg	% Recovery



Notes:

- Clay with dark green-black organics +- CaCO3
- Mostly dense silty clay
- Static Water Level (high conductivity)
- Interbedded silt, fine sand, silty clay
- Dominantly silty clay
- Interbedded silt/fn-vy fn sand (70%), silty clay/clay
- Ash, well sorted (air-fall ?)
- Qtz shard silty Ash well sorted
- Silty fn sand, minor clay local 2"-6" ash interbeds
- Base of casing
- Grey-green, waxy silty clay CaCO3 as 'rip up' clasts
- Ash, silty, well sorted
- Dense grey-green waxy silty clay
- Silty, loose fn sand
- Ash, med grey, silty loose, well sorted
- Silt/fn sand, mostly loose elev ash, 20% clay interbeds
- Ash, white, soft + silt as local 'channel fill'
- Silty clay, dk grey-green 30% 1"-3' silt/fn sand beds local dissem matrix med sand
- Silt/fn sand, well sorted, loose
- Dense, dk grey-green silty clay 20% 6"-3' silty fn sand beds rare local channel scour
- Faint salt taste @ 369-400 ft
- 5-10% dissem cr matrix sand

Lithology:

0-181.5' Paleo Lake Sediments: weak to mod consolidated, roughly equal amounts of interbedded silts and fn to vy fn sand and silty-clay/clay. Deposition reflects transgression-regression of lake levels with clay rich beds representing deeper, quiet water deposits and med-pale brown silts/fn sands related to more near-shore, episodic, low gradient flood events. Individual beds ranges from sev inches to 10 ft. Silts and fn sands often fairly well sorted. Clays typically dense, waxy and shades of dark green indicating a more reducing environment. Rare thin, 1-2 ft interbeds of pale, silty, quartz shard ash. 20 % of core hosts pale, variably 'hardened' zones related to elev. CaCO3 (possibly paleo surface evaporites?).

181.5-195' Air-Fall Ash: Pale grey to off-white, quartz rich silt and fn to cr gr sand. Poorly consolidated (with poor core recovery), sharp contacts and mod-strong permeability. May occur as crude spherical 'pellets'. Interpreted as Main Ash Aquifer (MMA). Noted in literature as a Basin wide, air-fall ash marker bed and important brine producing aquifer. Zone cased off, but strong brine indicated from drilling fluid evidence and elevated conductivity readings.

249-267' Air-fall (?) Ash: Med grey to grey brown, silty, well sorted, loose, sharp contacts, homogeneous texture. Moderate water infiltration. Elevated drill water conductivity.

195-249' 267-479.5 Paleo Lake Sediments: (similar to 0-181.5). Interbedded mostly wk to mod consolidated quiet water to near shore deposited lacustrine sediments. 37% med brown, silt, silty fn sand as .2 to 10' interbeds. Mostly well sorted, loose, showing wk to mod applied core water infiltration. Elevated ash content locally common. 28% silty clay/clayey silt as 1 to 9' interbeds, brown-green to green, mostly dense. Local 2-3" silt/silty fn sand beds. 26% dense, med green, waxy streak clay +- minor silt, as .4 to 10' interbeds. 9% .5 to 3' pale silty ash and high ash content silts. Typically well sorted, loose and permeable. Interpreted as episodic flood event deposits. Local 1-4' pale, 'hardened' core sections with elevated CaCO3. Rare fn to med pebble pumice clasts. Small % disseminated matrix med-cr sand + rare fn gravel increases with depth.

Core water infiltration test (field), top to bottom: W, W, W, W, W, W-M, W, W, M, W, M, M-S, W, W, W, M, W, W-M, W-M, W, M-S, W, W, W-M, W, W

% Recovery, top to bottom: 20%, 71, 60, 77, 67, 75, 54, 60, 41, 58, 40, 43, 20, 46, 32, 70, 97, 62, 34, 88, 90, 28, 90, 90, 60, 90, 83, 38, 93, 60, 97, 85, 79, 73, 80, 92, 58, 77, 98, 80, 80, 97

ACME Lithium Inc. Drill Hole # 1
Clayton Valley, Esmeralda Co., NV

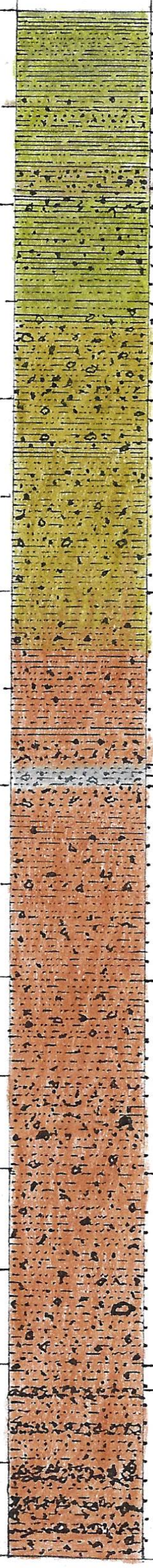
logged by: N Barr/Laura Millan
GeoXplor Corp.

Drilling Summary:
HQ core, start 6/2/2022
finish 6/14/2022 @ 1400' T.D.
90 deg. 8" steel casing to 204 ft.

Collar elev. 4260 ft
NAD 83 448920 E
4183948 N
Lat. 37.801483 N
Long. 117.580231 W

Graphic log	Notes	Lithology	Core water infiltration test (field) wk mod stg	% Recovery

Depth marks: 400, 500, 600, 700, 800



Notes:

- 77% Silty fn sand
  33% Dense, green waxy clay
- High drill water conductivity @ 425'
- 65% Dense, green silty clay
  35% Silty fn sand as 3"–3.5' interbeds
  5% Dissem cr sand/fn gravel
  Rare pebble pumice
- 65% Dense, green-brown clayey silt
  35% Silty fn sand, dissem, mixed lith fn-cr sand/fn gravel, rare pebble pumice
- 10% .5 to 5' clayey silt/fn sand interbeds and matrix clay decreasing with depth. Local zones of 5-30% matrix supported med-cr sand/fn gravel increasing. Local elevated pebble pumice.
- Ash, off-white, silty, well sorted increase of salt taste noted
- Med brown, mod to weaky consolidated, silty fn to cr sand with tr to locally 30% matrix supported, mixed lithology fn gravels. Dominantly silty with vy minor clay. Sparse sub ang pebbles up to 3/4" dia.
- 6 " angular volcanic cobble
- Increasing gravels including local .5-1' clast supported, sub-angular, very mixed lithology gravels. Locals clast up to 1" + Core mostly weakly consolidated with very minor matrix clay.

Lithology:

Trace to weak salt taste 400-594'

Paleo Lake Sediments: (cont.)

479.5 – 564' Transition from Lacustrine to Marginal Basin Fanglomerate: silt-sand-gravel deposition: Evidenced by increasing matrix fn to cr sand and fn gravels, decreasing silty clay interbeds and matrix clay, and absence of CaCO3 deposits and quiet water, green, dense, 'waxy' clays. Core less consolidated, with color change from green/green-brown to mostly med brown. Fanglomerates interpreted to have been deposited on gentle to moderate flank-of-basin slopes at a time when differential basin subsidence saw low point of lacustrine deposition centered in a more distal location.

479.5 - 1185'
1250 – 1400' TD

Marginal Basin Fanglomerates: Interpreted to have been deposited at edge or peripheral to basin-fill, fine lacustrine sediments. Wide variety of gravel clast lithology supports accumulation of stacked, overlapping fanglomerate flood deposits from multiple source areas. Deposition gradient of older deposits clearly steeper and more energetic than up section. Upper fanglomerates typically composed of silt-rich, fn to med sand, minor clay, and local matrix supported fn gravels. Down section, angularity, percent and size of gravel increases, and fines decrease. Deeper gravels also expose imbricated textures indicating more high-energy deposition. Drilling typically more difficult in deeper, more friable coarse gravels. Trace to wk, locally strong brine taste evidence detected in 60-70% of fanglomerates. Nearly all fanglomerates exhibit some degree of permeability based on core water infiltration testing.

Core water infiltration test (field) / % Recovery:

Infiltration	% Recovery
W	86%
	80
M / W	80
	99
W-M	100
W	90
	100
W	59
W	88
W	90
	65
W	100
W	99
W	39
W	43
W	100
	80
W-M	87
M	93
S	95
W local M	98
	100
	96
	78
	70
	96
	100
	97
	98
	100
	58
	28
	38
	45
	100
	94
	100
	100
	100
	98

ACME Lithium Inc. Drill Hole # 1
Clayton Valley, Esmeralda Co., NV

logged by: N Barr/Laura Millan
GeoXplor Corp.

Collar elev. 4260 ft
NAD 83 448920 E
4183948 N
Lat. 37.801483 N
Long. 117.580231 W

Drilling Summary:
HQ core, start 6/2/2022
finish 6/14/2022 @ 1400' T.D.
90 deg. 8" steel casing to 204 ft.

Depth	Graphic log	Notes	Lithology	Core water infiltration test (field) wk / mod / stg	% Recovery
800'			Marginal Basin Fanglomerates: (cont.)		

800–1010' — Med brown, weakly consolidated silty fn to cr sand with 5 to 40% very mixed lithology, fn to cr, matrix supported pebble gravels. Increasing clast supported gravels. Rare 3-4" cobbles.

~1000' — Strong salt crust on drying core. Elevated drill fluid conductivity @ 999'

~1020–1065' — Loose, cr to vy cr pebble gravels (poor recovery)

~1055–1185' — Mostly mod to strong brine evidence noted on drying core.

1065–1185' — Greenish to med brown, weakly consolidated to loose, 40-50%, very mixed color lithology, silty sand fn to cr gravels. Mix of matrix and clast supported gravel. Increasing 6 to 18" intervals of crudely imbricated, ¼ to 1.5" ang pebble horizons.

1185 – 1250' Tuff Breccia: (air fall)

Core water infiltration test (field):
- ~800–835': M-W
- ~835–1000': W, local M
- 1000–1185': M
- 1185–1200': W, local M

% Recovery (10 ft intervals, 800' to 1200'):

100%	100	98	100	100	99	100	100	97	100
100	100	96	100	92	55	40	100	100	98
80	92	7	0	75	65	25	81	73	64
60	23	89	75	54	83	100	96	91	80

Depth marks: 800' · 900 · 1000 · 1100 · 1200'

ACME Lithium Inc. Drill Hole # 1
Clayton Valley, Esmeralda Co., NV

logged by: N Barr/Laura Millan
GeoXplor Corp.

Drilling Summary:
HQ core, start 6/2/2022
finish 6/14/2022 @ 1400' T.D.
90 deg. 8" steel casing to 204 ft.

Collar elev. 4260 ft
NAD 83 448920 E
4183948 N
Lat. 37.801483 N
Long. 117.580231 W

Graphic log	Notes	Lithology	Core water infiltration test (field) wk / mod / stg	% Recovery

1200'

1185 – 1250' **Tuff Breccia:** (air fall)
Pale brown-grey to mostly pale grey/off-white, silty qtz shard Ash. Sharp contacts with Fanglomerate. Very homogeneous texture. Yields to moderate thumb pressure. 5 to 15% disseminated, pale cr sand to fn pebble pumice clasts and lessor, dark, cr sand to vy fn pebble mixed volcanic clasts. Weak to locally moderate applied water infiltration. Faint detectable brine.

Core water infiltration test: W local m

Elevated drill water conductivity

Marginal Basin Fanglomerates: (cont.)

Med brown, weak to local mod consolidated silty, fn to cr sand matrix with 40–70%, mostly clast supported, fn to vy cr angular gravels. Very mixed lithology. Local elevated clay in matrix. Scattered 2.5 – 6" cobbles, rare obsidian. Graded bedding noted at base of hole. Mostly faint to weak detectable salt.

Core water infiltration test: W local M

1300

Strong brine evidence in core

1400' T.D.

% Recovery: 100%, 100, 100, 100, 95, 88, 100, 99, 62, 97, 76, 96, 93, 90, 110, 93, 100, 99, 100, 100

Author's Note:
As part of logging, and following cleaning of surficial drilling fluid residue, water was systematically applied to the core surface. Rate of infiltration was visually gauged and rated weak to strong. Results do generally support that infiltration rate can often directly relate to the degree of sediment grain size sorting. Well sorted, or equal grain size material, can have significant open or void space between individual clasts. In addition and related to lack of very fine grain material acting as a 'binder', well sorted sediments will often be poorly consolidated and easily yield to applied thumb pressure. Weak to locally moderate infiltration associated with the very poorly sorted fanglomerates, appears related to the mostly absent clay size fraction within the silty sand matrix. It is intended that test results may serve to help identify permeable brine aquifer zones.

ACME Lithium Inc
DH 1A, Clayton Valley, Esmerelda County, NV

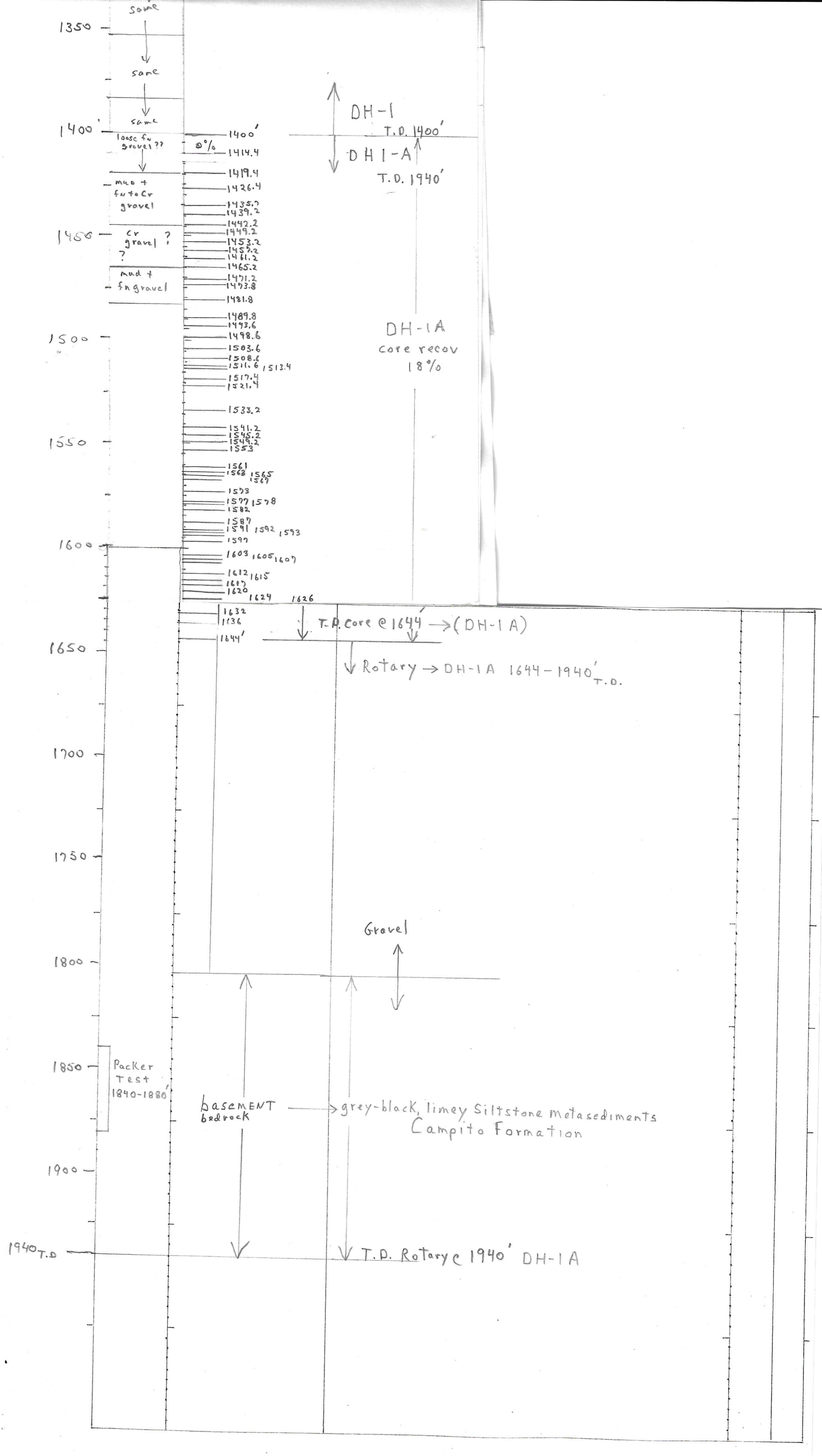
Logged by: N Barr/L Millan
GeoXplor Corp

Date	Depth (ft)	Label	Lithology
2/27/2023	1400		NR
2/27/2023	1405		NR
2/27/2023	1410		NR
2/27/2023	1414	medium gravels	Ground up gravels, very little to no matrix, seems flushed out or washed- angular pea gravel. Mixed lithology meta sediments. Reacts to HCl, likely sluff from rotary uphole.
2/27/2023	1419	clayey fine matrix w coarse	medium brown med fine to coarse gravels in clayey matrix. Very poorly sorted, coarse angular gravels. Holds worm shape weakly No salty taste. Pale orange oxide within the fine matrix and very fine ash fragments.
2/27/2023	1426	clayey fine matrix w coarse	" " locally elevated clay
2/27/2023	1431	fine to coarse gravels in clayey matrix	medium brown med fine to coarse gravels in sandy/clayey matrix. Very poorly sorted, coarse angular gravels. Holds worm shape weakly No salty taste,
2/27/2023	1436	clayey fine matrix w coarse	medium brown med fine to coarse gravels in sandy/clayey matrix. Very poorly sorted, coarse angular gravels. Holds worm shape weakly, faint salt taste,
2/28/2023	1439	clayey fine matrix w coarse gravels	Med brown silty clayey matrix supported gravels. holds worm shape, Poorly sorted, fine sand through pebble size. Rare cobbles. Clasts are angular to sub rounded. Weak infiltration. Black carbonate clasts abundandant.
	1444	coarse gravels	Med brown silty clayey matrix supported gravels- coarser gravels 1-3". holds worm shape, Poorly sorted, fine sand through pebble size. Rare cobbles. Clasts are angular to sub rounded. Weak infiltration
	1449	Fine to coarse gravels in	""
	1453	Fine to coarse gravels in	""
	1457	Fine to coarse gravels in	""
	1461	Fine to coarse gravels in	""

1465	Fine to coarse gravels in	""
1471	Fine to coarse gravels in	""
1474	Fine to coarse gravels in	""
1482		1480- chunk of halite? Calcite? In clayey matrix and black host rock. Reacts to HCl 1488- Cemented 'breccia?' Calcite matrix- hard rock, reacts to HCl,
1490		NR
1494		NR
1499	Fine to coarse gravels in	Med brown silty clayey matrix supported gravels- coarser gravels 1-3". holds worm shape, Poorly sorted, fine sand through pebble size. Rare cobbles. Clasts are angular to sub rounded. Reacts to HCl
1504	Fine to coarse gravels in	""
1509	Fine to coarse gravels in	""
1512		NR
1513	Fine to coarse gravels in	Med brown clayey matrix supported gravels- coarser gravels 2-4". holds worm shape, Poorly sorted, fine sand through pebble size. Cobbles more abundant. Clasts are angular to sub rounded.
1517	coarse gravels	dark calcium carbonates, reacts to HCl, little clayey matrix
1521	coarse gravels	""
1533	coarse gravels	""
1541	coarse gravels	""
1545	fine to coarse gravels	dark calcium carbonates & mixed lithology fine to coarse gravels, reacts to HCl, more abundant clayey matrix
1549	fine to coarse gravels	dark calcium carbonates & mixed lithology fine to coarse gravels, reacts to HCl, more abundant clayey matrix, signs of interbedding among finer gravels

1553	fine to coarse gravels	""- slickenlines -appears to be mineral sheen on slickenlines- could just be clay sheen
1561	fine to coarse gravels	""
1563	fine to coarse gravels	"" , slickenlines present
1565	fine to coarse gravels	""
1567	fine to coarse gravels	""
1573	fine to coarse gravels	""
1577	fine to coarse gravels	Chunk recovered of calcite? Marble? Hard rock, reacts to HCl,
1578	fine to coarse gravels	dark calcium carbonates & mixed lithology fine to coarse gravels, reacts to HCl, more abundant clayey matrix, signs of interbedding among finer gravels, Slickenlines present
1582	fine to coarse gravels	""
1587	fine to coarse gravels	1586-1587- more fine to coarse sand and minor fine fraction. Possible signs of weakly imbrecated bedding. Channel fill? Darker brown.
1591	Minor fine gravels and coarse sand	Minor fine gravels in more clay dominant matrix, medium brown,
1592	Minor fine gravels and coarse sand	""
1593	Minor fine gravels and coarse sand	"" Slickenlines present
1597	Minor fine gravels and coarse sand	""
1603	Minor fine gravels and coarse sand	""
1605	Minor fine gravels and coarse sand	""
1607	Minor fine gravels and coarse sand	noted weak graded bedding in some spots- on a 45 degree angle to core. Sand to Pea pebble size clasts in bedding planes. Local elevated coarse pebbles

1612	Minor fine gravels and coarse sand	""
1615	Minor fine gravels and coarse sand	Slickenlines
1617	Minor fine gravels and coarse sand	""
1620	Minor fine gravels and coarse sand	""
1624	Minor fine gravels and coarse sand	""
1626	fine to coarse gravels in clayey matrix	Chunk recovered of calcite? Marble? Hard rock, reacts to HCl.
1632	fine to coarse gravels in clayey matrix	Med brown, 40-50% fine to coarse gravels in clayey matrix. Local clay slip sheen visible. Coarse gravels are dominantly dark carbonates & mixed lith. Pale oxidation on the fine ash fragments.
1636	fine to coarse gravels in clayey matrix	
1644	fine to coarse gravels in clayey matrix	



same
1350
same
same
1400'
DH-1
T.D. 1400'
loose fn gravel??
0%
1400'
1414.4
DH1-A
T.D. 1940'
1419.4
mud + fn to cr gravel
1426.4
1435.2
1439.2
1442.2
1449.2
1450
cr gravel ? ?
1453.2
1457.2
1461.2
1465.2
mud + fn gravel
1471.2
1473.8
1481.8
1489.8
1493.6
1498.6
1500
DH-1A
core recov
18%
1503.6
1508.6
1511.6
1513.4
1517.4
1521.4
1533.2
1541.2
1545.2
1549.2
1550
1553
1561
1563
1565
1567
1573
1577
1578
1582
1587
1591
1592
1593
1597
1600
1603
1605
1607
1612
1615
1617
1620
1624
1626
1632
1636
1644'
T.D. Core @ 1644' → (DH-1A)
1650
Rotary → DH-1A 1644-1940' T.D.
1700
1750
Gravel
1800
1850
Packer Test 1840-1880'
basement bedrock
→ grey-black, limey Siltstone metasediments
Campito Formation
1900
1940 T.D
T.D. Rotary @ 1940' DH-1A

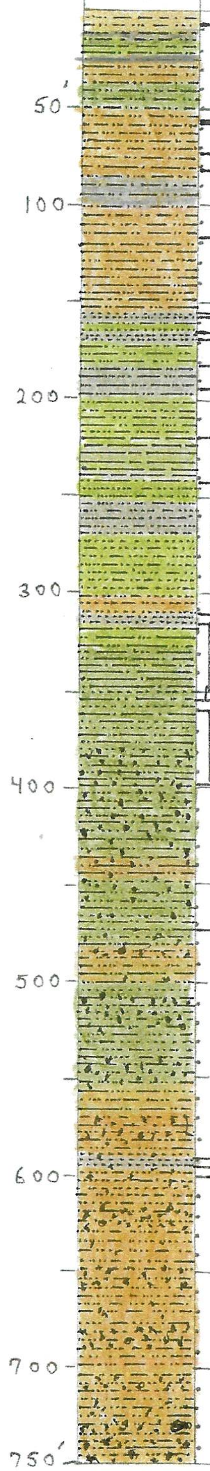
ACME Lithium Inc. Drill Hole (Test Well) TW-1
Clayton Valley, Esmeralda County, Nevada

logged by: Laura Millan/Nick Barr
GeoXplor Corp.

Drilling Summary:
16" casing 0-266'
7 7/8" tri-cone 'pilot' hole 290-1820'
14 ¾" tri-cone rotary to 1824'
7" well casing 0-1824'
(perforated casing set 1300 to 1800')

Collar elev. 4260'
(NAD 83) 448927 E
4183979 N
Vertical, 1824' total depth
Start 4/9/2023, Finish 5/23/2023
Finish Well Construction 6/3/2023

Graphic log	Notes	Lithology



Notes:

- Dense silty-clay
- Static water level
- Mostly silty-clay
- Local, well-sorted ash beds
- Drillers note lost circulation zones at 0-263'
- Dense, grey-green 'waxy' clay
- Loose, silt-fn sand, elevated ash
- Ash
- Dense silty-clays, 20-30%, 1" to 3' fn sand interbeds
- Increasing matrix supported cr sand and fn gravel. Local pebble pumice.
- Off-white, silty, well-sorted ash
- Med brown, weakly consolidated silty fn to cr sand + local 30% matrix supported fn gravels. Very minor clay. Sparse sub angular pebbles up to ¾".
- Local 6" angular volcanic cobble

Lithology:

0 – 181.5' Lake Sediments:
.2 to 10' interbeds of fn sand/silt/silty-clay, clay. Silts, sands often well sorted. Clays typically dark green, dense, 'waxy'. Rare 1 to 2' thick, fine qtz shard, ash interbeds. Local elevated CaCO3.

181.5 – 195' Air-fall Ash:
Off-white, poorly consolidated, silt to fn sand, quartz rich ash. Sharp contacts, permeable.

249-267' Air-fall (?) Ash:
Med grey-brown, silty, well-sorted, permeable, sharp contacts.

195-249' Lake Sediments: (Similar to 0-181.5')
267-479' Wk to mod consolidated with roughly equal proportions of .2 to 10' thick beds of fn sand silt, silty-clay, clay. Elevated ash content common. Silts/fn sands mostly well-sorted, loose. Clays, silty-clays mostly green-brown with 'waxy' streak. Local elevated CaCO3. Approx. 10% .5 to 3' pale, silty-ash interbeds. Small % disseminated cr sand and rare fine gravel increases with depth.

479-564' Transition from Lacustrine to Marginal Basin Fanglomerates:
Increasing matrix fn to cr sand and fn gravels. Decreasing silty-clay interbeds and matrix clay. Dense, green 'waxy' clays absent. Color change from green-brown to med brown. Angularity and mix of clast lithologies also gradually increasing.

Marginal Basin Fanglomerates:
(continue to contact with basement). Interpreted as stacked, overlapping flood deposits from multiple source areas. % and clast size of gravels increases with depth. Exhibits weak to locally moderate permeability.

100' – 200 – 300 – 400 – 500 – 600 – 700

ACME Lithium Inc. Drill Hole (Test Well) TW-1
Clayton Valley, Esmeralda County, Nevada

logged by: Laura Millan/Nick Barr
GeoXplor Corp.

Drilling Summary:
16" casing 0-266'
7 7/8" tri-cone 'pilot' hole 290-1820'
14 ¾" tri-cone rotary to 1824'
7" well casing 0-1824'
(perforated casing set 1300 to 1800')

Collar elev. 4260'
(NAD 83) 448927 E
4183979 N
Vertical, 1824' total depth
Start 4/9/2023, Finish 5/23/2023
Finish Well Construction 6/3/2023

Graphic log	Notes	Lithology
800'	Lost circulation at 801' Local elevated permeability Increasing % gravels with transition from matrix to clast supported. Sub-angular, mixed lithology clasts up to 1" +. Weakly consolidated with very minor matrix clay.	479.5 - 1185', 1250 – 1804' Marginal Basin Fanglomerates: Upper section fanglomerates typically silt-rich, fn to med sand, minor clay and local matrix supported fn gravels. Steeper gradient, more high-energy deposition evident down section where gravels are coarser, more angular and clast supported. Imbricated textures more common with depth. Down section coarse gravel sections typically more friable.
900		900
1000	Increase in loose, cr to vy cr pebble gravels. Poor recovery. Rare 3-4" cobbles. Elevated permeability 995-1185"	1000
1100	Med brown, weakly consolidated to loose zones of 40-50% fn to cr gravels and silty sand. Mix of matrix and clast supported gravels. Increasing 6 to 18" horizons of crudely imbricated ¼ to 1.5" pebbles. Mostly moderate permeability.	1100 1185-1250' Tuff Breccia: (air-fall) Pale brown-grey to pale grey/off-white, silty qtz shard ash. Sharp contacts with fanglomerate. Very homogeneous texture. Yields to moderate thumb pressure. 5 to 15% disseminated pale cr sand to fn pebble pumice clasts + lessor dark fn pebble volcanic clasts. Weak to locally moderate permeability.
1200		1200
1300	Med brown, weak to locally mod consolidated silty, fn to cr sand matrix. 40-70%, mostly clast supported fn to vy cr angular gravels. Very mixed lithology. Minor, local elevated clay in matrix. Sparse 2.5 to 6" cobbles. Rare obsidian. Local graded bedding at 1390-1400'	1300 1250 – 1804' Marginal Basin Fanglomerates: (continued) Approx. 1440-1595', increase in gravel matrix clay noted. Sub-angular to angular gravel clasts mostly 1-3". Rare 4"+ cobbles. Strong HCL reaction indicates elevated $CaCO_3$ throughout fanglomerates. Gravel lithology dominated by meta-sediments/mixed volcanics with lessor intrusives. Local fault-slip slickensides noted below about 1560'. Coarse gravels show increase in silty, grey-black meta-carbonates below about 1625'.
1400		1400
1500'		1500'

ACME Lithium Inc. Drill Hole (Test Well) TW-1
Clayton Valley, Esmeralda County, Nevada

logged by: Laura Millan/Nick Barr
GeoXplor Corp.

Drilling Summary:
16" casing 0-266'
7 7/8" tri-cone 'pilot' hole 290-1820'
14 ¾" tri-cone rotary to 1824'
7" well casing 0-1824'
(perforated casing set 1300 to 1800')

Collar elev. 4260'
(NAD 83) 448927 E
4183979 N
Vertical, 1824' total depth
Start 4/9/2023, Finish 5/23/2023
Finish Well Construction 6/3/2023

Depth	Graphic log	Notes	Lithology
1500			
1550'		Elevated matrix clay.	1250 – 1804' Marginal Basin Fanglomerates: (continued) Sub-angular to angular 1-3" very mixed lithology gravels. Rare 4 to 6" cobbles. Variable clay content in mostly silty, fn sand matrix. Gravels locally poorly consolidated as noted by increased drilling torque.
1600		Local 'channel fill' evidence. Local graded bedding at 45 deg angle.	
1700		Drillers report 'tight' sections due to abundant loose gravel	
		Local loose gravels. Groundwater influx diluting drilling fluids.	
1800			1804' Contact with playa basement. Bedrock lithology composed of grey-black, fracture-healed, silty meta-carbonates assigned to the Campito Formation. Basement in sharp contact with overlying basin sediments. Driller noted loose gravels mark bedrock/basin fill contact.
1824' T.D.			

(Sources of information for TW-1 hole log)

Interpretation of geology for TW-1 utilized rotary tri-cone cuttings and detailed notes provided by drillers. Drill holes DH-1 and twin hole DH-1A, positioned approximately 33m south-southwest of TW-1, generated core samples to a depth of 1644'. For geologic detail purposes, and due to very close proximity of the three holes, the authors assumed characteristics of DH-1, DH-1A & TW-1 should be very similar. Given that, core logging details from DH-1 & DH-1A were projected onto the TW-1 log.

Appendix C

Core and Chip Trey Photos (DH-1 and DH-1A)

DH-1

0 to 21 feet

21 to 39 feet

39 to 49 feet

49 to 61.5 feet

61.5 to 80 feet

80 to 99 feet

DH-1

99 to 120 feet

120 to 149 feet

149 to 162 feet

162 to 172 feet

172 to 191 feet

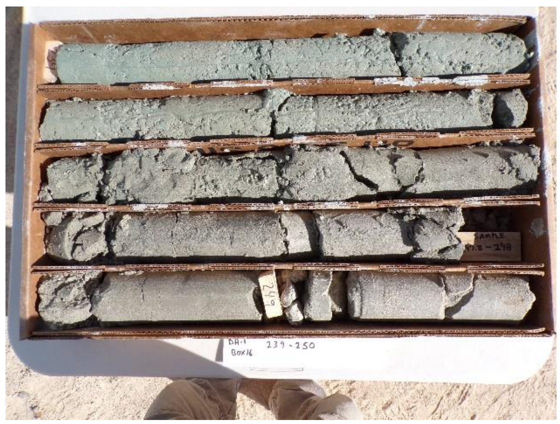
191 to 199 feet

DH-1

199 to 213 feet

213 to 224 feet

224 to 239 feet



239 to 250 feet

250 to 267 feet

267 to 281 feet

DH-1

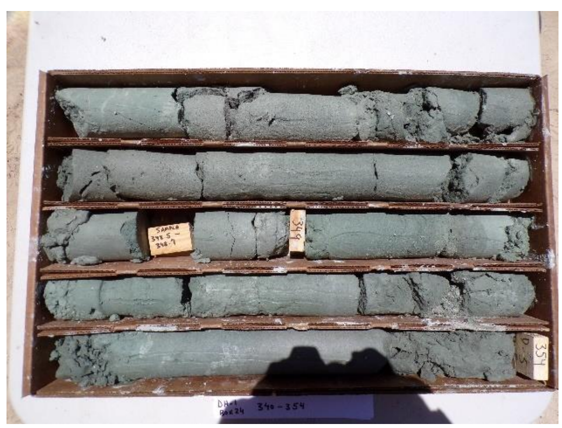
281 to 291 feet

291 to 302.5 feet

302.5 to 316 feet

316 to 329 feet

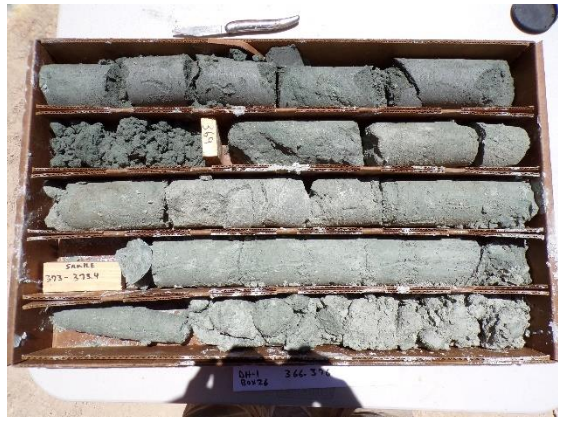
329 to 340 feet



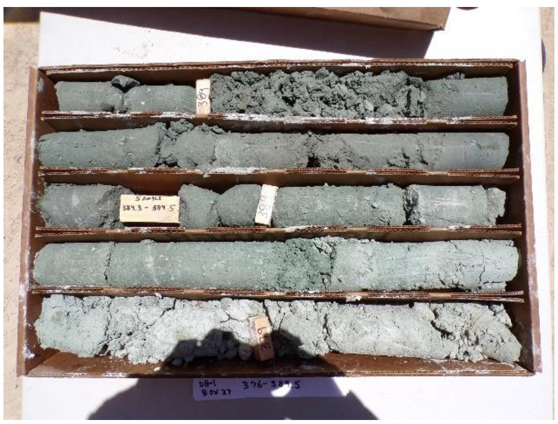
340 to 354 feet

DH-1

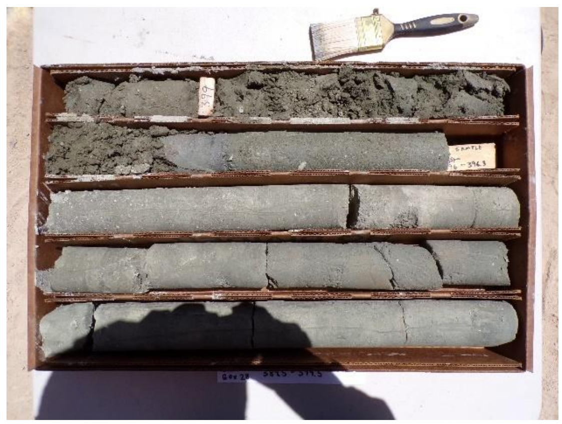
354 to 366 feet



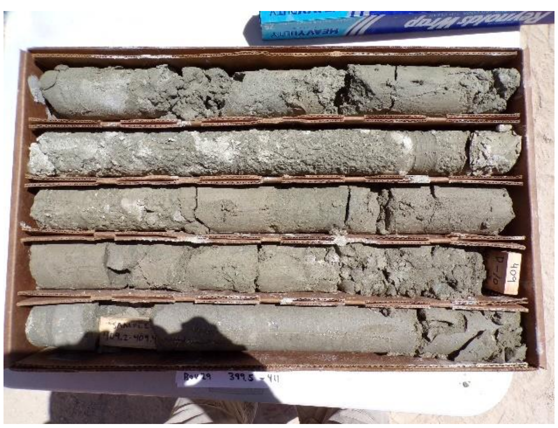
366 to 376 feet



376 to 389.5 feet



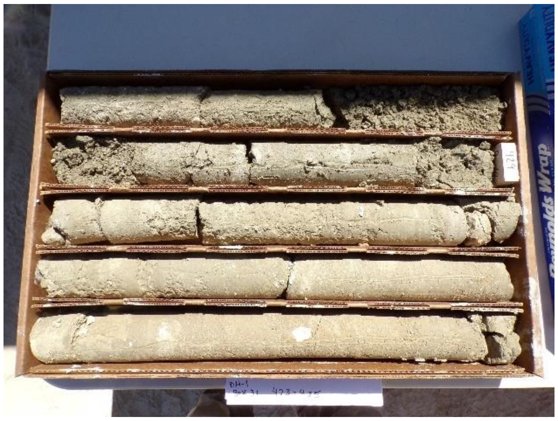
389.5 to 399.5 feet



399.5 to 411 feet

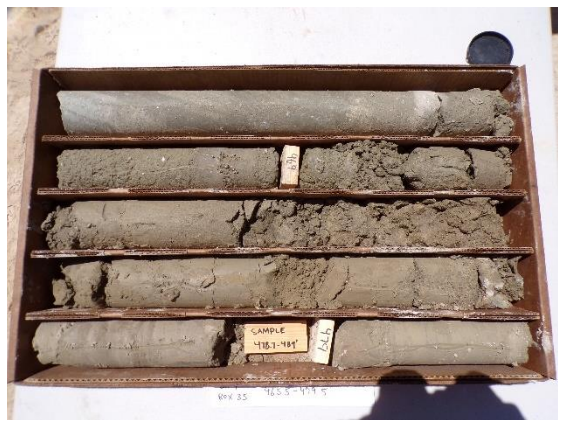
411 to 423 feet

DH-1



423 to 435 feet

435 to 445 feet



445 to 465.5 feet

465.5 to 479.5 feet

479.5 to 491 feet

491 to 502 feet

DH-1

502 to 512.5 feet

512.5 to 523 feet

523 to 539 feet

539 to 554 feet

554 to 564 feet

564 to 576 feet

DH-1

576 to 587.5 feet

587.5 to 597.5 feet

597.5 to 607.5 feet

607.5 to 617.5 feet

617.5 to 627.5 feet

627.5 to 640 feet

DH-1

640 to 654 feet

654 to 664 feet

664 to 673 feet

673 to 684 feet

684 to 694 feet

694 to 707 feet

DH-1

707 to 732 feet

732 to 745 feet

745 to 753 feet

753 to 765 feet

765 to 775 feet

784 to 794 feet

DH-1

794 to 804 feet

804 to 814 feet

814 to 824 feet

824 to 834 feet

834 to 844 feet

844 to 854 feet

DH-1

854 to 864 feet

864 to 874 feet

874 to 884 feet

884 to 894 feet

894 to 904 feet

904 to 914 feet

DH-1

914 to 924 feet

924 to 936 feet

936 to 947 feet

947 to 961 feet

961 to 977 feet

977 to 987 feet

DH-1


987 to 997 feet

997 to 1009 feet


1009 to 1029 feet

1051 to 1071 feet


1071 to 1082.5 feet

1087.5 to 1095 feet

DH-1

1095 to 1118.5 feet

1118.5 to 1130 feet

1130 to 1146 feet

1146 to 1157 feet

1157 to 1167.5 feet

1167.5 to 1177.5 feet

DH-1

1177.5 to 1189 feet **1189 to 1201 feet**

1201 to 1211 feet **1211 to 1221 feet**

1221 to 1230 feet **1230 to 1239.5 feet**

DH-1

1239.5 to 1249.5 feet

1249.5 to 1261 feet

1261 to 1271 feet

1271 to 1282 feet

1282 to 1295 feet

1295 to 1305 feet

DH-1

1305 to 1315.8 feet

1315.8 to 1324.5 feet

1324.5 to 1335 feet

1335 to 1343.1 feet

1343.1 to 1353.5 feet

1353.5 to 1363 feet

DH-1

1363 to 1373.5 feet

1373.5 to 1384 feet

1384 to 1394 feet

1394 to 1400 feet

End of Hole 1460 feet bgs.

DH-1A (Twin Hole to DH-1) Extended From 1400 Feet bgs.

1400 to 1419.4 feet

1419.4 to 1461.2 feet

1461.2 to 1474 feet

1474 to 1503.6 feet

1503.6 to 1541.7 feet

1541.7 to 1552.8 feet

DH-1A

1552.8 to 1573 feet

1573 to 1588 feet

1588 to 1598 feet

1595 to 1617 feet

1617 to 1632 feet

1632 to 1644 feet

End of Core Due to Poor Recovery and Rate of Penetration

DH-1A (Continue Rotary) Chip Trey Photos Provided

1650 to 1940

End of Hole

Appendix D

Downhole Wireline and Geophysical Logs

COLOG borehole geophysics / hydrophysics	Fluid Temperature\Resistivity & Natural Gamma		Colog, Inc. 608 River Street, Elko, NV 89801 Phone: (775) 777-3433 www.colog.com
	COMPANY: ACME Lithium	PROJECT: Clayton Valley	
	DATE LOGGED: 16 June 2022	WELL: DH-01	

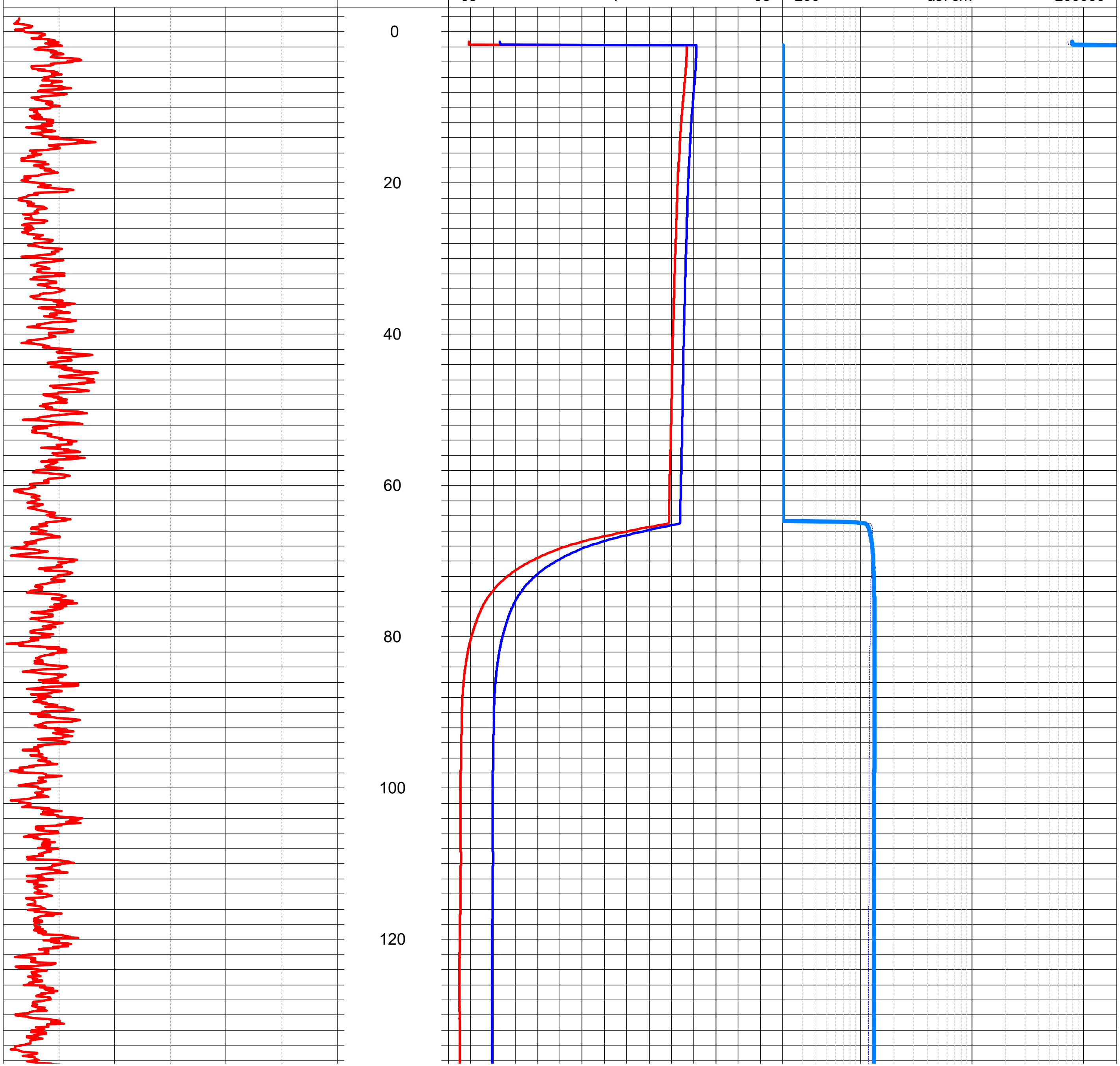
LOCATION: Silver Peak, NV	LOG MEASURED FROM: Ground Surface (GS)
FIELD ENGINEER(S): NPW	TOP & BOTTOM OF CASING: HWT, 0' to 210'
WITNESSED BY: Harris Drilling	BOREHOLE DIAMETER: HQ w/ 3"PVC 0 to 1399'
DEPTH DRILLER: 1399'	FLUID LEVEL DEPTH: 65' @ 20:05
DEPTH LOGGER: 1399'	ORIENTATION REFERENCE: N/A

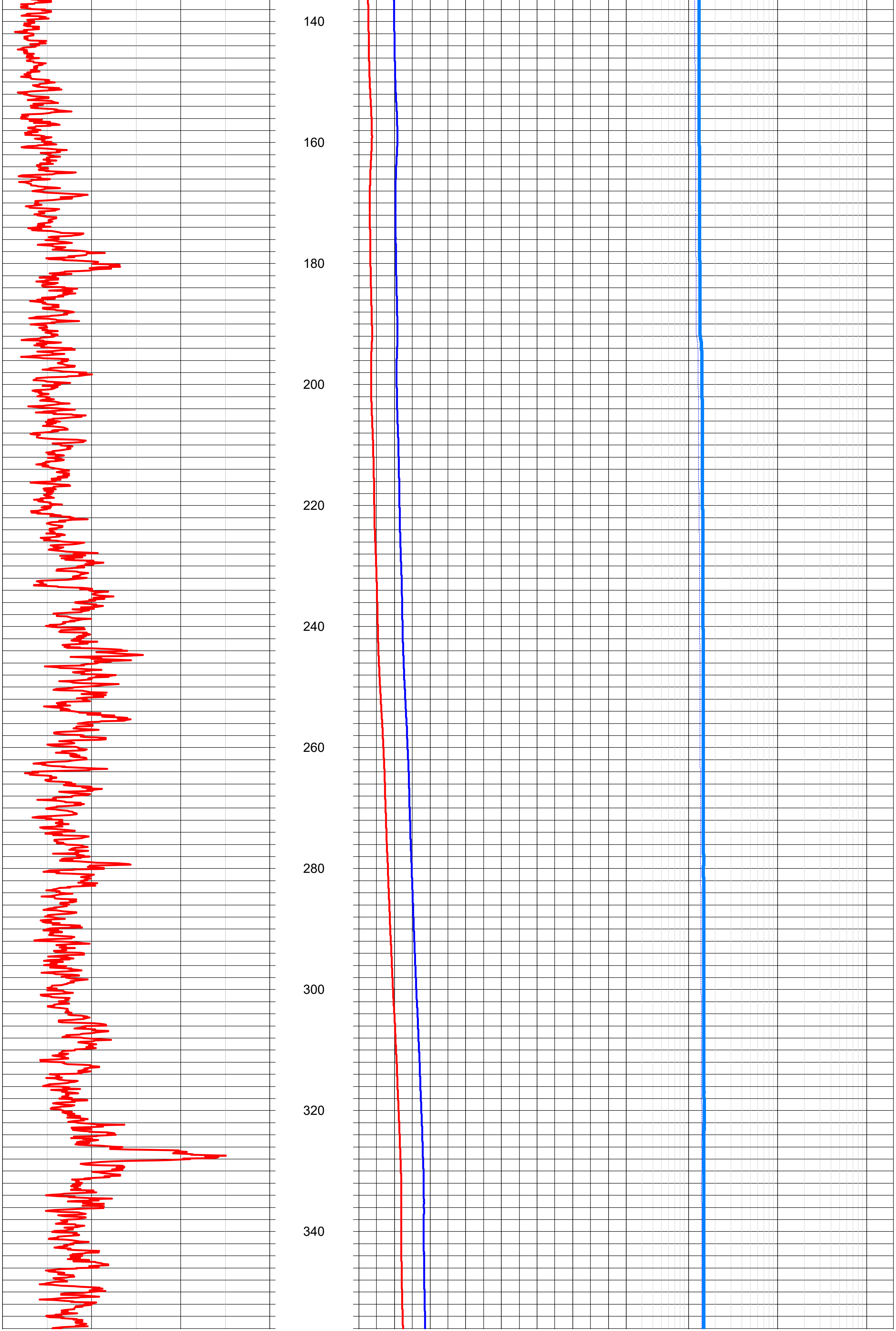
COMMENTS:

Logging Interval: 8' to 1399'

Below 849' data affected by high brine level. Able to log FTC and Gamma below this point with lower resolution. Deviation would not work below this.
Natural Gamma converted to API units for correlation purposes.
Blip at 849' from merging of log data, not true of borehole conditions.

Natural Gamma API (0 – API – 150)	Depth 1in:20ft	Temp C (20 – 'C – 35) / Temp F (65 – ºF – 95)	Cond (200 – uS/cm – 200000) / Cond25C (200 – uS/cm – 200000)

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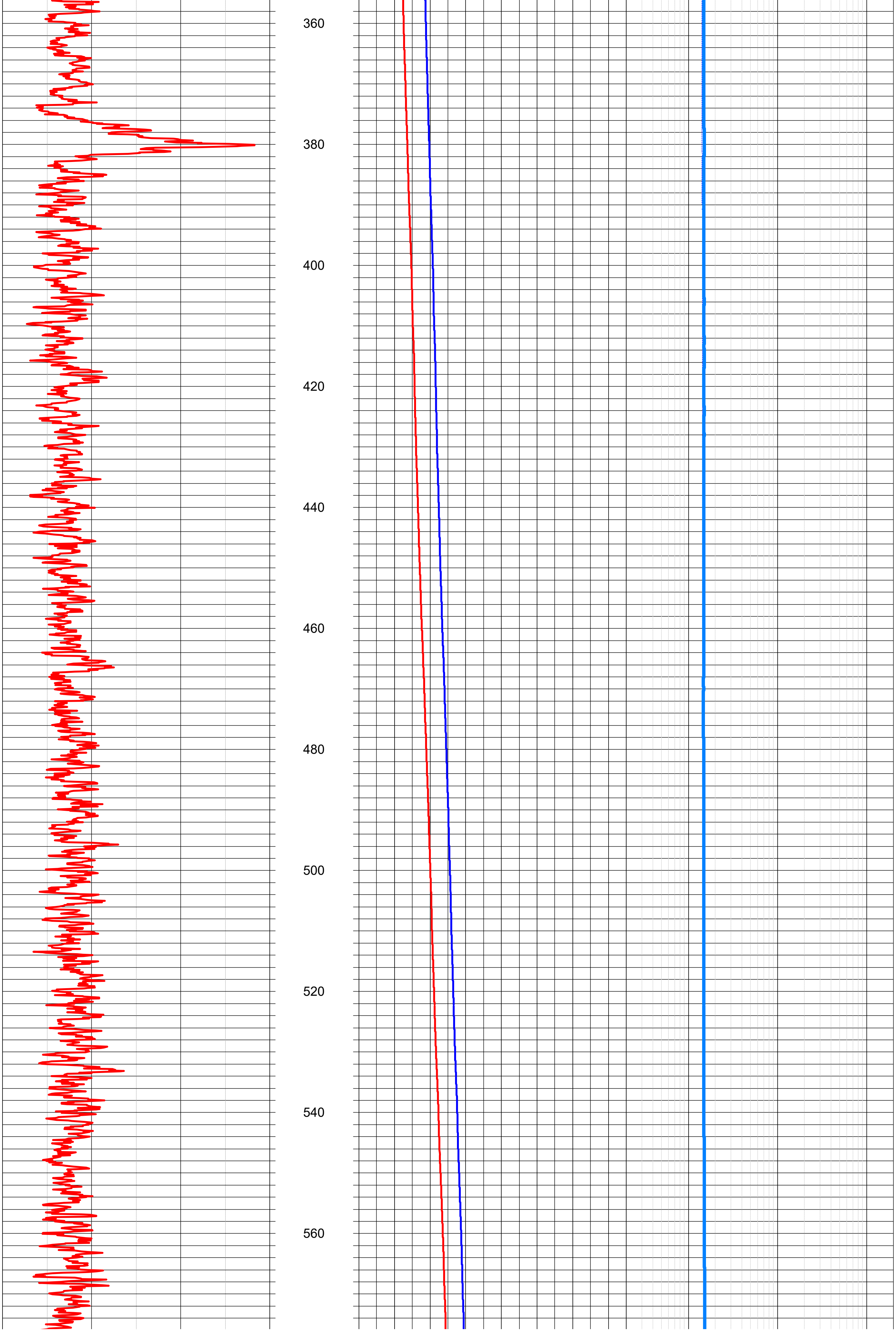
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460
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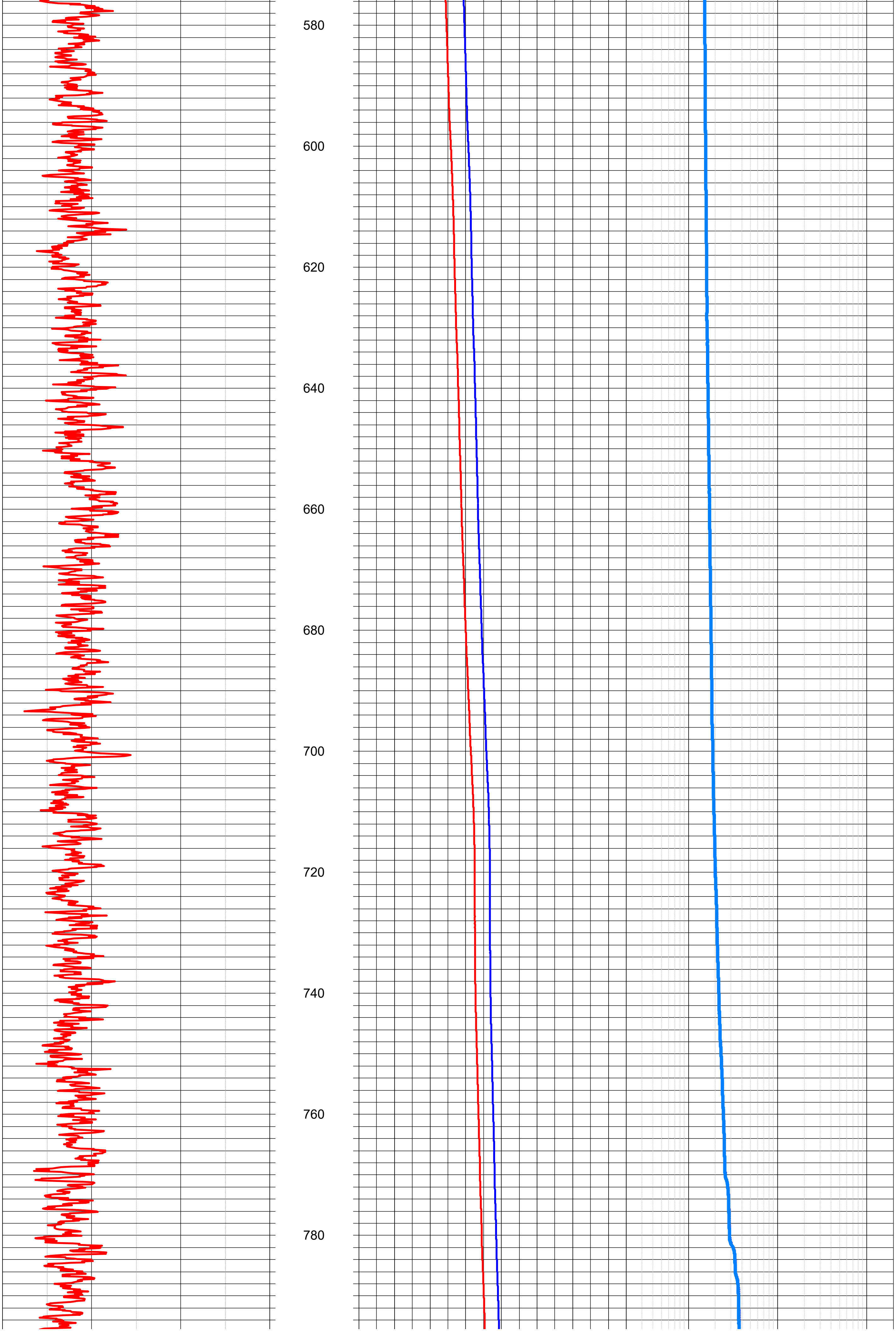
500
520
540
560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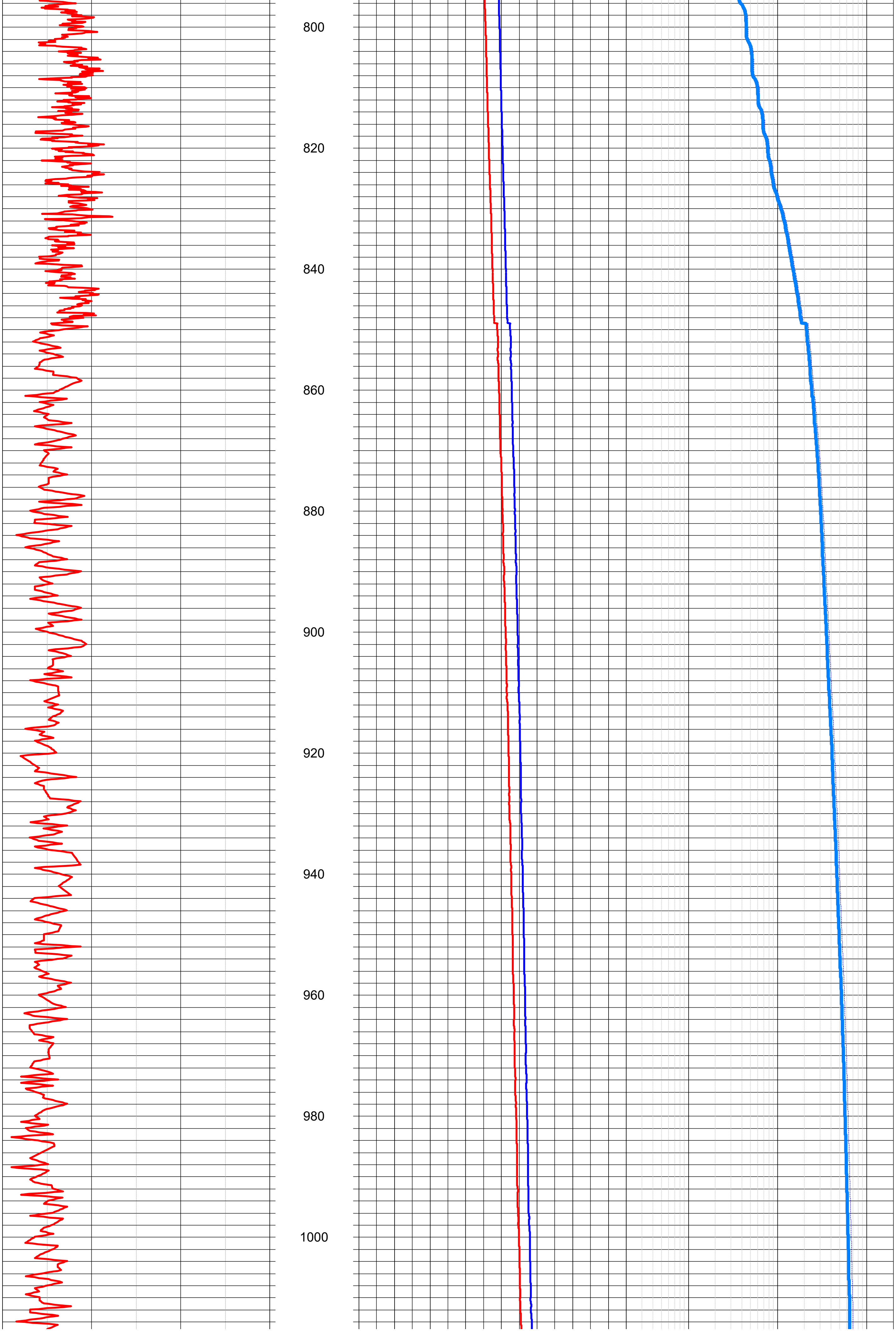
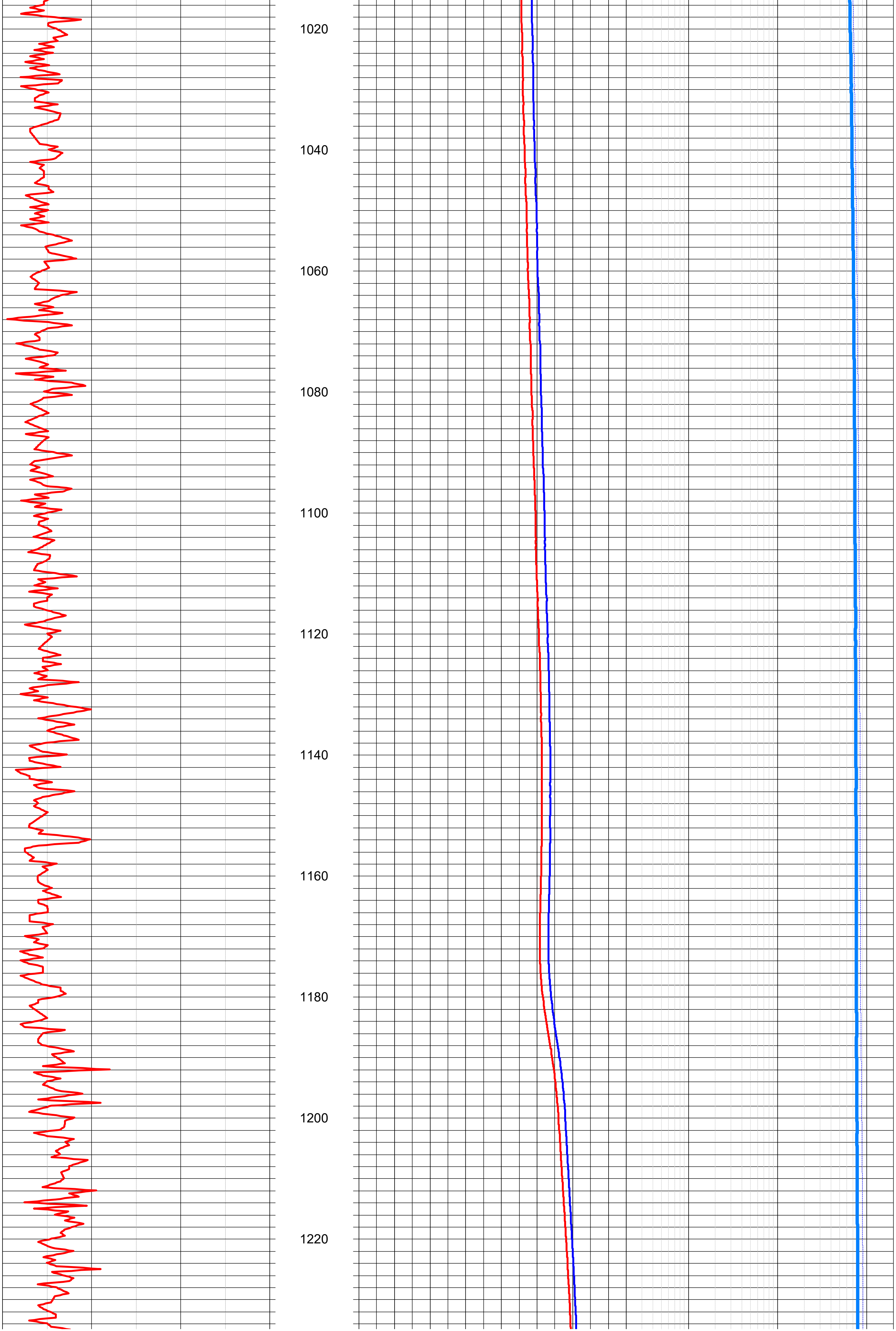
700
720
740
760
780



800
820
840
860
880
900
920
940
960
980
1000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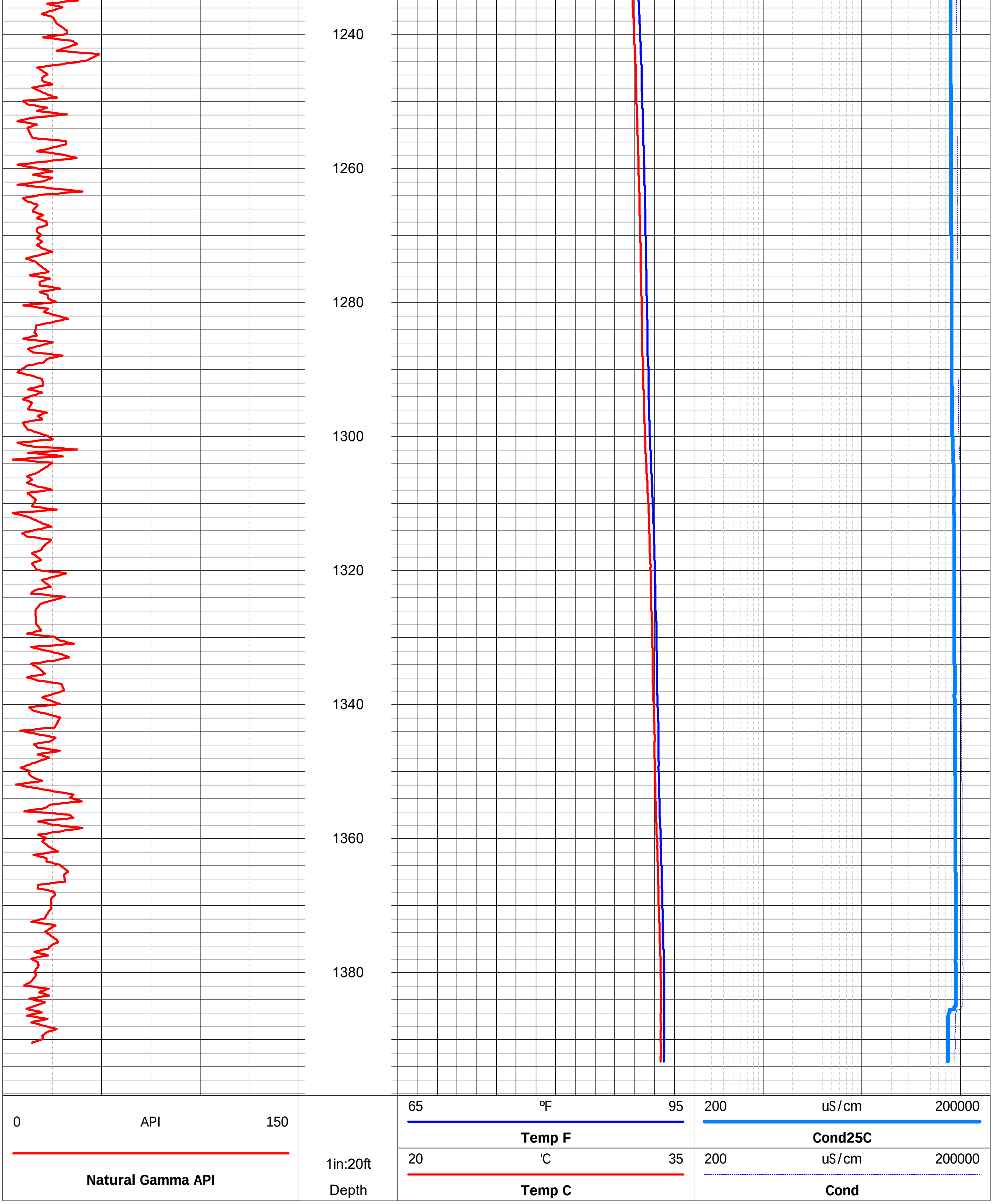
1060
1080
1100
1120
1140
1160
1180
1200
1220


1240
1260
1280
1300
1320
1340
1360
1380
0 API 150
Natural Gamma API
1in:20ft
Depth
65 ºF 95
Temp F
20 'C 35
Temp C
200 uS/cm 200000
Cond25C
200 uS/cm 200000
Cond

Colog Magnetometer Directional:

Date:	6/16/2021
Operator :	Nolan Welsh
Crew :	
Well Number :	DH-01
Field :	Clayton Valley
Tool Type And Number:	ABI 112061
Bottom Depth :	849.00
Latitude :	0
Longitude :	0
Declination Applied	0.00

COLOG
borehole geophysics / hydrophysics

Starting Point Coordinates (in local grid):

Northing: 0.00 Easting: 0.00 Altitude: 0.00

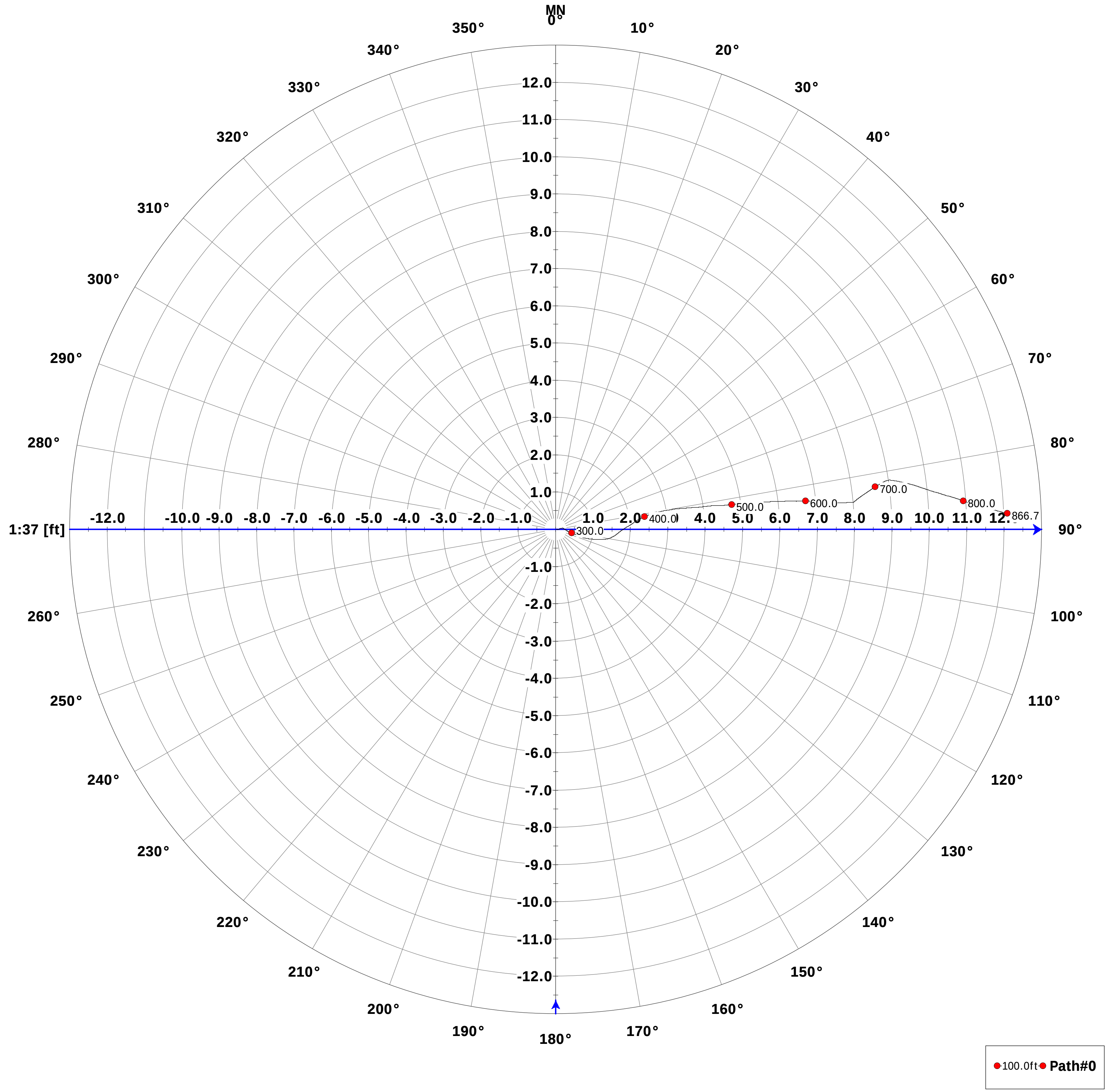
Description:

Azimuth measured in degrees and referenced to Magnetic North

Inclination measured from Horizontal

Length measured in feet

Depth	Inclination	Azimuth	Closure Direction	Elev	Coordinates		Dogleg Severity	Closure Distance
					+N/-S	+E/-W		
ft	Deg	Deg	Azimuth	ft	ft	ft	deg/100 ft	ft
225.000	0.200	74.500	57.295	-224.970	0.542	3.359	4.548	3.403
250.000	0.100	124.700	57.296	-249.970	0.517	3.395	8.414	3.434
275.000	0.400	123.300	57.296	-274.969	0.421	3.541	4.679	3.566
300.000	0.500	104.600	57.296	-299.968	0.366	3.752	9.667	3.770
325.000	0.900	105.400	57.296	-324.965	0.262	4.131	12.144	4.139
350.000	1.400	90.700	57.296	-349.957	0.255	4.741	17.660	4.748
375.000	1.500	53.200	57.296	-374.949	0.647	5.265	7.837	5.305
400.000	1.700	68.600	57.296	-399.938	0.917	5.956	6.785	6.026
425.000	1.400	81.100	57.296	-424.930	1.012	6.559	4.364	6.637
450.000	1.100	84.800	57.296	-449.926	1.055	7.037	2.603	7.116
475.000	1.300	84.700	57.296	-474.919	1.108	7.602	1.414	7.682
500.000	1.200	87.400	57.296	-499.914	1.131	8.125	0.168	8.204
525.000	1.200	86.700	57.296	-524.908	1.162	8.648	2.195	8.725
550.000	1.000	87.800	57.296	-549.905	1.178	9.084	0.146	9.160
575.000	1.000	88.600	57.296	-574.901	1.189	9.520	1.055	9.594
600.000	0.900	90.600	57.296	-599.898	1.185	9.913	1.079	9.983
625.000	1.000	93.700	57.296	-624.894	1.157	10.348	1.062	10.413
650.000	0.900	90.300	57.296	-649.891	1.155	10.741	8.763	10.803
675.000	1.300	41.200	57.296	-674.884	1.581	11.114	5.101	11.226
700.000	1.700	58.900	57.295	-699.873	1.964	11.749	10.059	11.912
725.000	1.500	104.700	57.296	-724.865	1.798	12.382	1.408	12.512
750.000	1.400	110.800	57.296	-749.857	1.582	12.953	2.229	13.050
775.000	1.100	110.000	57.296	-774.853	1.417	13.404	0.675	13.479
800.000	1.100	105.100	57.296	-799.848	1.292	13.868	0.702	13.928
825.000	1.000	105.700	57.296	-824.844	1.174	14.288	0.631	14.336
850.000	1.093	105.787	57.296	-849.840	1.045	14.747	#DIV/0!	14.784



MN
0°
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60°
70°
80°
90°
100°
110°
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190°
200°
210°
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230°
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260°
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280°
290°
300°
310°
320°
330°
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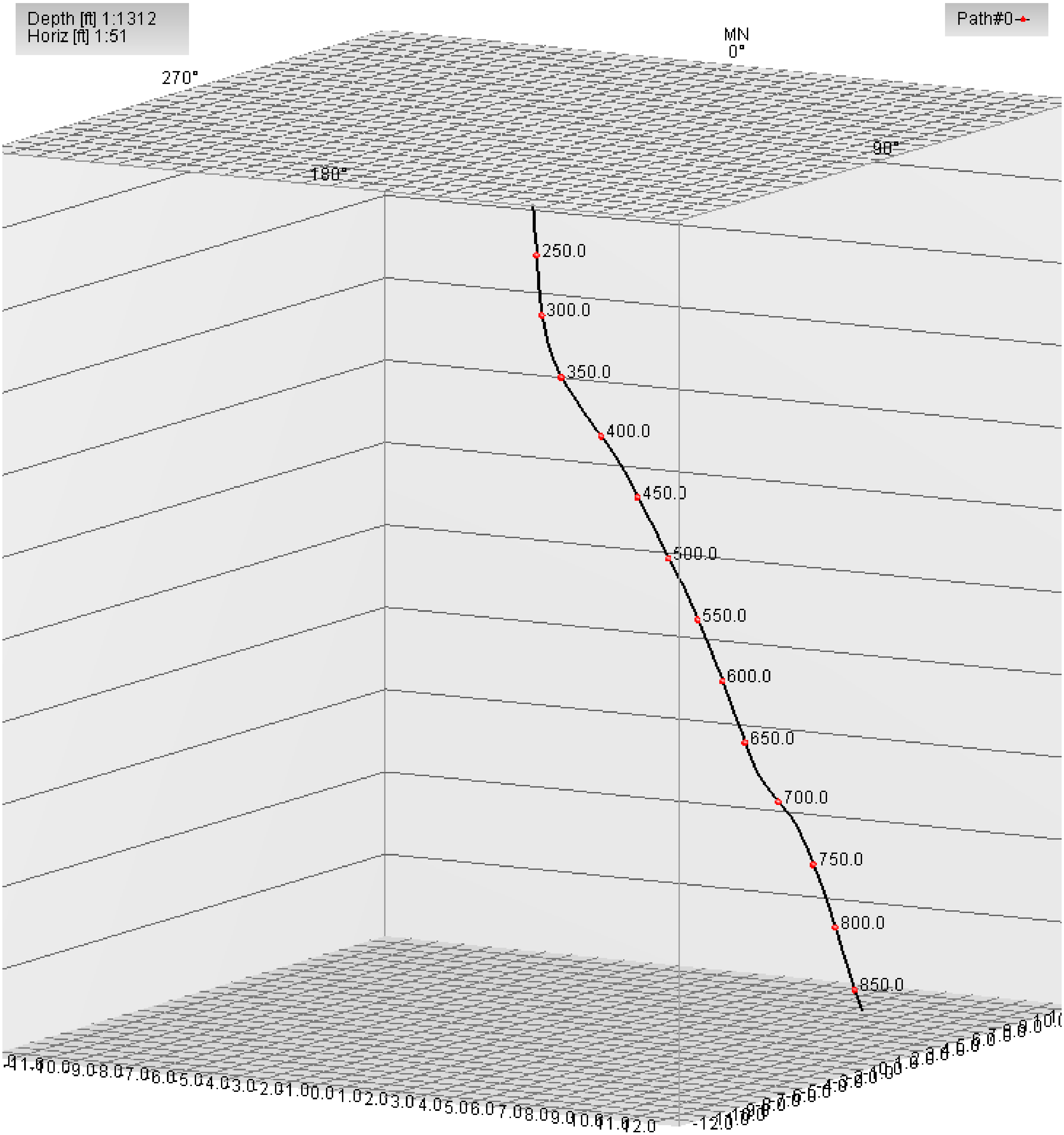
866.7
100.0ft
Path#0



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Horiz [ft] 1:51
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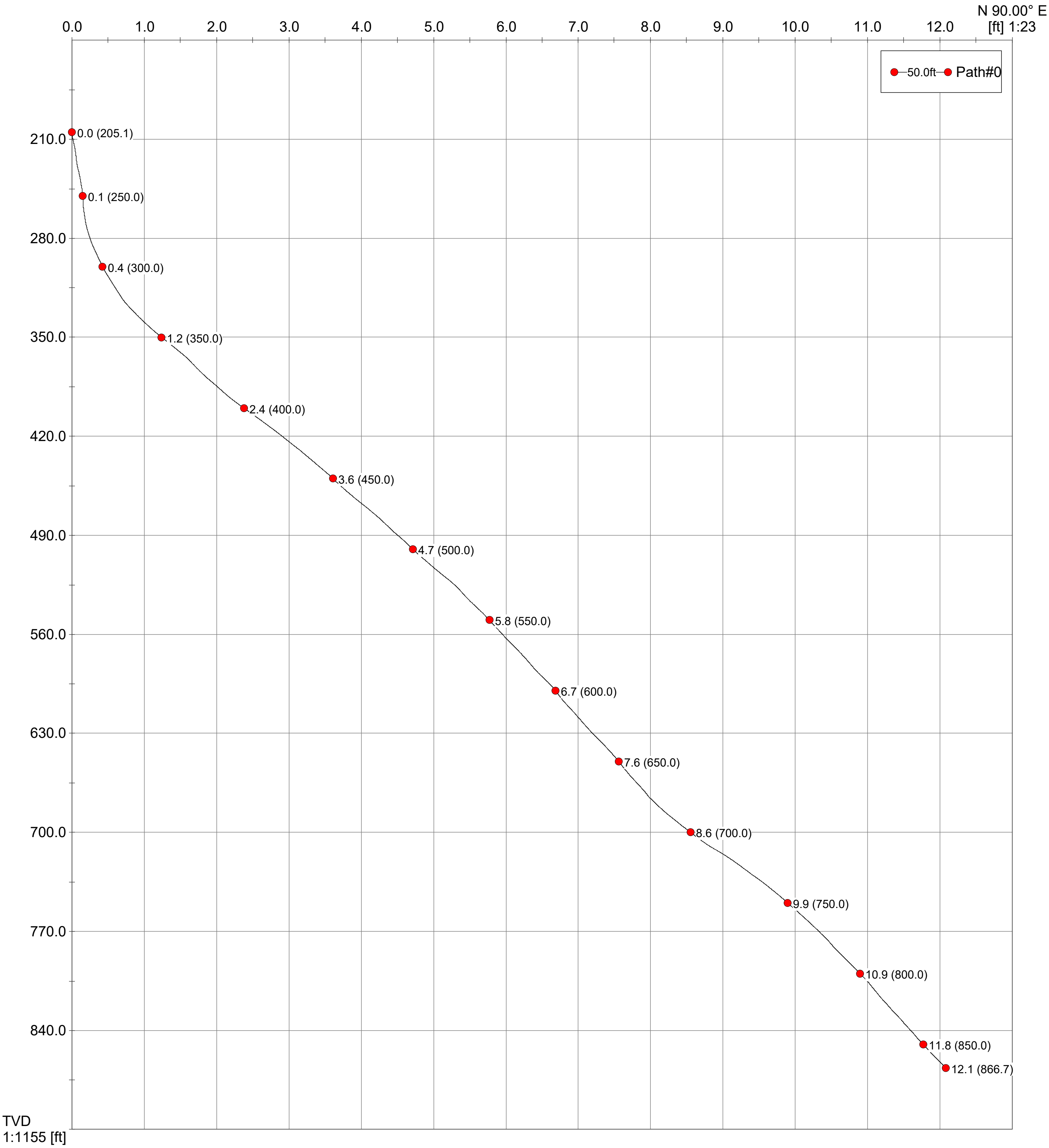
N 90.00° E
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210.0
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350.0
420.0
490.0
560.0
630.0
700.0
770.0
840.0
0.0 (205.1)
0.1 (250.0)
0.4 (300.0)
1.2 (350.0)
2.4 (400.0)
3.6 (450.0)
4.7 (500.0)
5.8 (550.0)
6.7 (600.0)
7.6 (650.0)
8.6 (700.0)
9.9 (750.0)
10.9 (800.0)
11.8 (850.0)
12.1 (866.7)
TVD
1:1155 [ft]

Magnetometer Deviation

Colog, Inc.
608 River Street, Elko, NV 89801
Phone: (775) 777-3433
www.colog.com

borehole geophysics / hydrophysics

COMPANY: ACME Lithium	PROJECT: Clayton Valley
DATE LOGGED: 16 June 2022	WELL: DH-01

LOCATION: Silver Peak, NV	LOG MEASURED FROM: Ground Surface (GS)
FIELD ENGINEER(S): NPW	TOP & BOTTOM OF CASING: HWT, 0' to 210'
WITNESSED BY: Harris Drilling	BOREHOLE DIAMETER: HQ w/ 3"PVC 0 to 1399'
DEPTH DRILLER: 1399'	FLUID LEVEL DEPTH: 65' @ 20:05
DEPTH LOGGER: 1399'	ORIENTATION REFERENCE: N/A

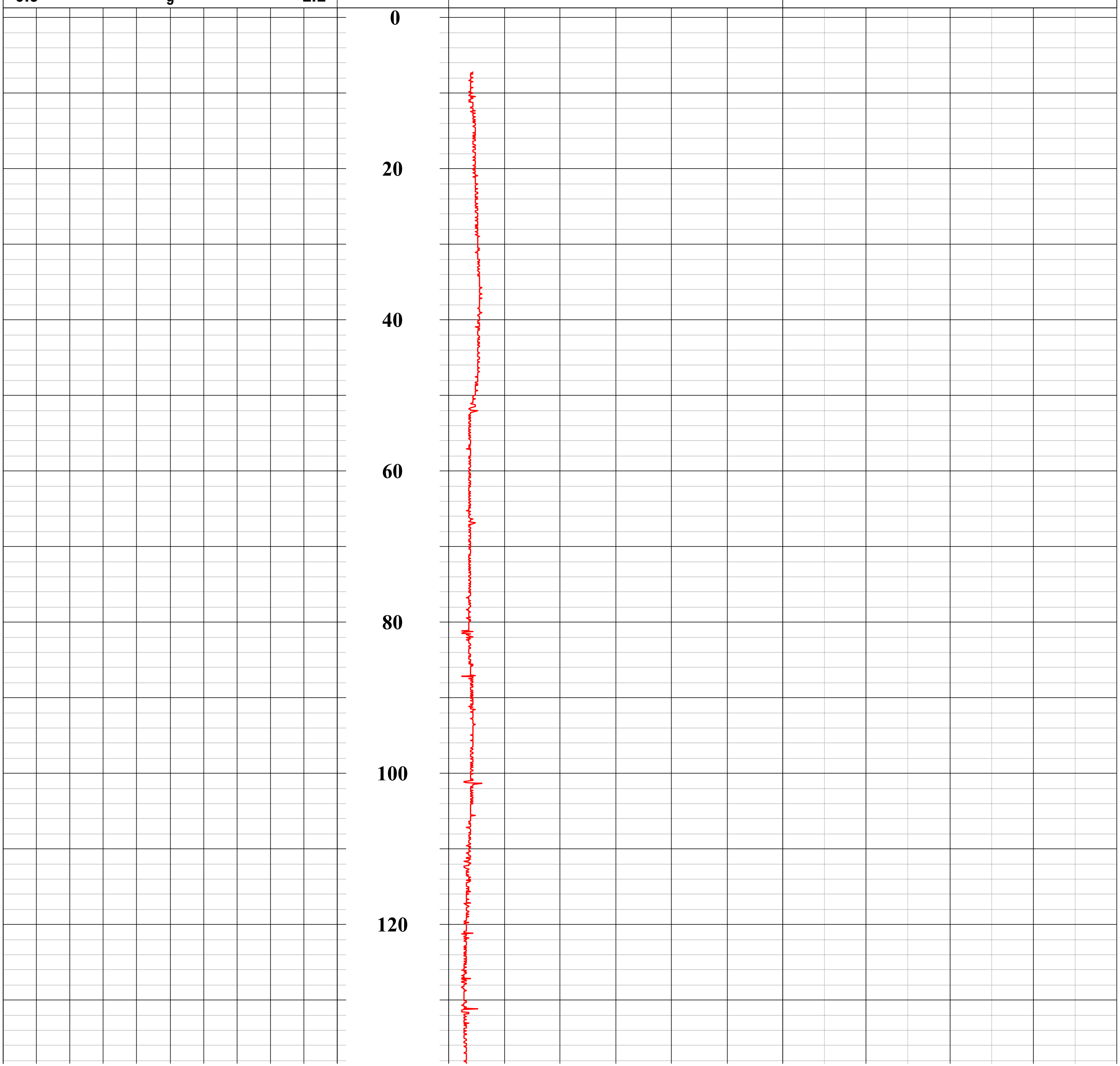
COMMENTS:

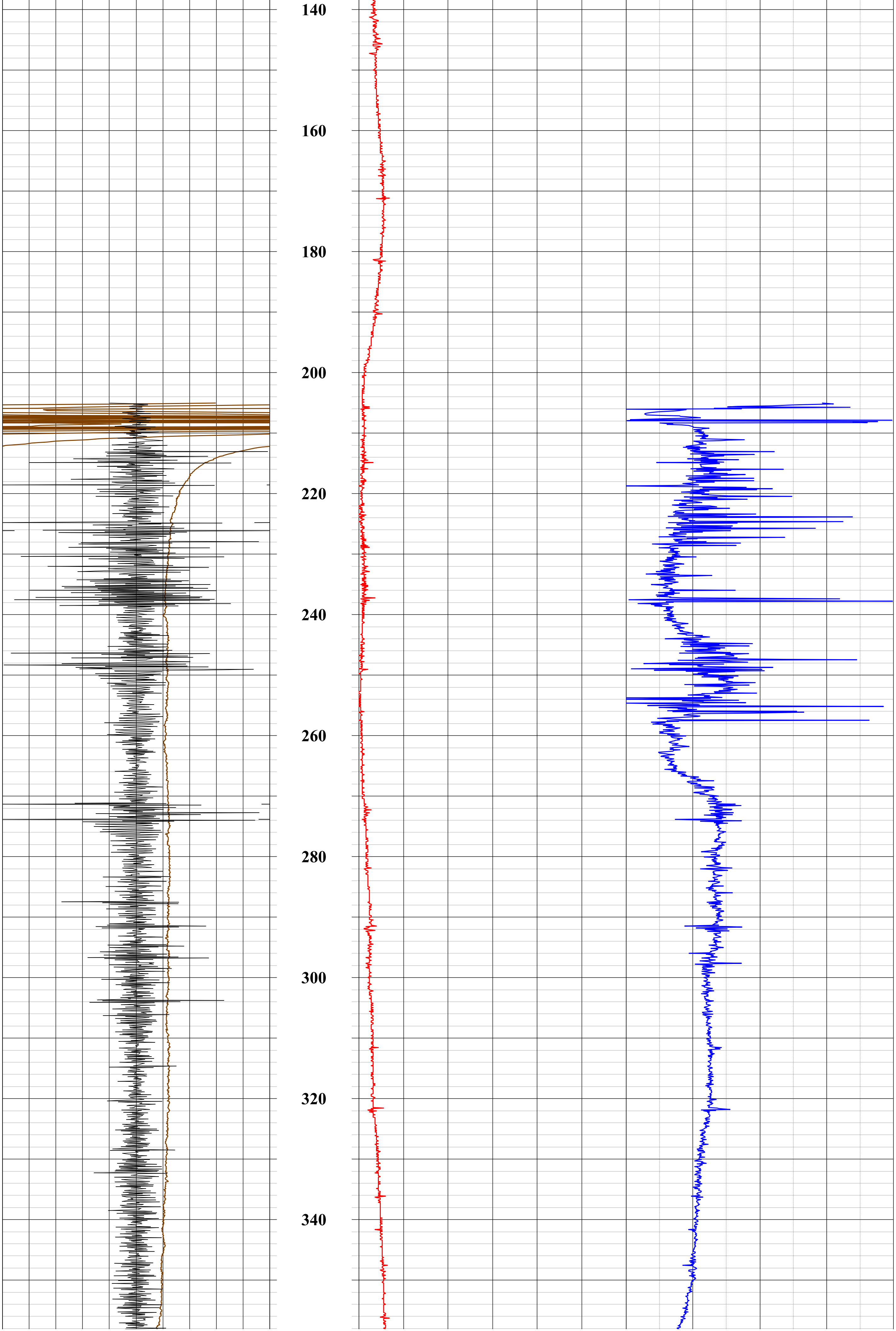
Logging Interval: 8' to 1399'

Below 849' data affected by high brine level. Able to log FTC and Gamma below this point with lower resolution. Deviation would not work below this.

Azimuth Data above 205' affected by Metal Casing in the hole

MagnField 45 uT 55 / Gravity 0.9 g 1.1	Depth 1in:20ft	Tilt 0 deg 15	Azimuth 0 deg 360





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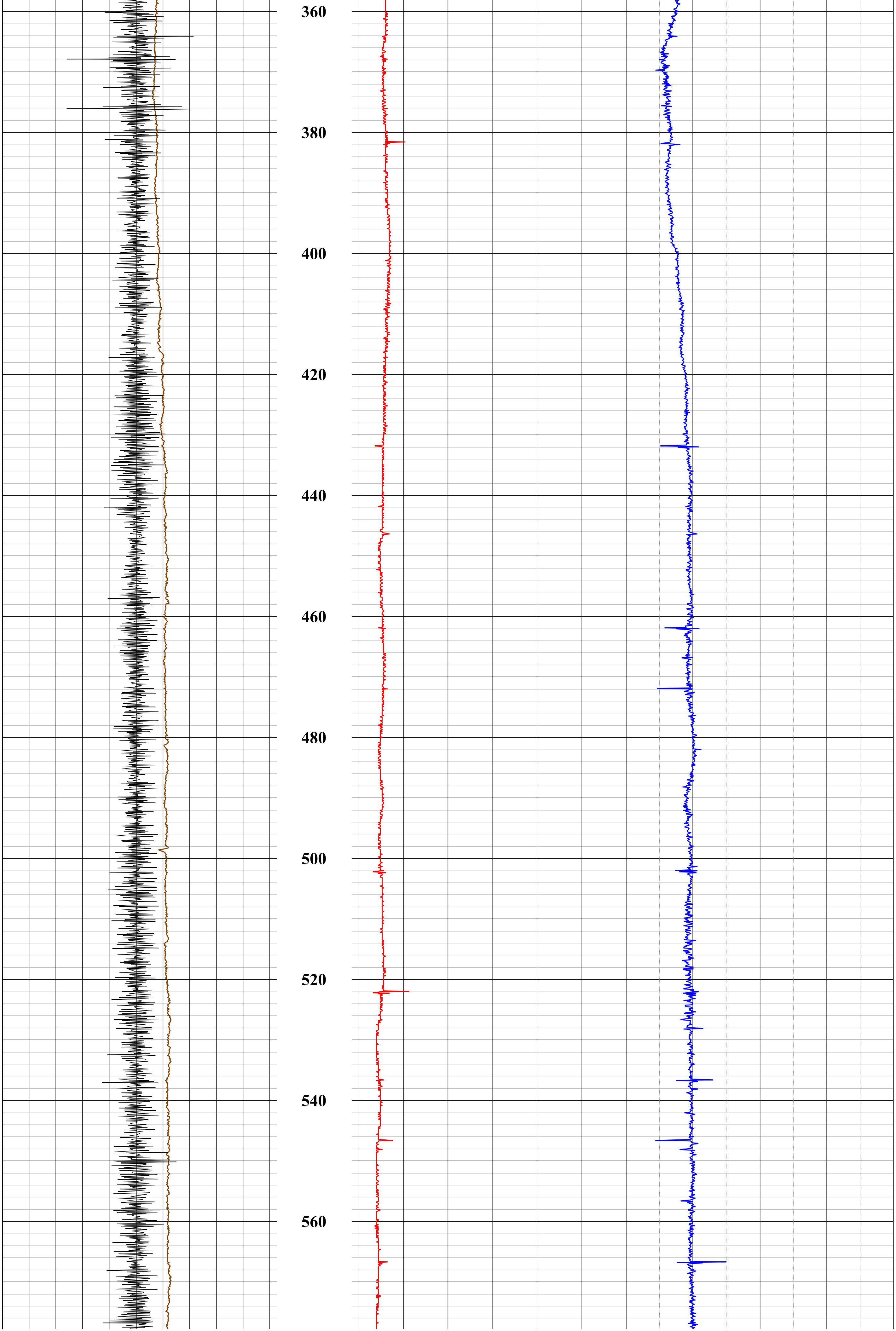
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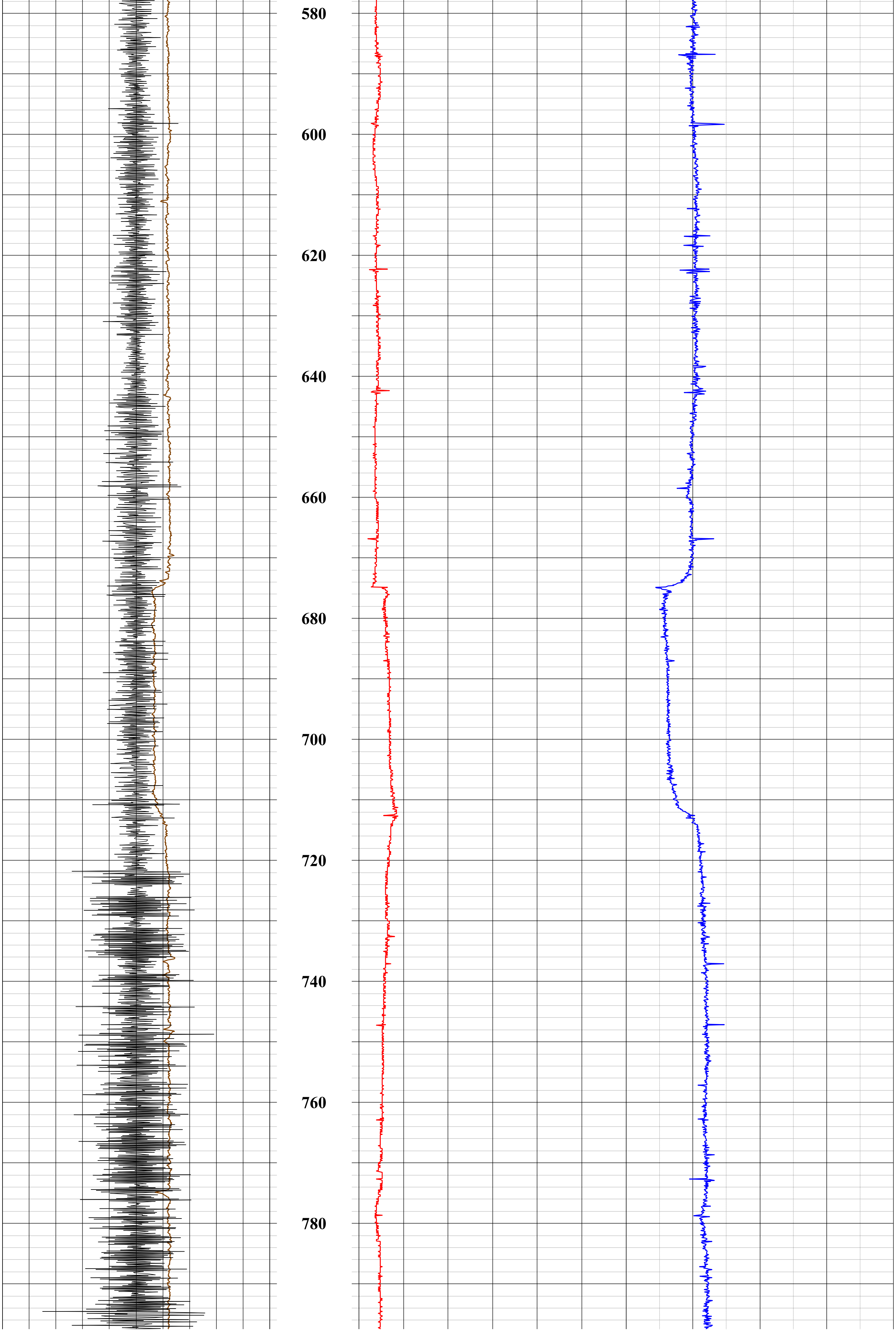
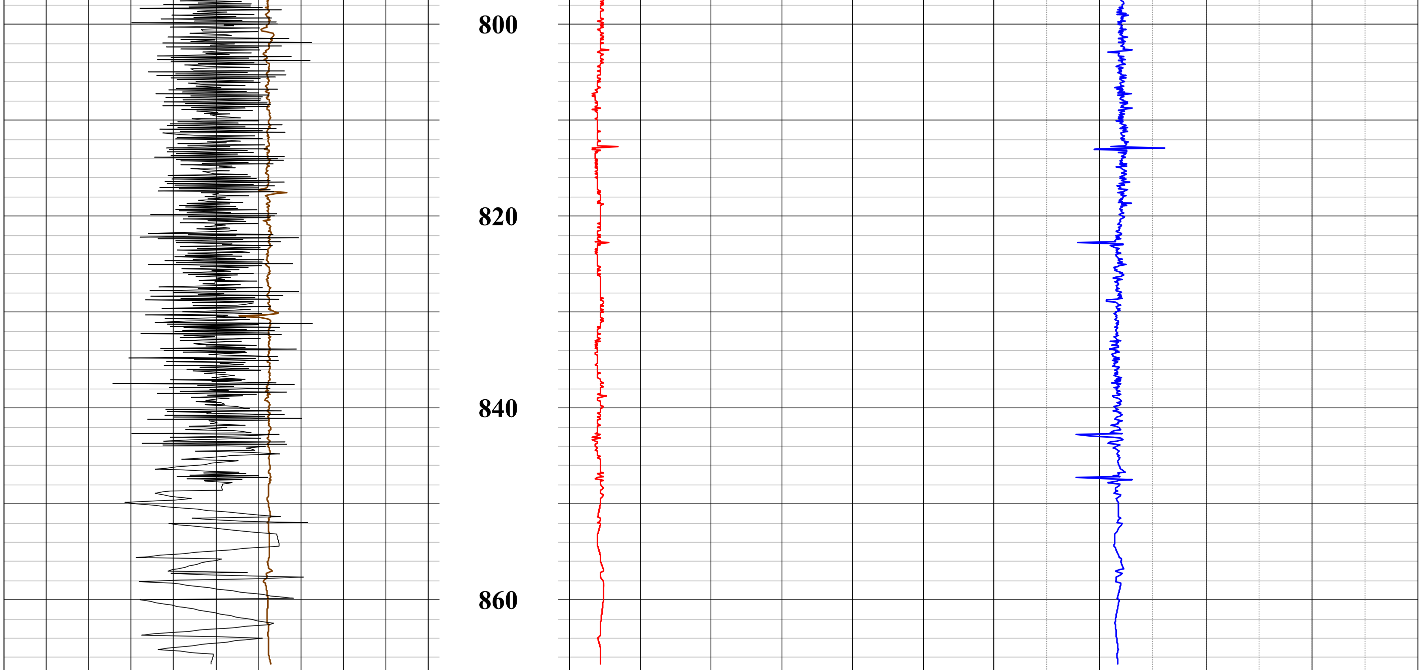
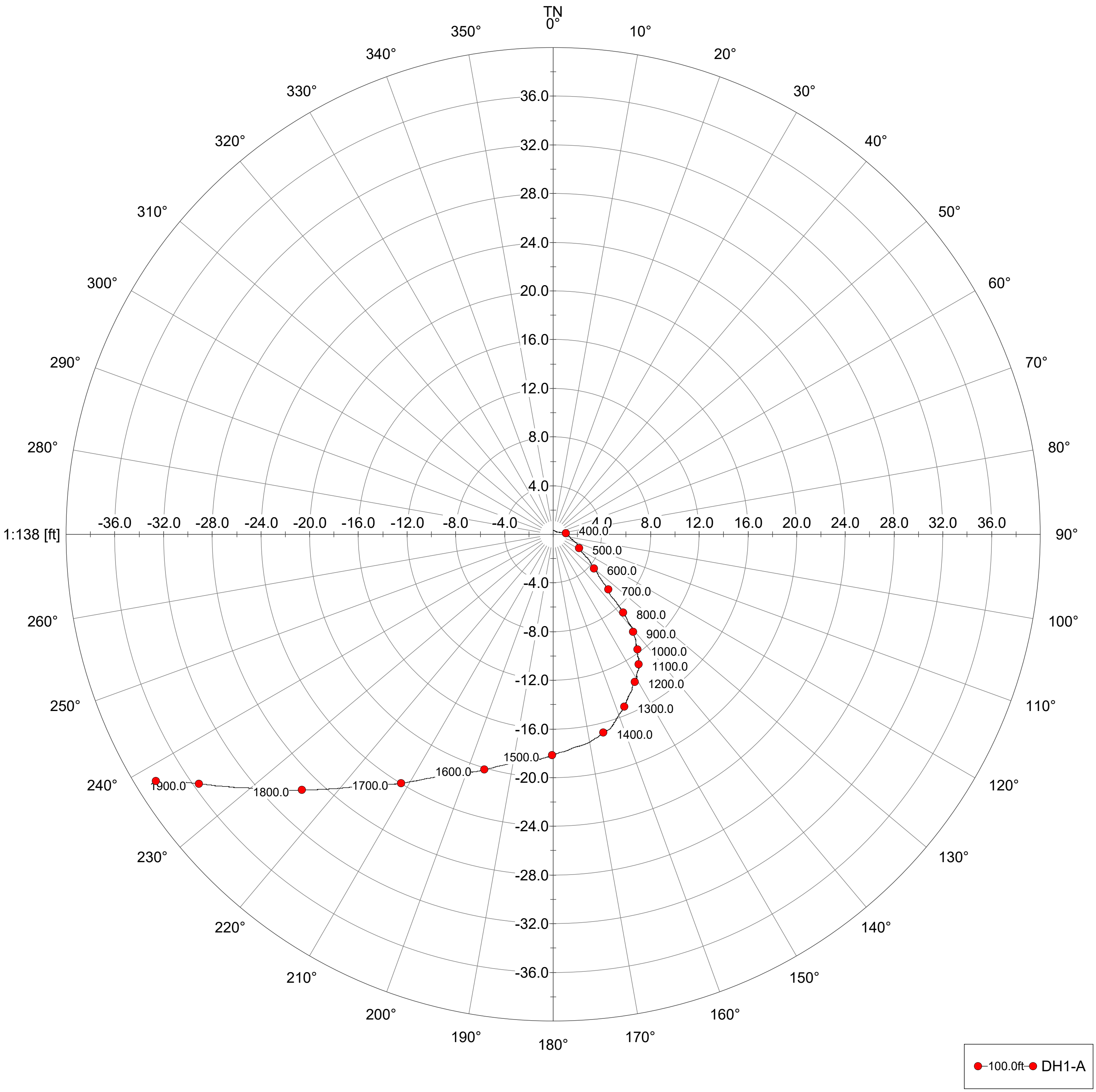
540
560

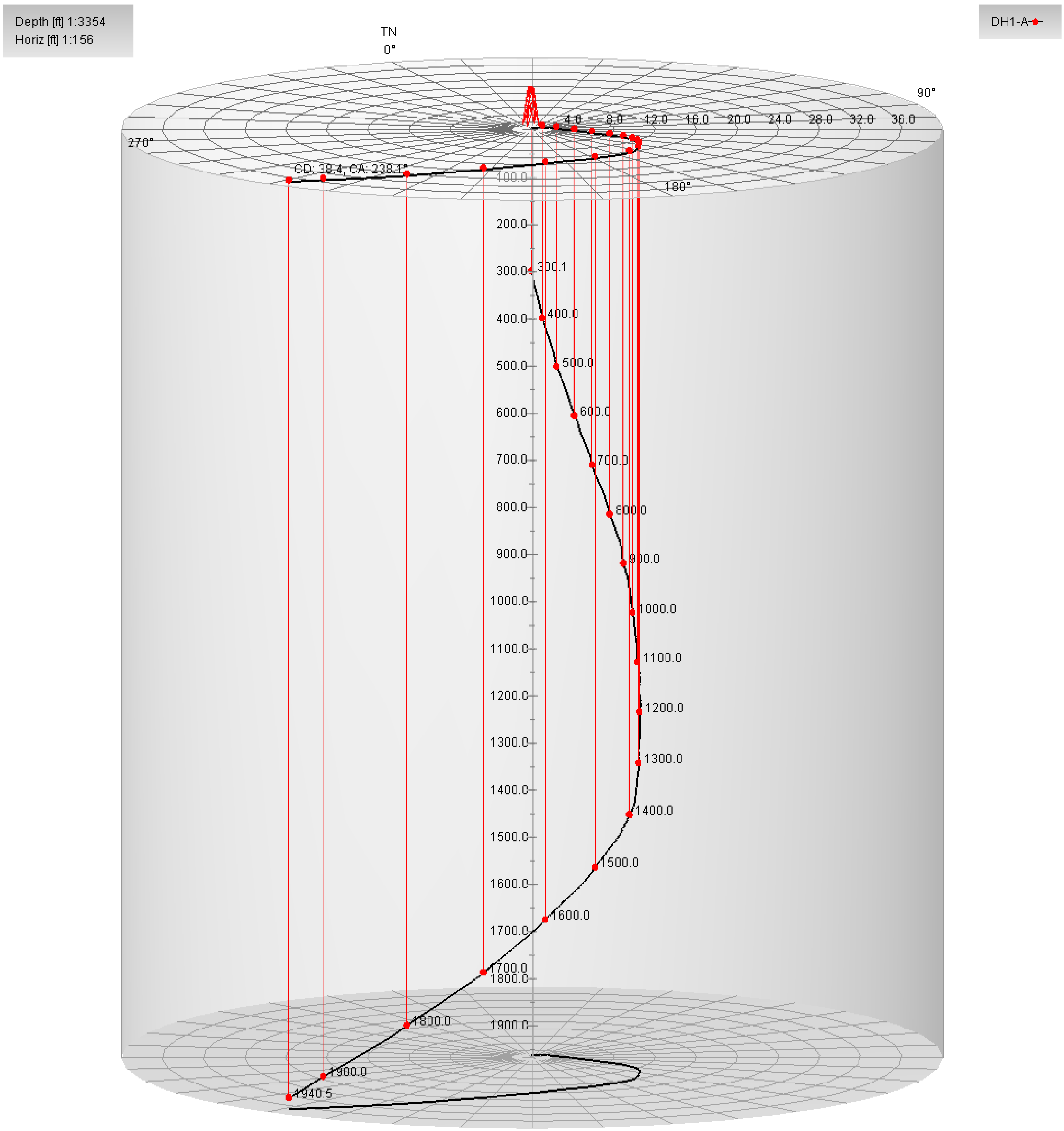

580
600
620
640
660
680
700
720
740
760
780



Gravity	Depth	Tilt	Azimuth
0.9 g 1.1	1in:20ft	0 deg 15	0 deg 360
MagnField 45 uT 55			



TN
0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
100°
110°
120°
130°
140°
150°
160°
170°
180°
190°
200°
210°
220°
230°
240°
250°
260°
270°
280°
290°
300°
310°
320°
330°
340°
350°
1:138 [ft]
-36.0 -32.0 -28.0 -24.0 -20.0 -16.0 -12.0 -8.0 -4.0 4.0 8.0 12.0 16.0 20.0 24.0 28.0 32.0 36.0
36.0 32.0 28.0 24.0 20.0 16.0 12.0 8.0 4.0 -4.0 -8.0 -12.0 -16.0 -20.0 -24.0 -28.0 -32.0 -36.0
400.0
500.0
600.0
700.0
800.0
900.0
1000.0
1100.0
1200.0
1300.0
1400.0
1500.0
1600.0
1700.0
1800.0
1900.0
100.0ft
DH1-A



Depth [ft] 1:3354
Horiz [ft] 1:156
DH1-A
TN
0°
90°
270°
180°
4.0
8.0
12.0
16.0
20.0
24.0
28.0
32.0
36.0
CD: 38.4, CA: 238.1°
100.0
200.0
300.0
300.1
400.0
500.0
600.0
700.0
800.0
900.0
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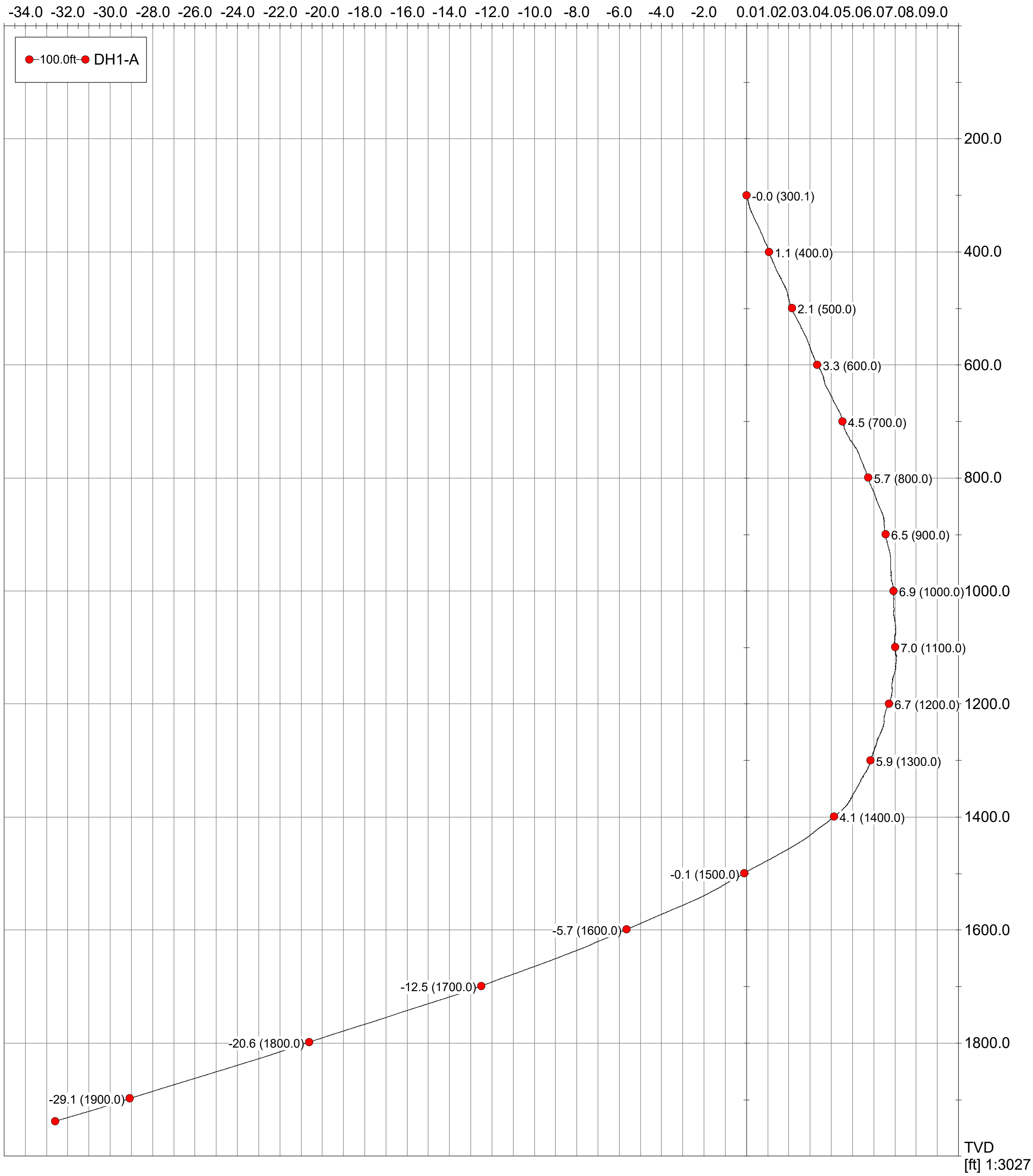
1600.0
1700.0
1800.0
1900.0
1940.5



-34.0 -32.0 -30.0 -28.0 -26.0 -24.0 -22.0 -20.0 -18.0 -16.0 -14.0 -12.0 -10.0 -8.0 -6.0 -4.0 -2.0 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0
100.0ft
DH1-A
200.0
400.0
600.0
800.0
1000.0
1200.0
1400.0
1600.0
1800.0
-0.0 (300.1)
1.1 (400.0)
2.1 (500.0)
3.3 (600.0)
4.5 (700.0)
5.7 (800.0)
6.5 (900.0)
6.9 (1000.0)
7.0 (1100.0)
6.7 (1200.0)
5.9 (1300.0)
4.1 (1400.0)
-0.1 (1500.0)
-5.7 (1600.0)
-12.5 (1700.0)
-20.6 (1800.0)
-29.1 (1900.0)
TVD
[ft] 1:3027

Geophysical Log Summary

COLOG — borehole geophysics / hydrophysics

Colog, Inc.
608 River Street, Elko, NV 89801
Phone: (775) 777-3433
www.colog.com

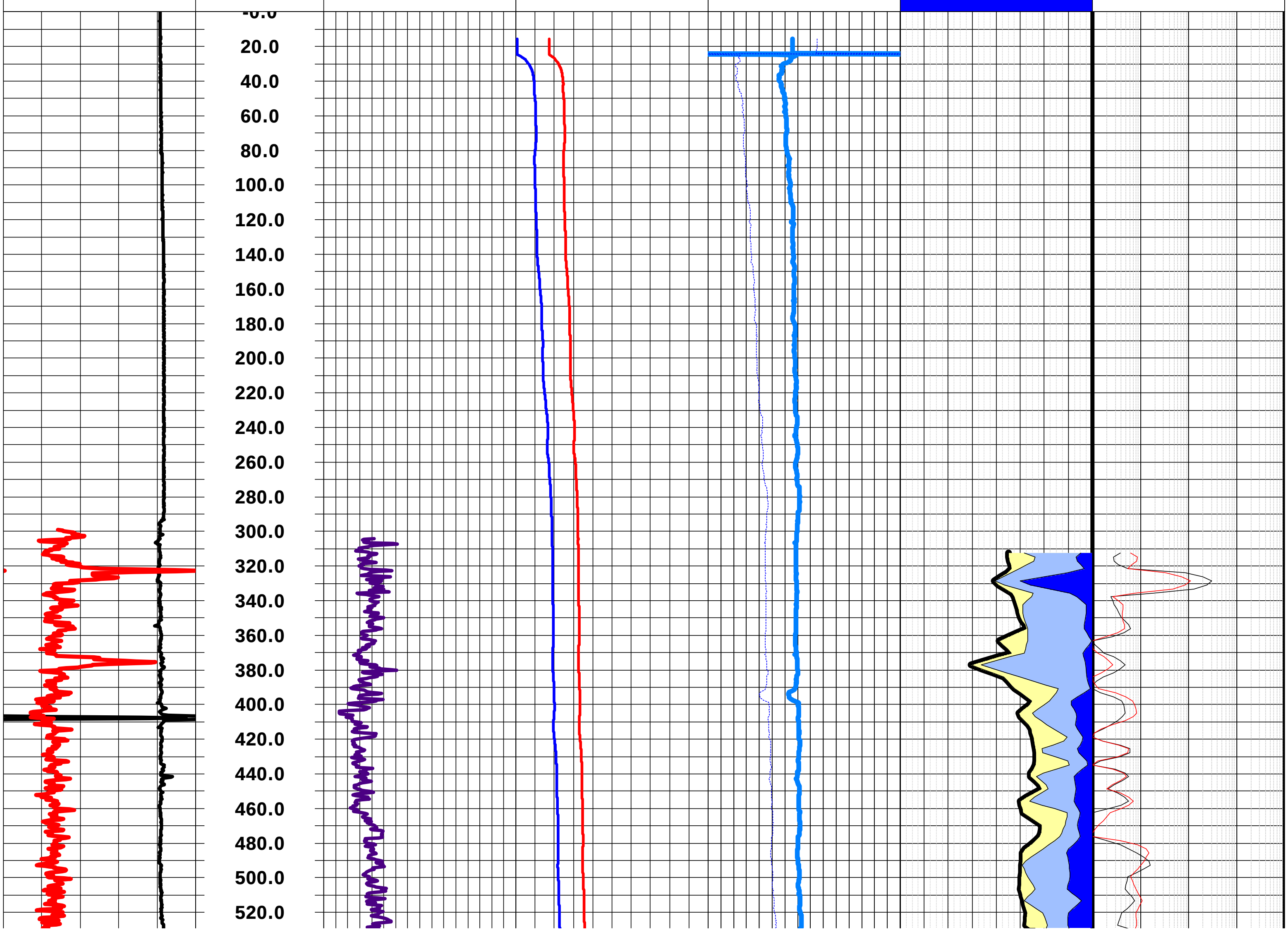
COMPANY: ACME Lithium	PROJECT: Clayton Valley
DATE LOGGED: 15 March 2023	WELL: DH1-A

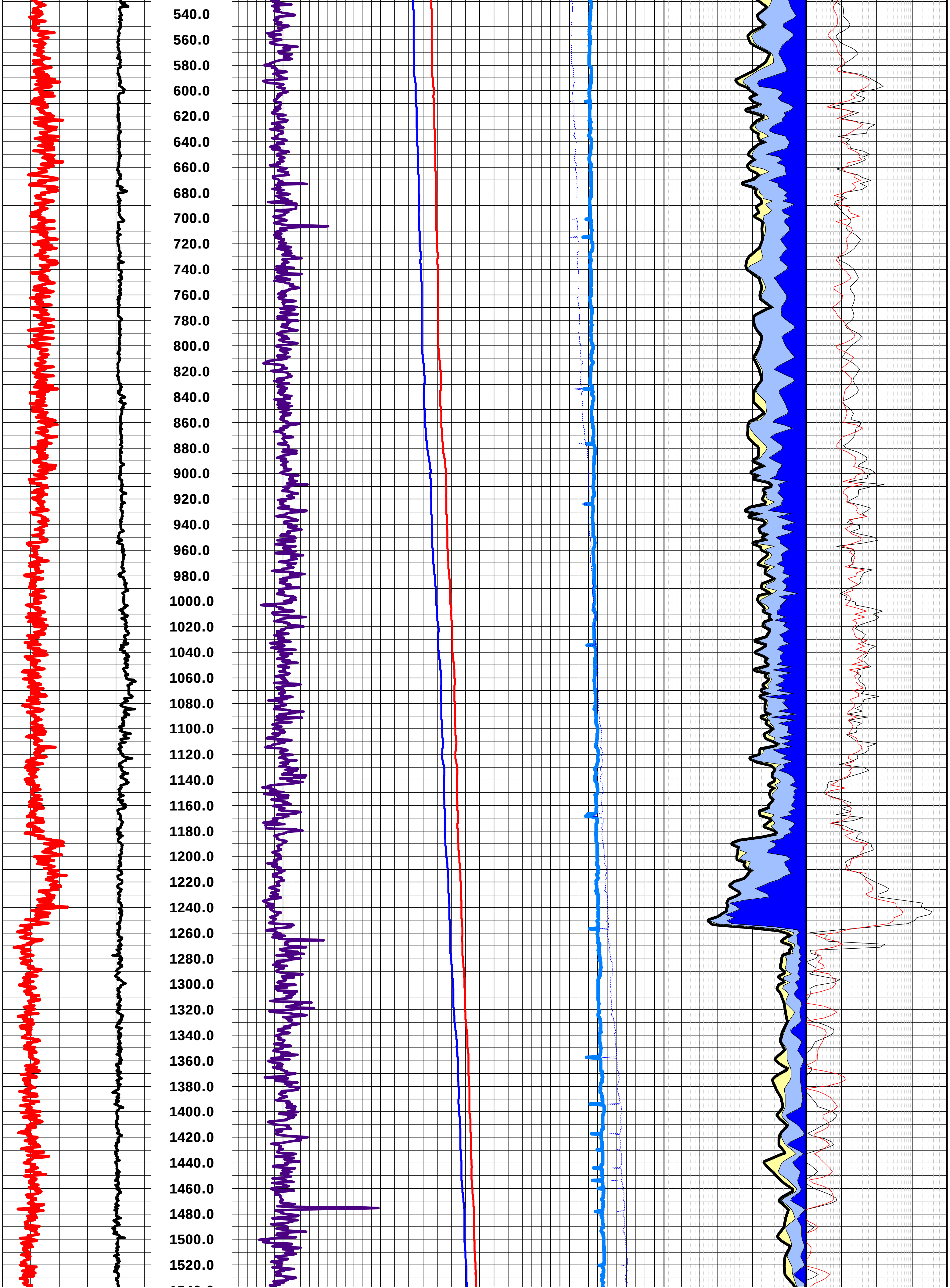
LOCATION: Silver Peak, NV	LOG MEASURED FROM: Ground Surface (GS)
FIELD ENGINEER(S): N.Welsh	TOP & BOTTOM OF CASING: 8.5", 0' to 300'
WITNESSED BY: Harris Drilling	BOREHOLE DIAMETER: 7 7/8", 300' to 1924'
DEPTH DRILLER: 1940'	FLUID LEVEL DEPTH: 24' @ 13:30
DEPTH LOGGER: 1924'	ORIENTATION REFERENCE: N/A

COMMENTS:

Induction and ELOG not Logged on this hole

Caliper	Depth	Microresistivity	Temp C	Cond25C	Total Fluid Volume	Hydra. Cond. (SDR)
0 in 10	1in:100ft	0 Ohm.m 800	15 'C 35	50000 uS/cm 80000	0.8 FRAC 0	0.1 FT/DAY 1000
Natural Gamma API			Temp F	Cond	Clay-Bound Fluid	Hydra. Cond. (SOE)
0 API 300			65 ºF 95	50000 uS/cm 80000	Capillary-Bound	0.1 FT/DAY 1000
					Mobile Fluid	




540.0
560.0
580.0
600.0
620.0
640.0
660.0
680.0
700.0
720.0
740.0
760.0
780.0
800.0
820.0
840.0
860.0
880.0
900.0
920.0
940.0
960.0
980.0
1000.0
1020.0
1040.0
1060.0
1080.0
1100.0
1120.0
1140.0
1160.0
1180.0
1200.0
1220.0
1240.0
1260.0
1280.0
1300.0
1320.0
1340.0
1360.0
1380.0
1400.0
1420.0
1440.0
1460.0
1480.0
1500.0
1520.0


1540.0
1560.0
1580.0
1600.0
1620.0
1640.0
1660.0
1680.0
1700.0
1720.0
1740.0
1760.0
1780.0
1800.0
1820.0
1840.0
1860.0
1880.0
1900.0
1920.0
1940.0

borehole geophysics / hydrophysics	**NMR**		Colog, Inc.
	COMPANY: ACME Lithium	**PROJECT:** Clayton Valley	608 River Street, Elko, NV 89801 Phone: (775) 777-3433 www.colog.com
	DATE LOGGED: 15 March 2023	**WELL:** DH1-A	

LOCATION: Silver Peak, NV
FIELD ENGINEER(S): N.Welsh
WITNESSED BY: Harris Drilling
DEPTH DRILLER: 1940'
DEPTH LOGGER: 1924'

LOG MEASURED FROM: Ground Surface (GS)
TOP & BOTTOM OF CASING: 8.5", 0' to 300'
BOREHOLE DIAMETER: 7 7/8", 300' to 1924'
FLUID LEVEL DEPTH: 24' @ 13:30
ORIENTATION REFERENCE: N/A

COMMENTS:

Logging Interval: 310' to 1924'

Hi Res Zones 600'-700', 900'-1300', 1560'-1700'

Vertical Window in Hi Res Zones: ~5'. Other Zones: ~15'.

NMR Processed Parameters

Processing Parameters used to generate the results in this folder.
This file was auto-generated during data export

Date of Export: 16-Mar-2023 03:14:26
Version of Javelin Pro Plus used: 4.7.1

ACQUISITION METADATA
=====================

	Tr1	Tr2
Averages (#):	4	24
Tr Recovery Time (sec):	8.50	0.25

PROCESSING OPTIONS
=================

Frequency indices included in stack: 1 2 3
Stacking method: Noise-weighted
Q-scaling: Applied

Depth Units: ft
Depth averaging method: none
Depth offset applied: 0.00

T2 Regularization: 30

PHASE ROTATION
===============
Phase rotation method used: AUTO

F1: 0.2 [0.2]
F2: 0.5 [0.5]
F3: 0.7 [0.7]

NOTE: First value is the phase rotation applied to data (in degrees). The value in brackets is the auto-calculated phase rotation.

HYDROLOGY ESTIMATORS
===================

Clay cutoff (ms): 3
Cap. cutoff (ms): 33

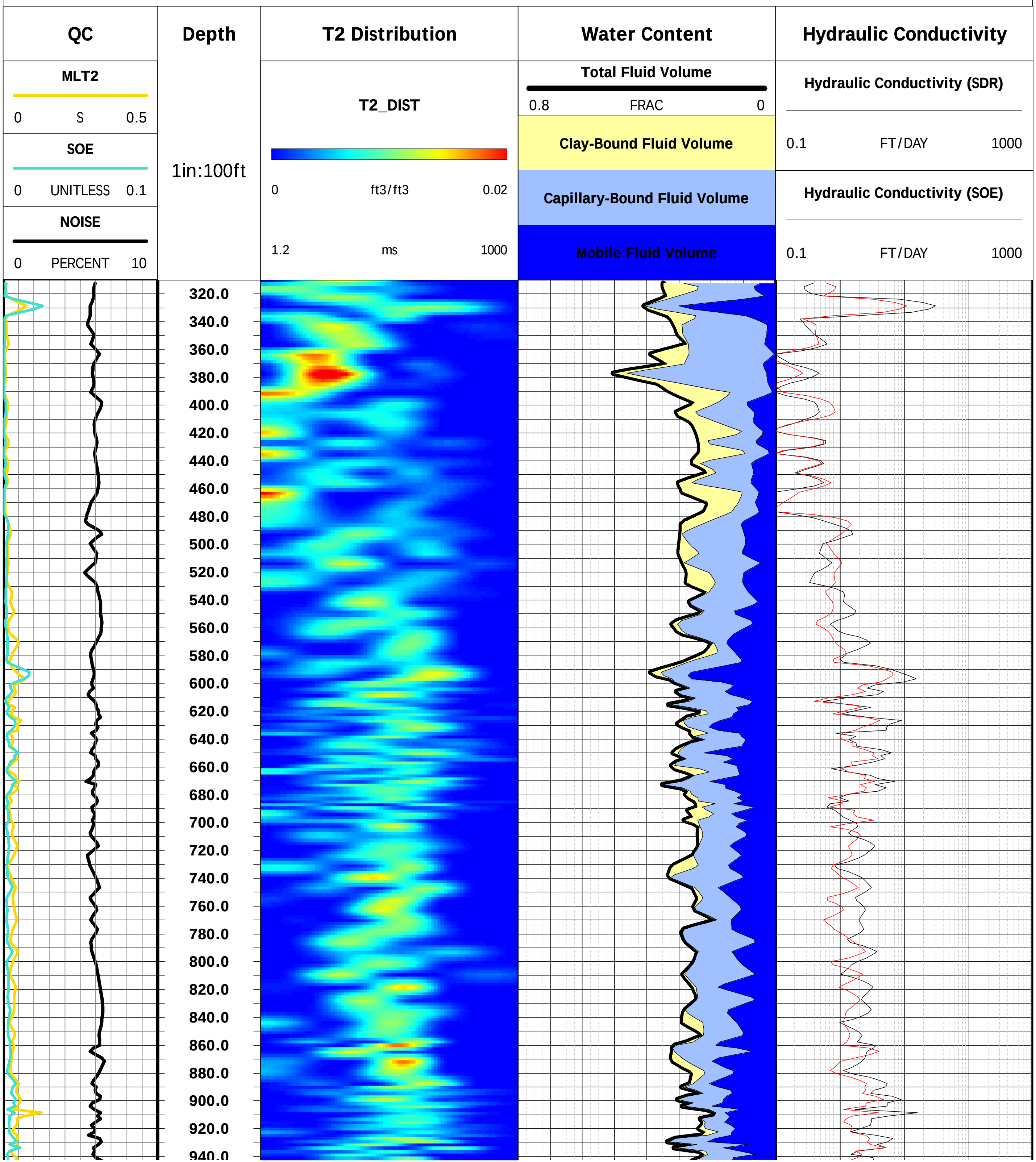
C_SDR: 8900
N_SDR: 2.0

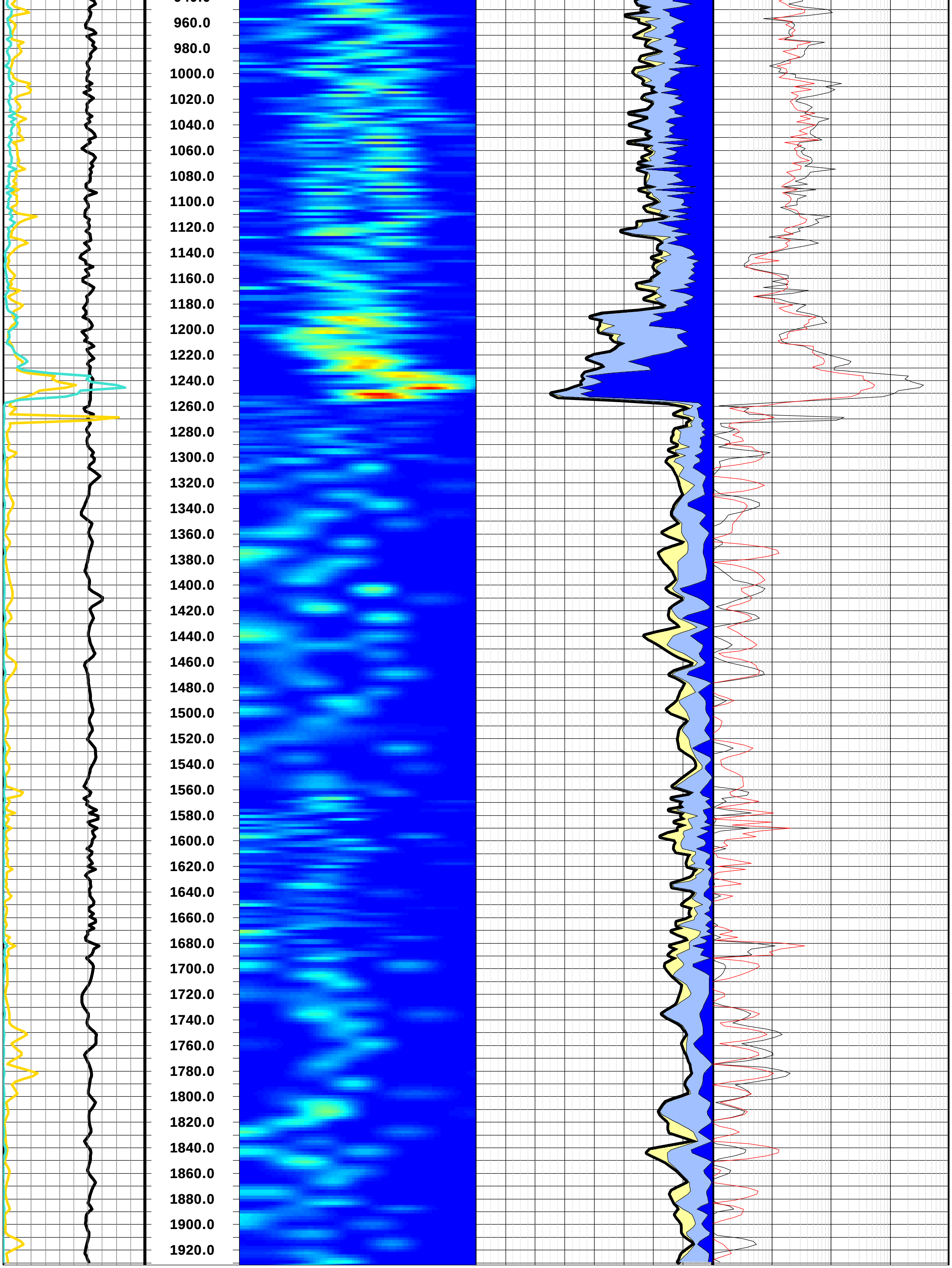
C_SOE: 420

SOE_win: 500

SOURCE FILE INFORMATION
======================

Seed file:
C:\VC_NMR_DATA\Javelin_Wireline\ACMELithium\DH1A\NMR_2UL\NMR_2UL_002.jrd




960.0
980.0
1000.0
1020.0
1040.0
1060.0
1080.0
1100.0
1120.0
1140.0
1160.0
1180.0
1200.0
1220.0
1240.0
1260.0
1280.0
1300.0
1320.0
1340.0
1360.0
1380.0
1400.0
1420.0
1440.0
1460.0
1480.0
1500.0
1520.0
1540.0
1560.0
1580.0
1600.0
1620.0
1640.0
1660.0
1680.0
1700.0
1720.0
1740.0
1760.0
1780.0
1800.0
1820.0
1840.0
1860.0
1880.0
1900.0
1920.0

FTC & Natural Gamma & Caliper & MicroRes

COLOG
borehole geophysics / hydrophysics

Colog, Inc.
608 River Street, Elko, NV 89801
Phone: (775) 777-3433
www.colog.com

COMPANY: ACME Lithium	**PROJECT:** Clayton Valley
DATE LOGGED: 15 March 2023	**WELL:** DH1-A

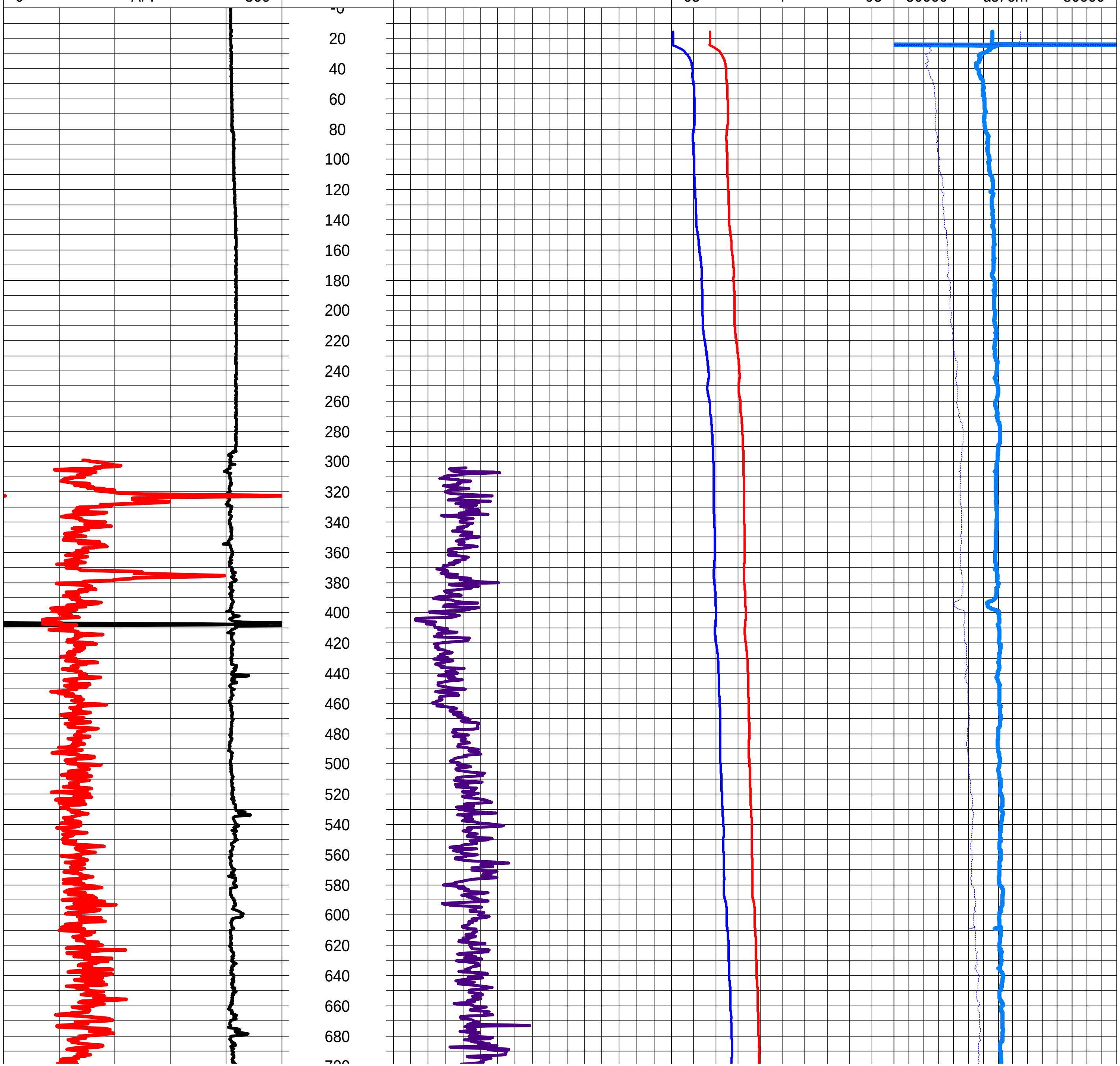
LOCATION: Silver Peak, NV	**LOG MEASURED FROM:** Ground Surface (GS)
FIELD ENGINEER(S): N.Welsh	**TOP & BOTTOM OF CASING:** 8.5", 0' to 300'
WITNESSED BY: Harris Drilling	**BOREHOLE DIAMETER:** 7 7/8", 300' to 1924'
DEPTH DRILLER: 1940'	**FLUID LEVEL DEPTH:** 24' @ 13:30
DEPTH LOGGER: 1924'	**ORIENTATION REFERENCE:** N/A

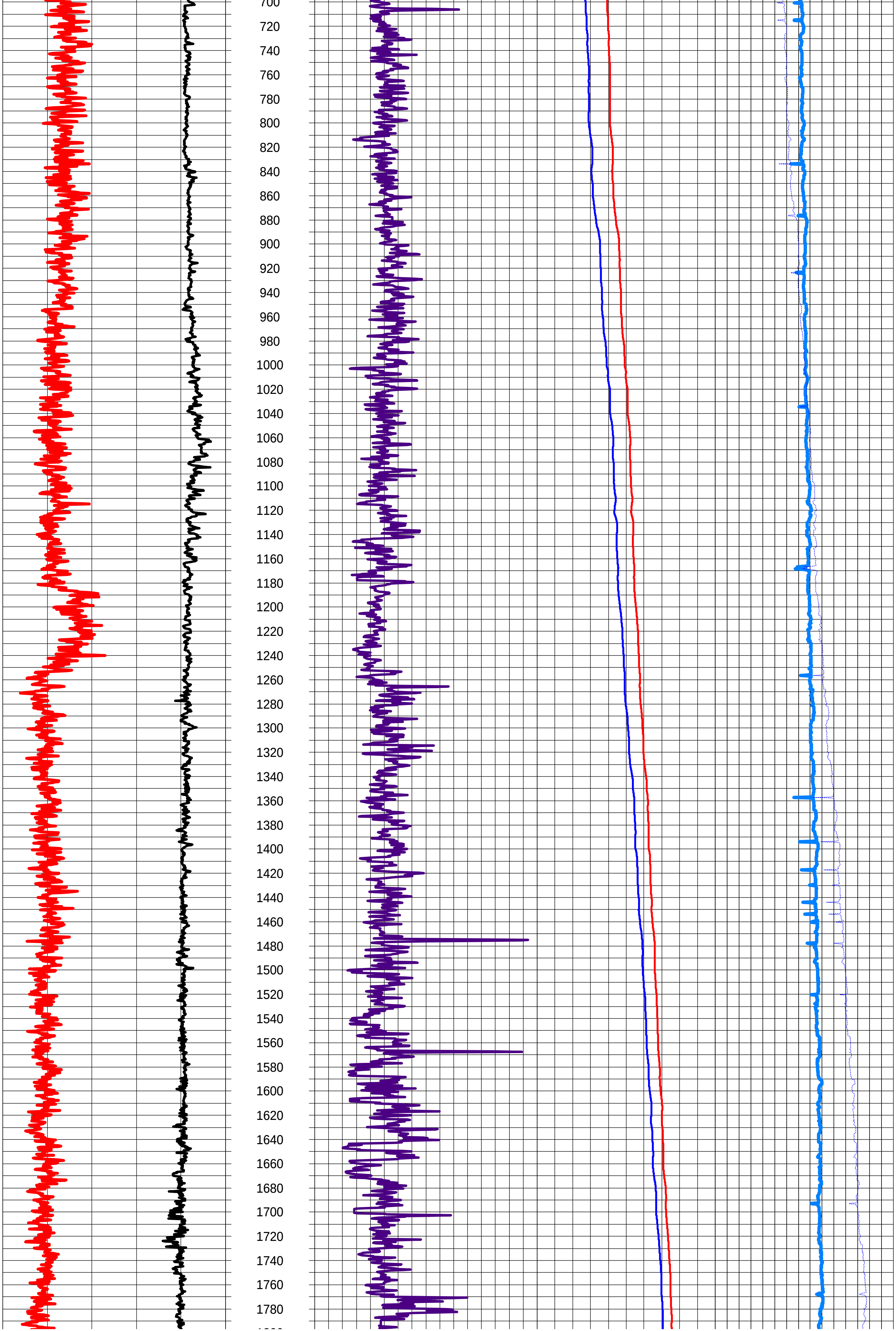
COMMENTS:

Logging Interval: 300' to 1924'

Natural Gamma converted to API units for correlation purposes.

Caliper / Natural Gamma API	Depth	Microresistivity	Temp C / Temp F	Cond25C / Cond
Caliper: 0 in 10	1in:100ft	Microresistivity	Temp C: 15 'C 35	Cond25C: 50000 uS/cm 80000
Natural Gamma API: 0 API 300		0 Ohm.m 800	Temp F: 65 ºF 95	Cond: 50000 uS/cm 80000




700
720
740
760
780
800
820
840
860
880
900
920
940
960
980
1000
1020
1040
1060
1080
1100
1120
1140
1160
1180
1200
1220
1240
1260
1280
1300
1320
1340
1360
1380
1400
1420
1440
1460
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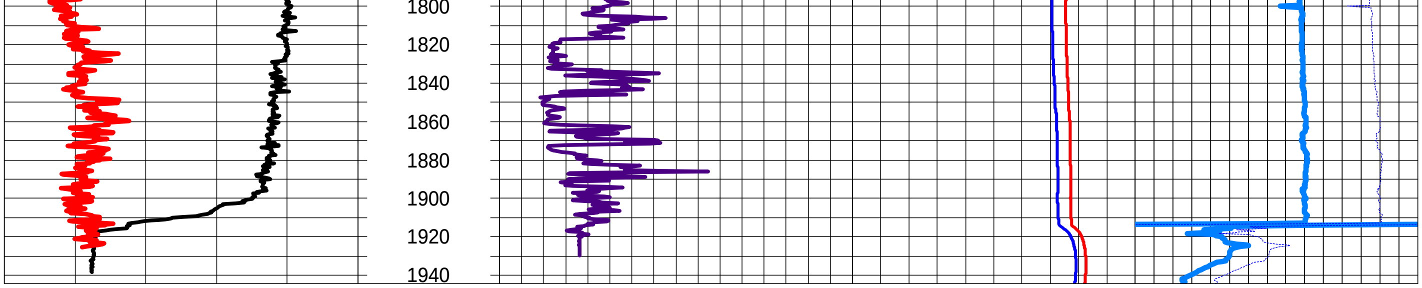
1720
1740
1760
1780


1800
1820
1840
1860
1880
1900
1920
1940

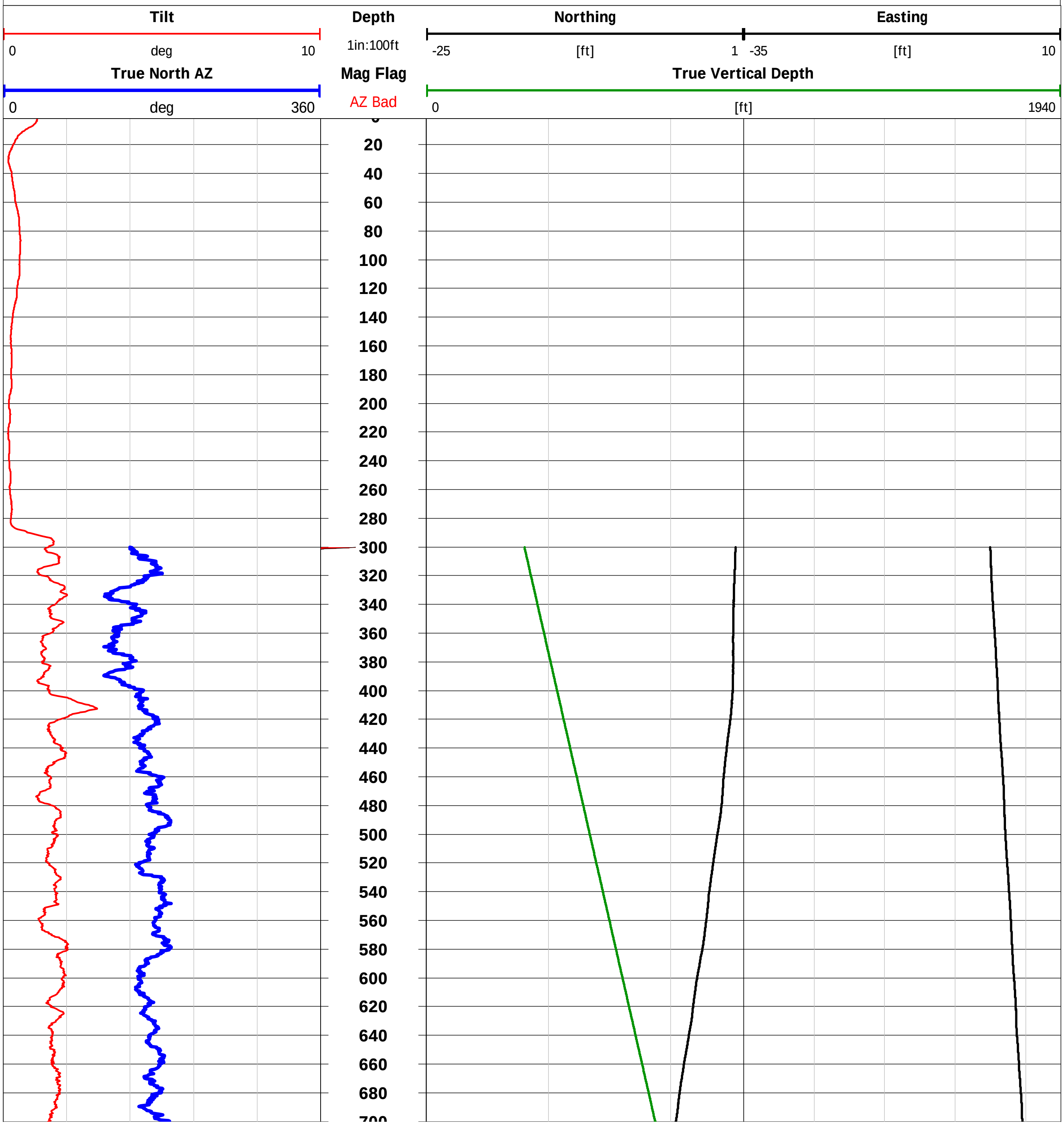
COLOG borehole geophysics / hydrophysics	**Magnetometer Deviation**		**Colog, Inc.**
	COMPANY: ACME Lithium	PROJECT: Clayton Valley	608 River Street, Elko, NV 89801
	DATE LOGGED: 15 March 2023	WELL: DH1-A	Phone: (775) 777-3433 www.colog.com

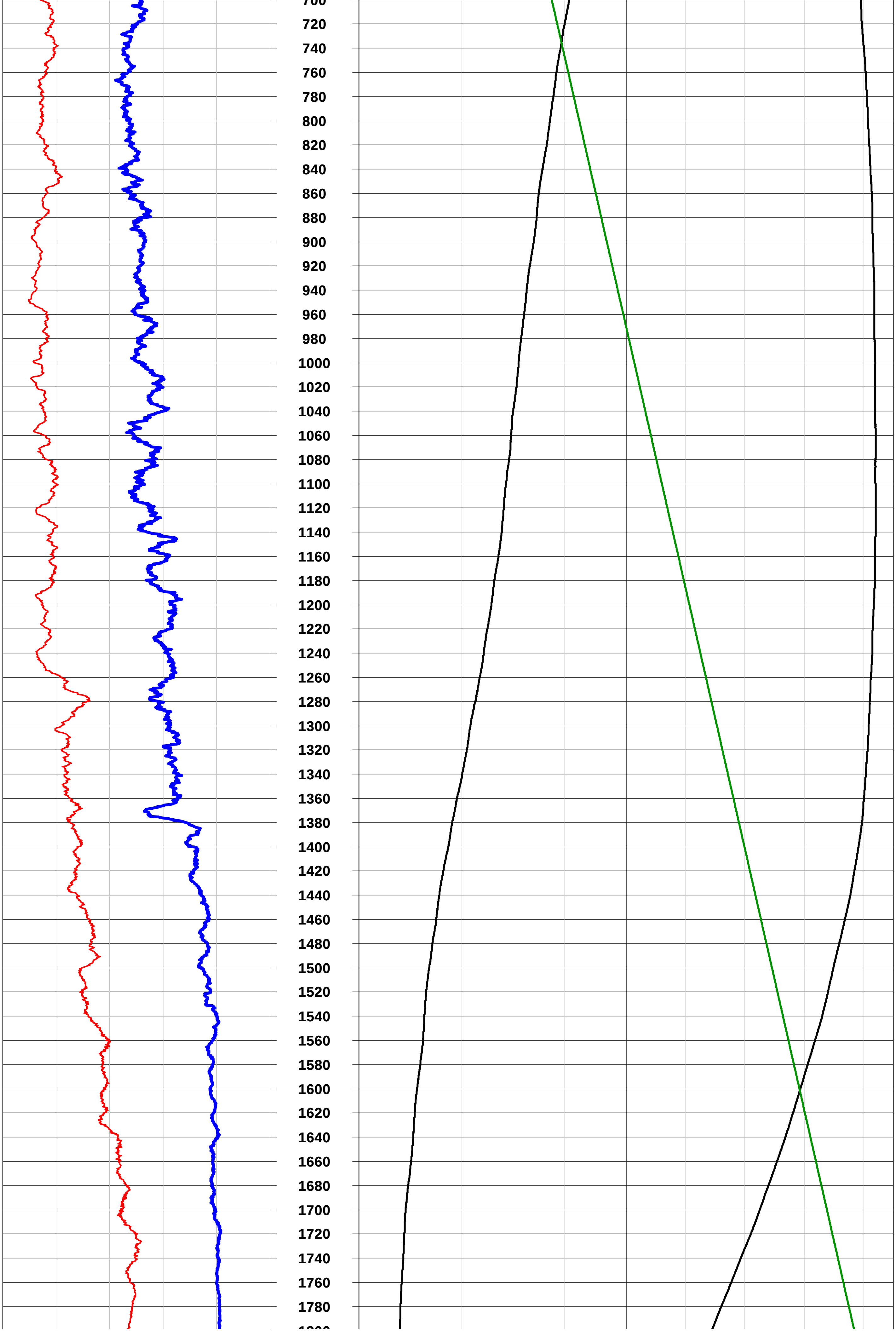
LOCATION: Silver Peak, NV	LOG MEASURED FROM: Ground Surface (GS)
FIELD ENGINEER(S): N.Welsh	TOP & BOTTOM OF CASING: 8.5", 0' to 300'
WITNESSED BY: Harris Drilling	BOREHOLE DIAMETER: 7 7/8", 300' to 1924'
DEPTH DRILLER: 1940'	FLUID LEVEL DEPTH: 24' @ 13:30
DEPTH LOGGER: 1924'	ORIENTATION REFERENCE: True North

COMMENTS:

Logging Interval: 300' to 1924'

AZ converted to True North AZ by applying a declination of 12.17 E




720
740
760
780
800
820
840
860
880
900
920
940
960
980
1000
1020
1040
1060
1080
1100
1120
1140
1160
1180
1200
1220
1240
1260
1280
1300
1320
1340
1360
1380
1400
1420
1440
1460
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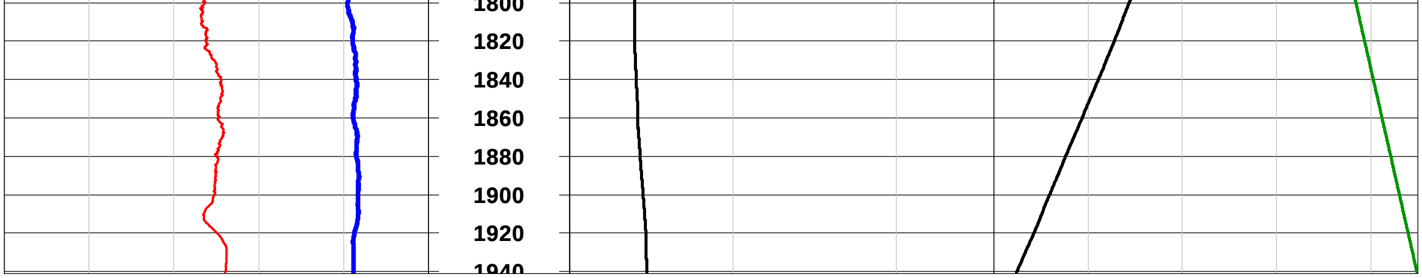
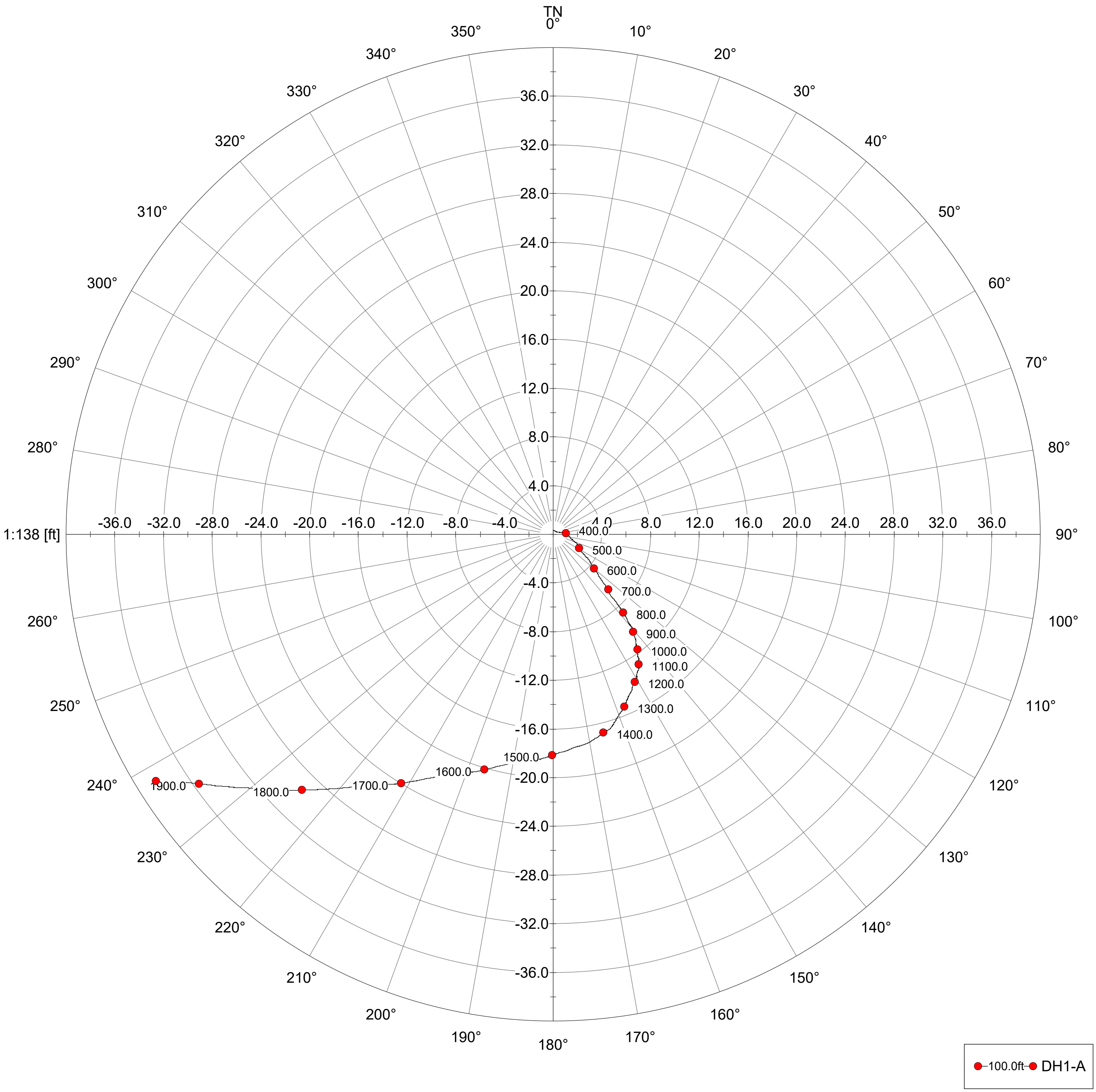
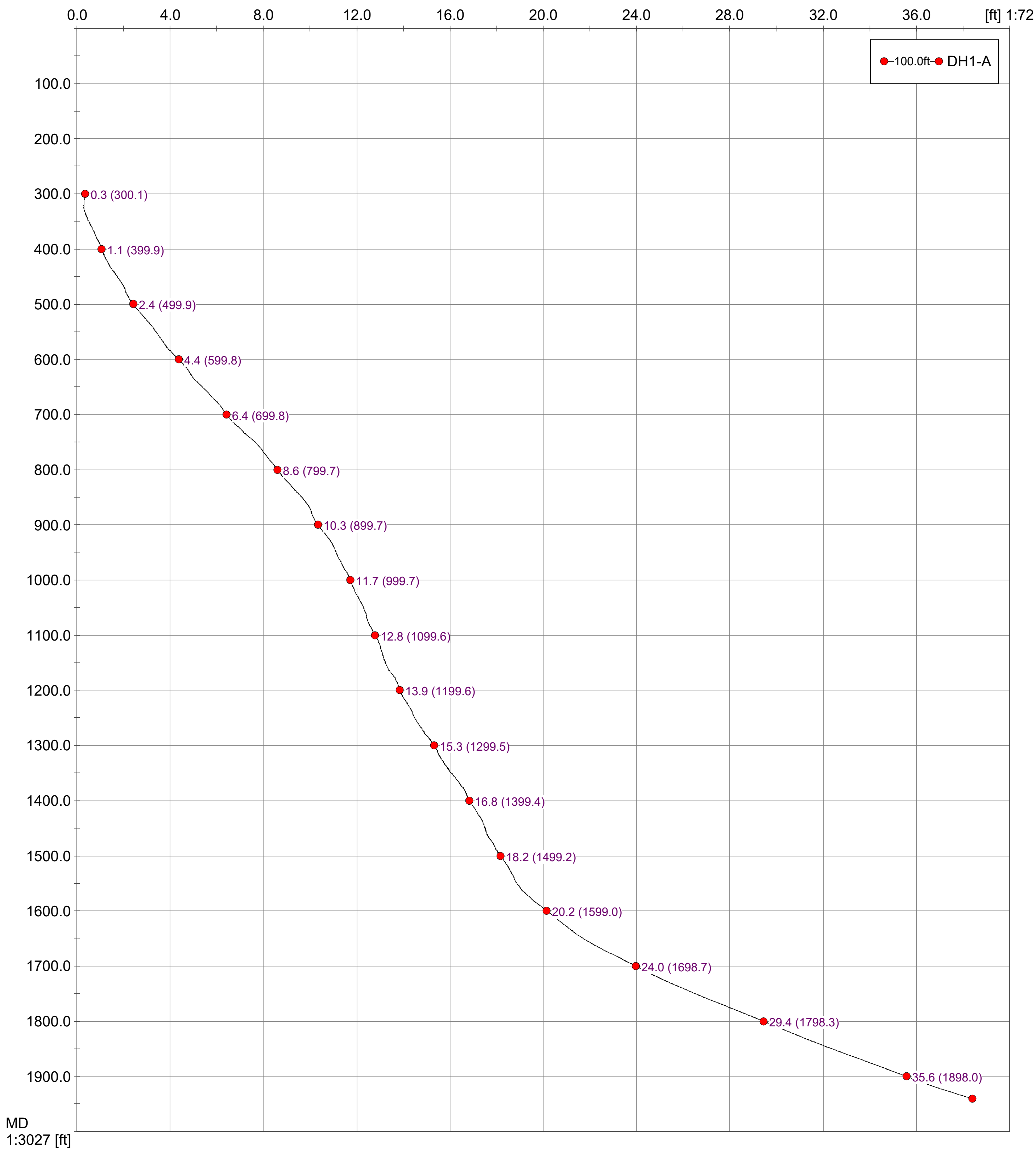
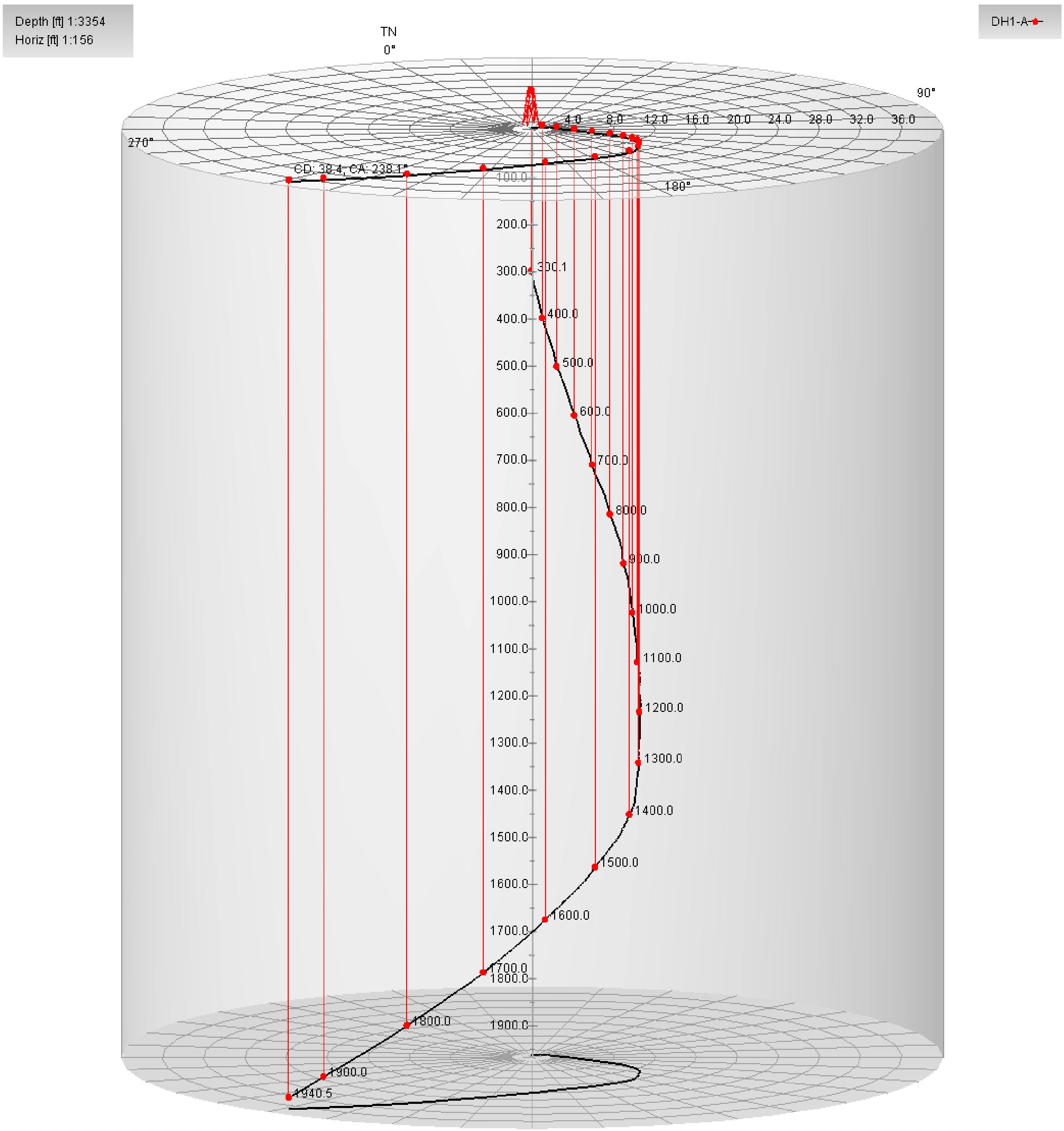
1720
1740
1760
1780


1800
1820
1840
1860
1880
1900
1920
1940

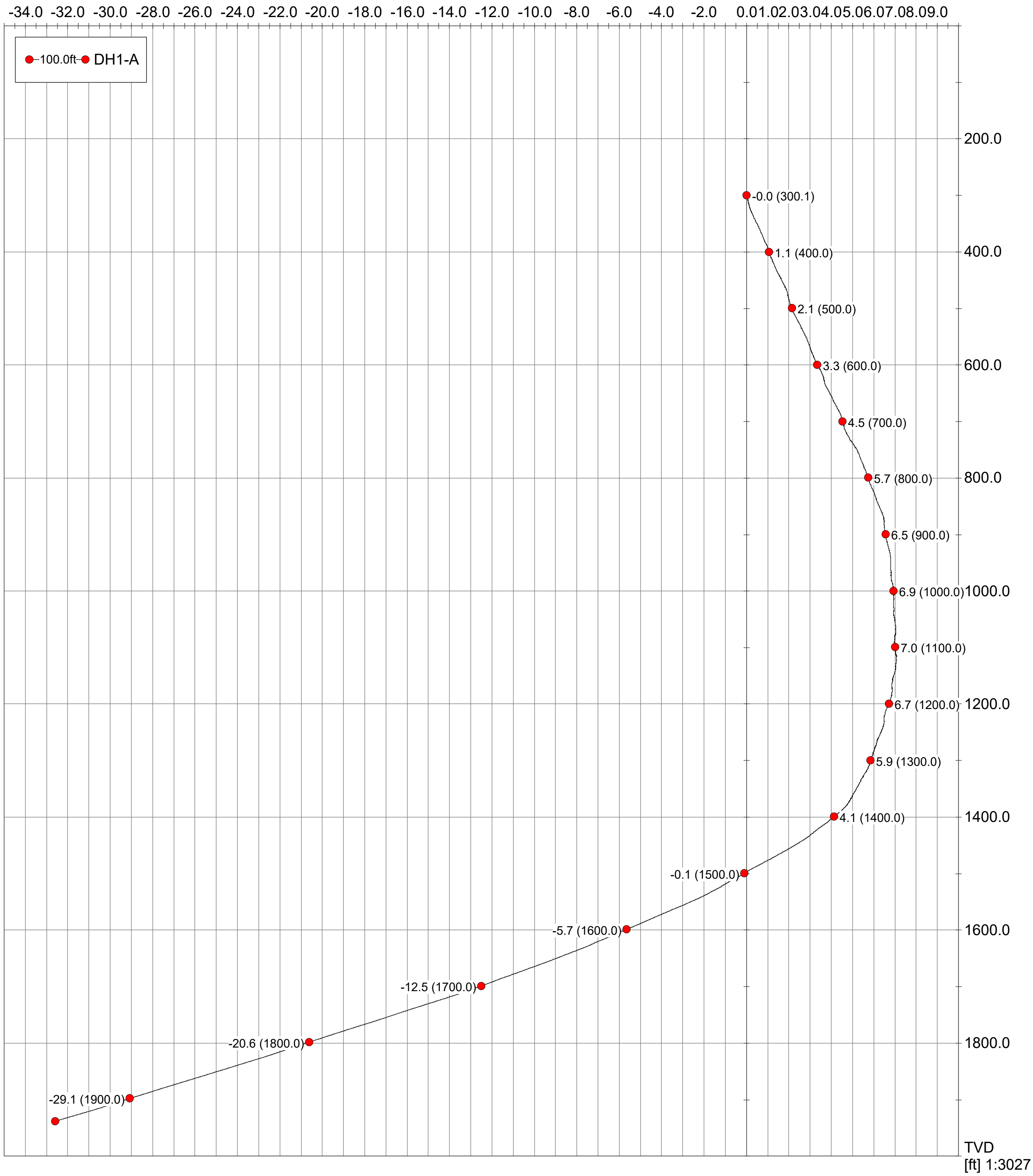


TN
0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
100°
110°
120°
130°
140°
150°
160°
170°
180°
190°
200°
210°
220°
230°
240°
250°
260°
270°
280°
290°
300°
310°
320°
330°
340°
350°
1:138 [ft]
400.0
500.0
600.0
700.0
800.0
900.0
1000.0
1100.0
1200.0
1300.0
1400.0
1500.0
1600.0
1700.0
1800.0
1900.0
100.0ft
DH1-A

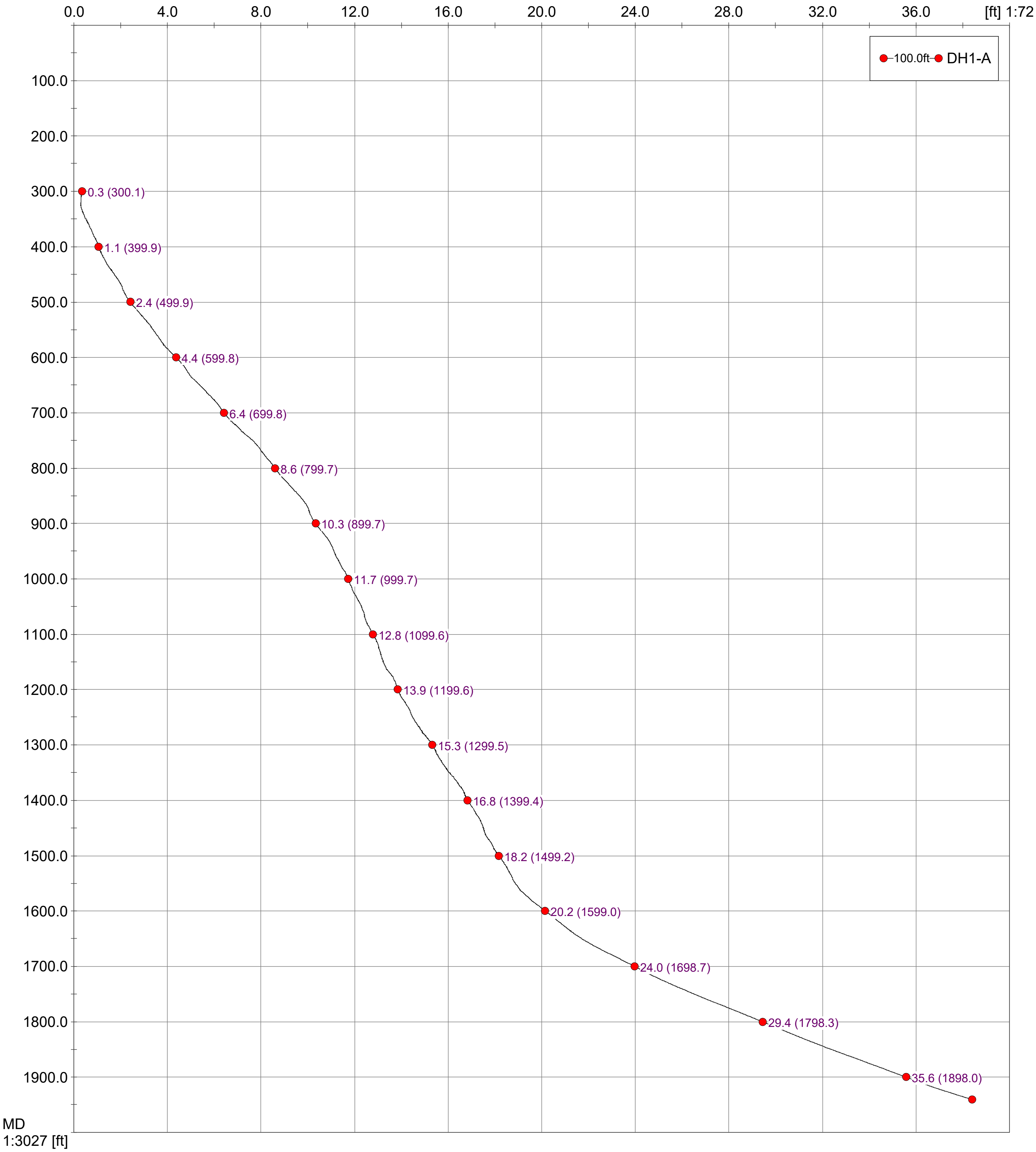

0.0
4.0
8.0
12.0
16.0
20.0
24.0
28.0
32.0
36.0
[ft] 1:72
100.0ft
DH1-A
100.0
200.0
300.0
400.0
500.0
600.0
700.0
800.0
900.0
1000.0
1100.0
1200.0
1300.0
1400.0
1500.0
1600.0
1700.0
1800.0
1900.0
MD
1:3027 [ft]
0.3 (300.1)
1.1 (399.9)
2.4 (499.9)
4.4 (599.8)
6.4 (699.8)
8.6 (799.7)
10.3 (899.7)
11.7 (999.7)
12.8 (1099.6)
13.9 (1199.6)
15.3 (1299.5)
16.8 (1399.4)
18.2 (1499.2)
20.2 (1599.0)
24.0 (1698.7)
29.4 (1798.3)
35.6 (1898.0)



Depth [ft] 1:3354
Horiz [ft] 1:156
DH1-A
TN
0°
90°
180°
270°
4.0
8.0
12.0
16.0
20.0
24.0
28.0
32.0
36.0
CD: 38.4, CA: 238.1°
100.0
200.0
300.0
400.0
500.0
600.0
700.0
800.0
900.0
1000.0
1100.0
1200.0
1300.0
1400.0
1500.0
1600.0
1700.0
1800.0
1900.0
300.1
1940.5



-34.0 -32.0 -30.0 -28.0 -26.0 -24.0 -22.0 -20.0 -18.0 -16.0 -14.0 -12.0 -10.0 -8.0 -6.0 -4.0 -2.0 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0
100.0ft DH1-A
200.0
400.0
600.0
800.0
1000.0
1200.0
1400.0
1600.0
1800.0
-0.0 (300.1)
1.1 (400.0)
2.1 (500.0)
3.3 (600.0)
4.5 (700.0)
5.7 (800.0)
6.5 (900.0)
6.9 (1000.0)
7.0 (1100.0)
6.7 (1200.0)
5.9 (1300.0)
4.1 (1400.0)
-0.1 (1500.0)
-5.7 (1600.0)
-12.5 (1700.0)
-20.6 (1800.0)
-29.1 (1900.0)
TVD
[ft] 1:3027



0.0
4.0
8.0
12.0
16.0
20.0
24.0
28.0
32.0
36.0
[ft] 1:72
100.0ft
DH1-A
100.0
200.0
300.0
400.0
500.0
600.0
700.0
800.0
900.0
1000.0
1100.0
1200.0
1300.0
1400.0
1500.0
1600.0
1700.0
1800.0
1900.0
MD
1:3027 [ft]
0.3 (300.1)
1.1 (399.9)
2.4 (499.9)
4.4 (599.8)
6.4 (699.8)
8.6 (799.7)
10.3 (899.7)
11.7 (999.7)
12.8 (1099.6)
13.9 (1199.6)
15.3 (1299.5)
16.8 (1399.4)
18.2 (1499.2)
20.2 (1599.0)
24.0 (1698.7)
29.4 (1798.3)
35.6 (1898.0)

Fluid-Temperature Conductivity/ Deviation

COLOG
borehole geophysics / hydrophysics

COMPANY: Harris Drilling	PROJECT: ACME: CLAYTON VALLEY
DATE LOGGED: 24 May 2023	WELL: TW-1

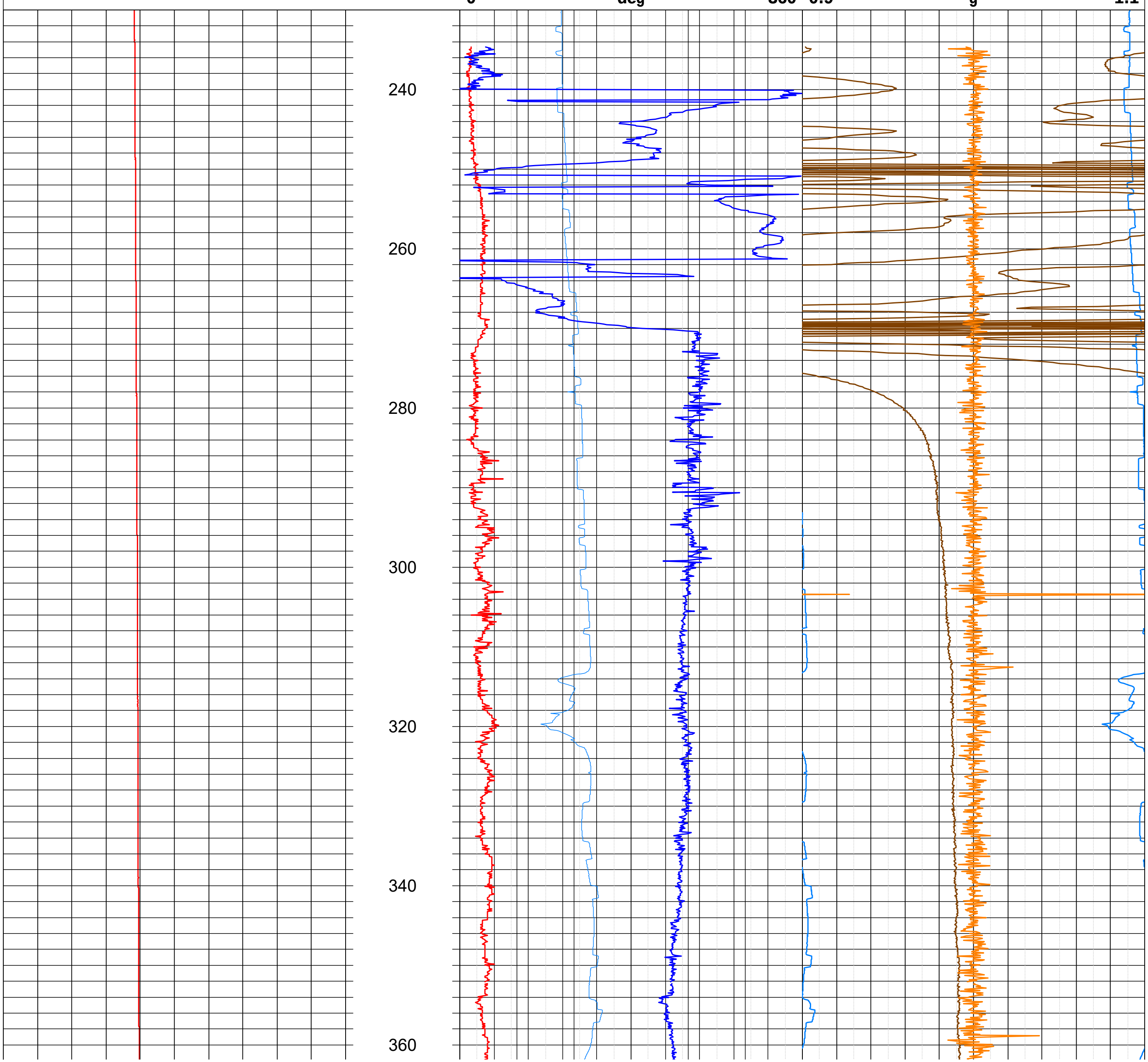
Colog, Inc.
608 River Street, Elko, NV 89801
Phone: (775) 777-3433
www.colog.com

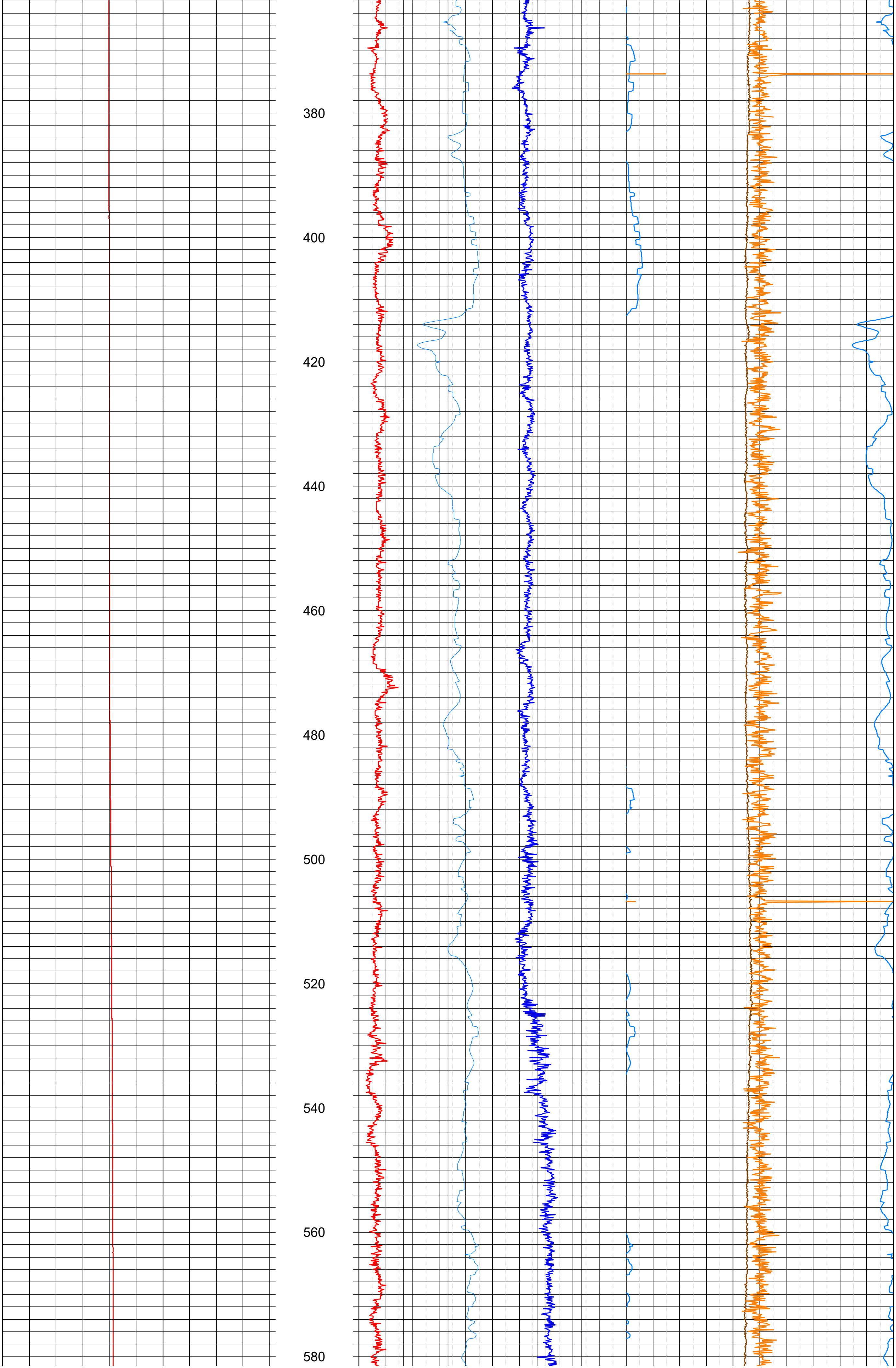
LOCATION: S of Tonopah, NV	LOG MEASURED FROM: Ground Surface
FIELD ENGINEER(S): S.Barrus	TOP & BOTTOM OF CASING: 0-264'
WITNESSED BY: Harris Drilling	BOREHOLE DIAMETER: 14.7"
DEPTH DRILLER: 1822'	FLUID LEVEL DEPTH: 4' @ 11:14
DEPTH LOGGER: 1809'	ORIENTATION REFERENCE: Mag North

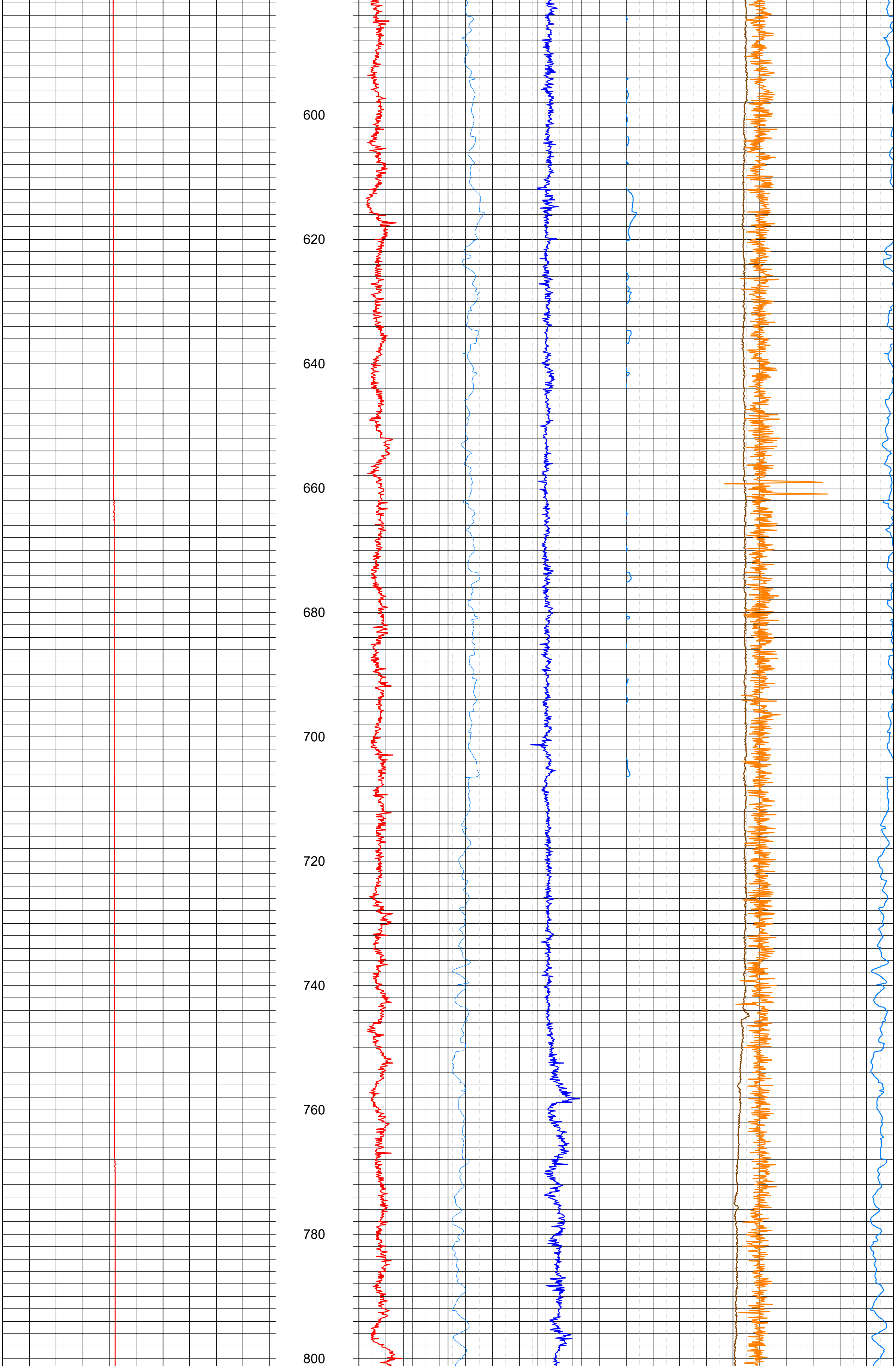
COMMENTS:

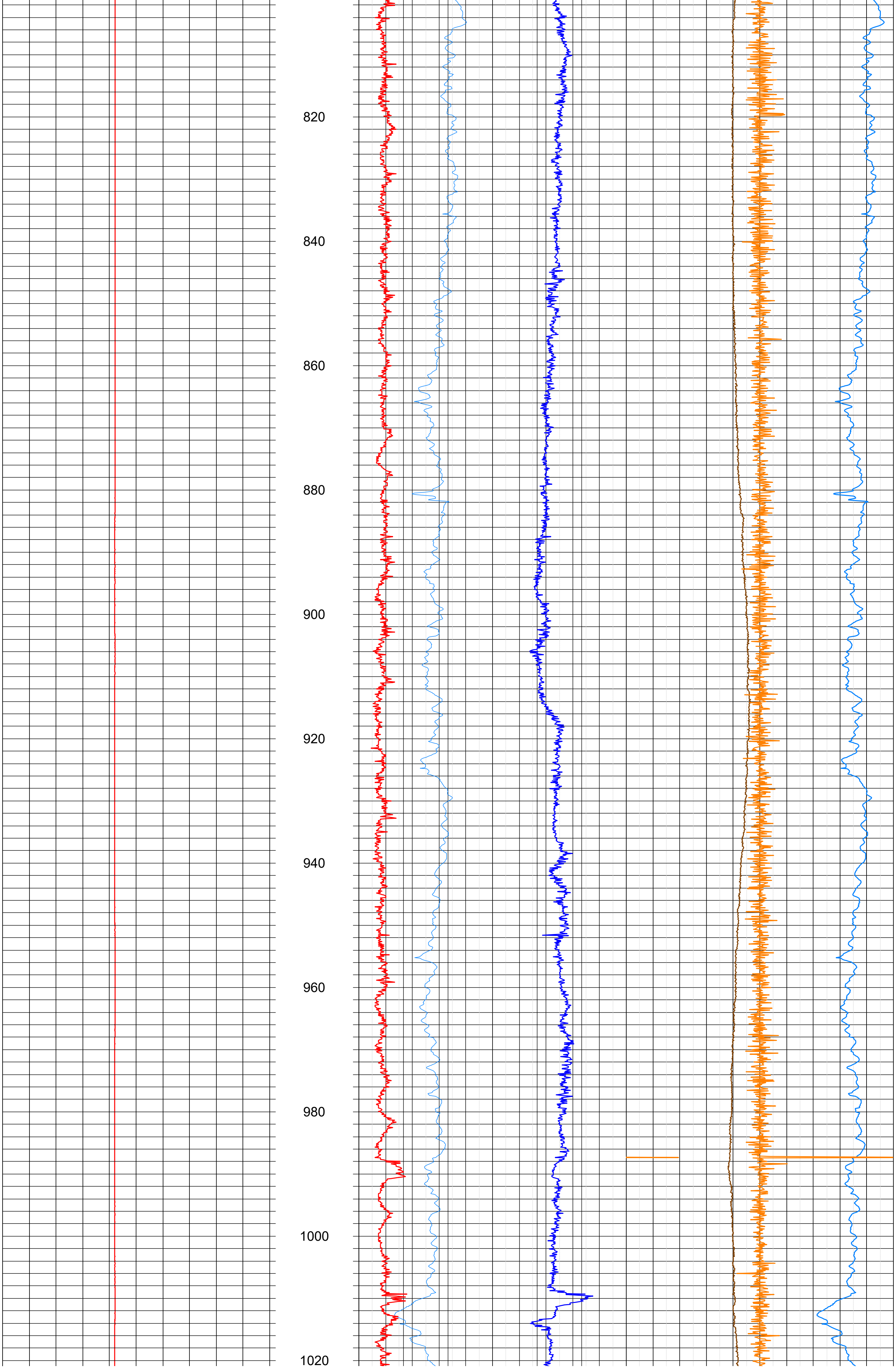
264'-1809'

Temp	Depth	Cond	Cond25C
0 C 20	1in:20ft	0 uS/cm 1000	0 uS/cm 1000
Temp F		Tilt	MagnField
40 ºF 60		0 deg 15	45 uT 55
		Azimuth	Gravity
		0 deg 360	0.9 g 1.1




380
400
420
440
460
480
500
520
540
560
580


600
620
640
660
680
700
720
740
760
780
800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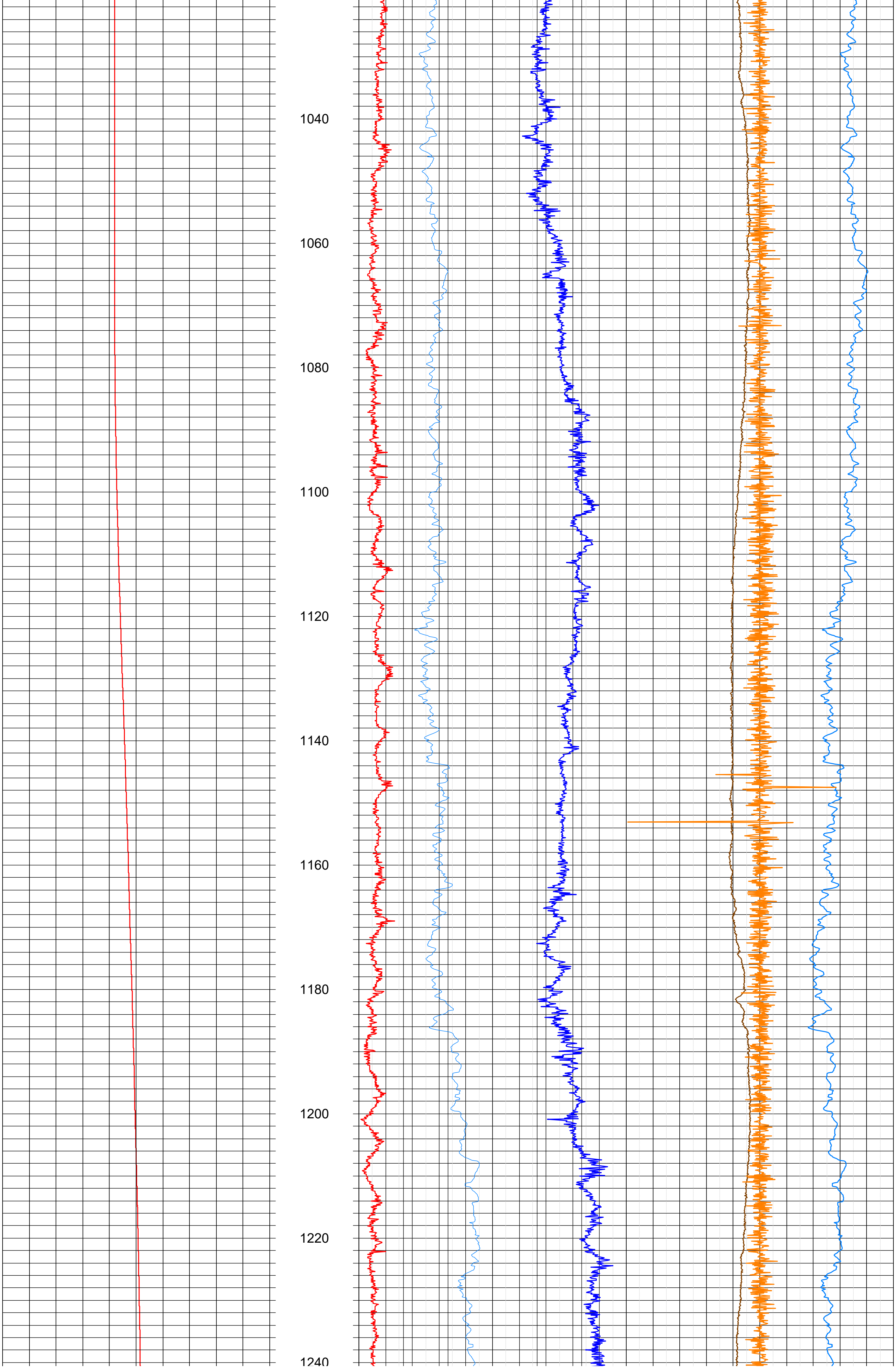
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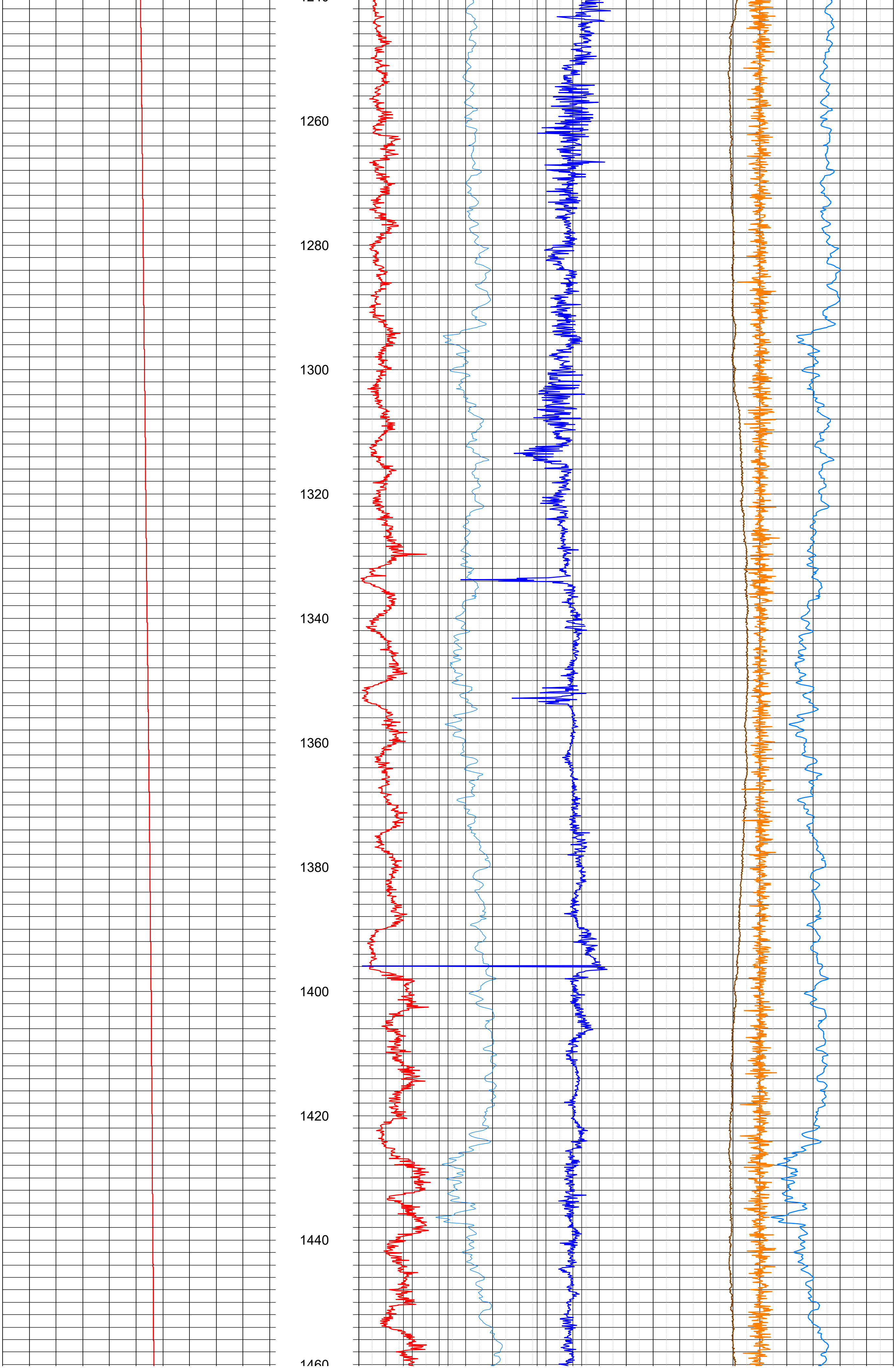
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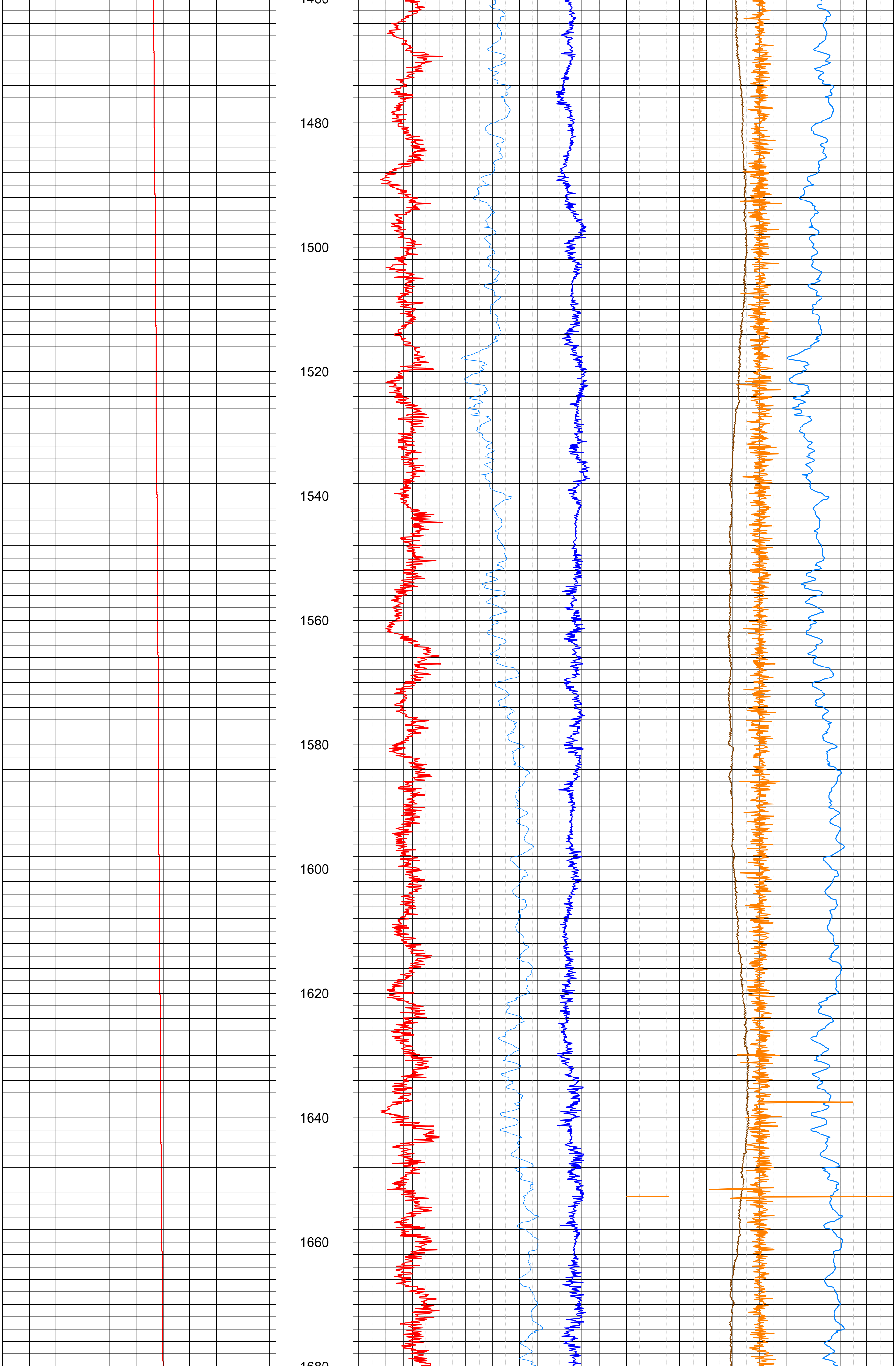
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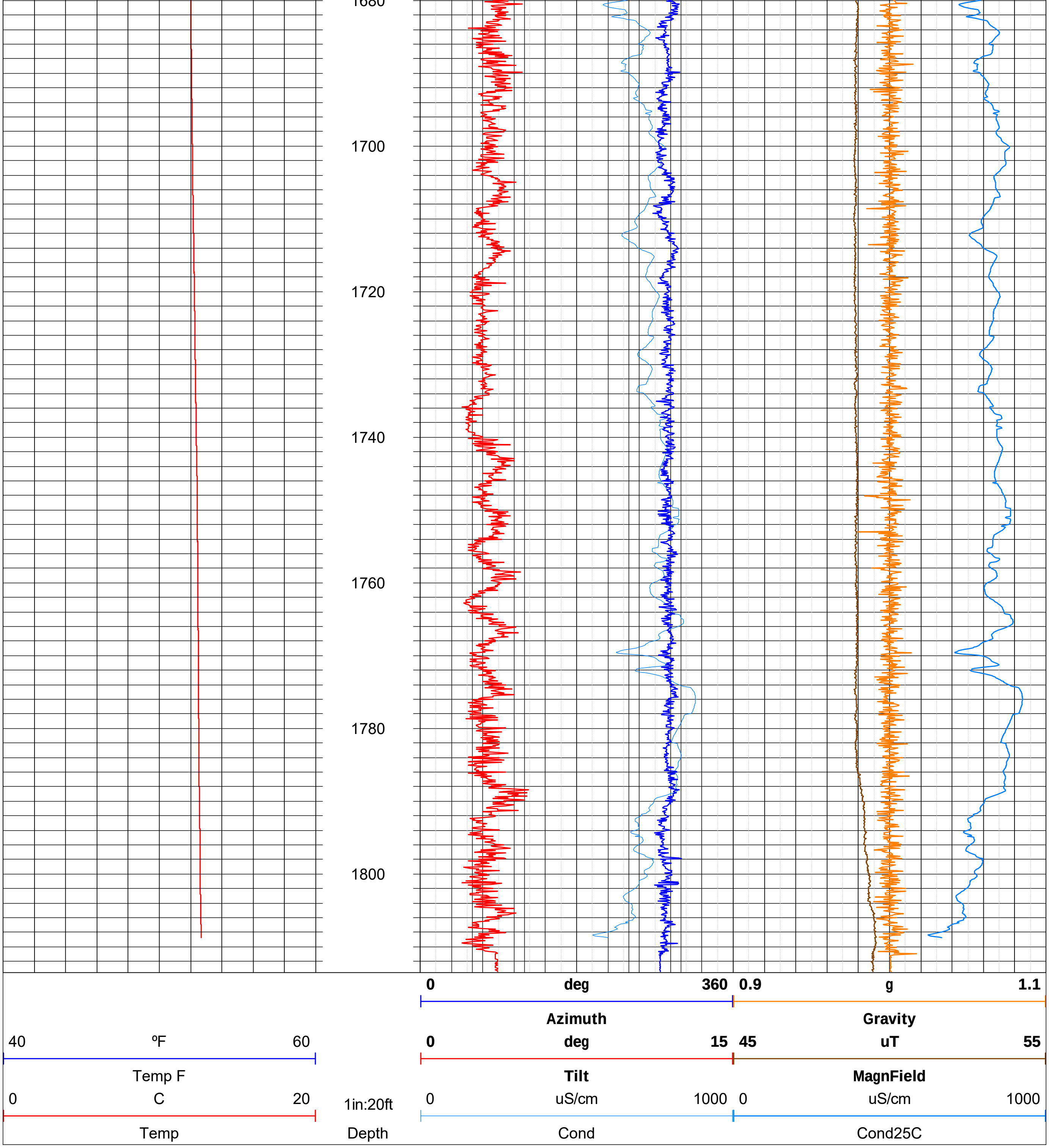
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1760
1780
1800
0 deg 360
Azimuth
0.9 g 1.1
Gravity
40 ºF 60
Temp F
0 deg 15
Tilt
45 uT 55
MagnField
0 C 20
Temp
1in:20ft
Depth
0 uS/cm 1000
Cond
0 uS/cm 1000
Cond25C

Dual Induction

COLOG
borehole geophysics / hydrophysics

Colog, Inc.
608 River Street, Elko, NV 89801
Phone: (775) 777-3433
www.colog.com

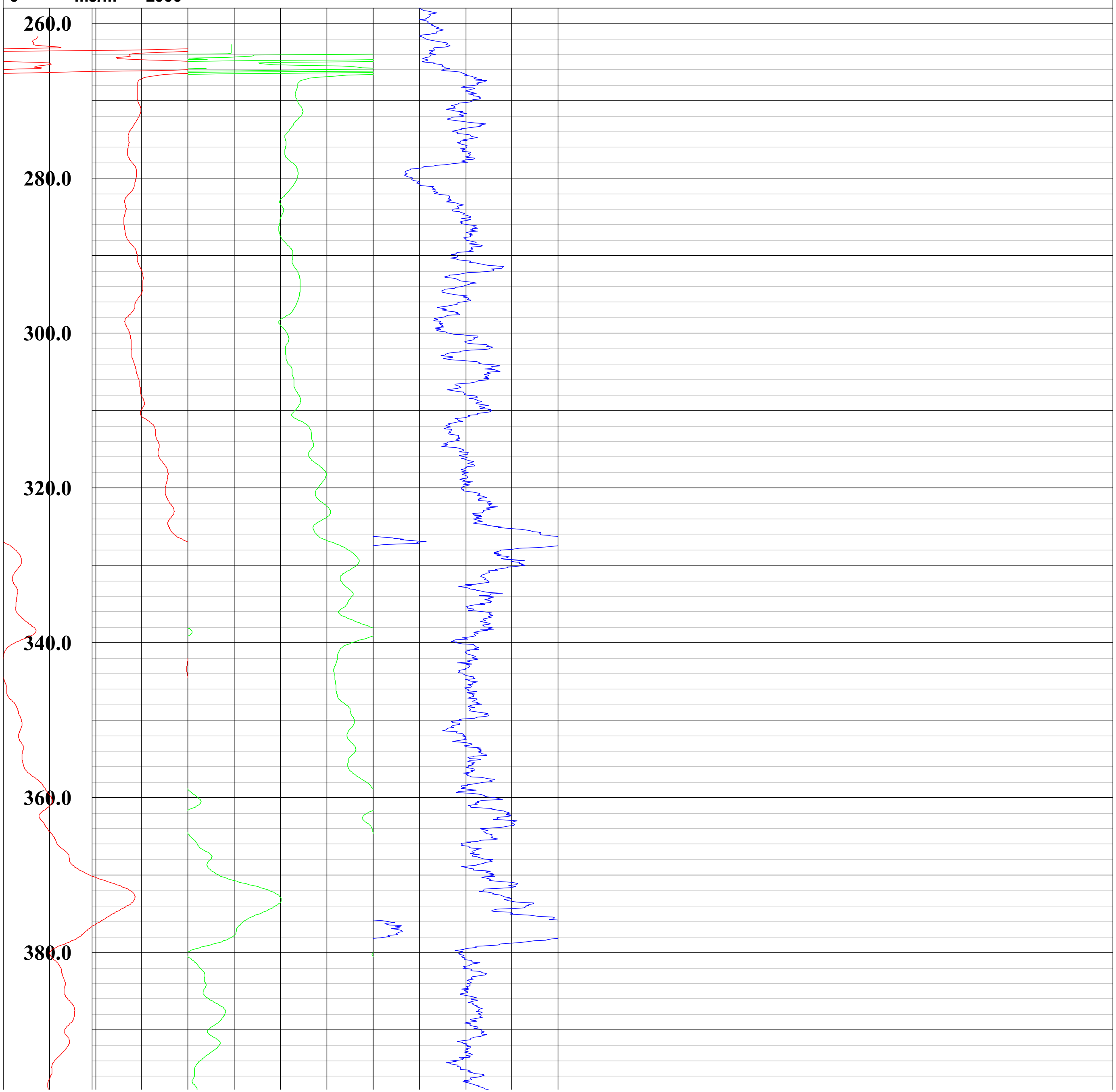
COMPANY: Harris Drilling	PROJECT: ACME: CLAYTON VALLEY
DATE LOGGED: 24 May 2023	WELL: TW-1

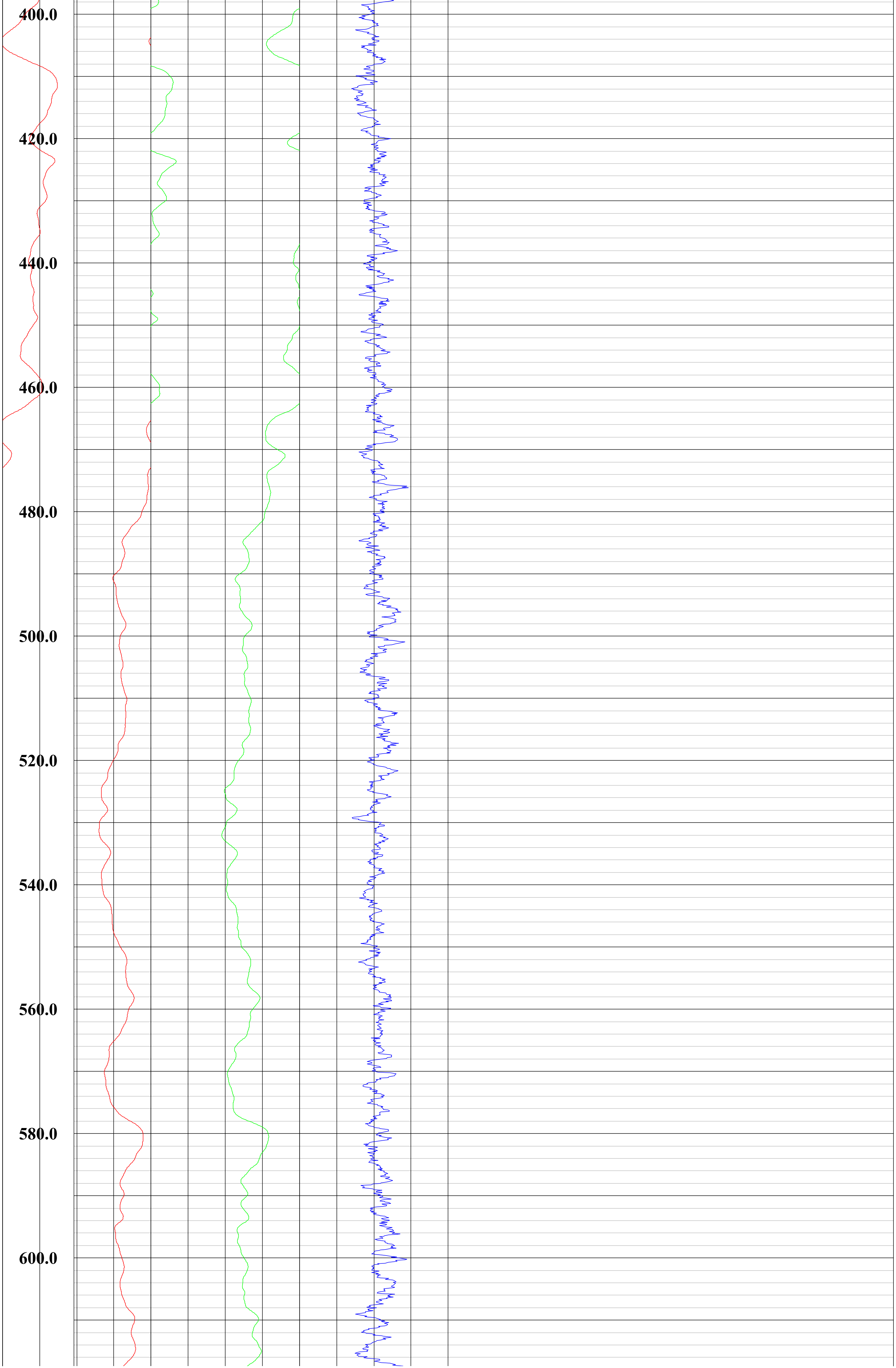
LOCATION: S of Tonopah, NV	LOG MEASURED FROM: Ground Surface
FIELD ENGINEER(S): S.Barrus	TOP & BOTTOM OF CASING: 0-264'
WITNESSED BY: Harris Drilling	BOREHOLE DIAMETER: 14.7"
DEPTH DRILLER: 1822'	FLUID LEVEL DEPTH: 4' @ 11:14
DEPTH LOGGER: 1809'	ORIENTATION REFERENCE: Mag North

COMMENTS:

264'-1809'

Depth	Conductivity (short-spacing)	Natural Gamma
1ft:240ft	0 mS/m 1000	0 CPS 200
Conductivity (long-spacing) 0 mS/m 1000		

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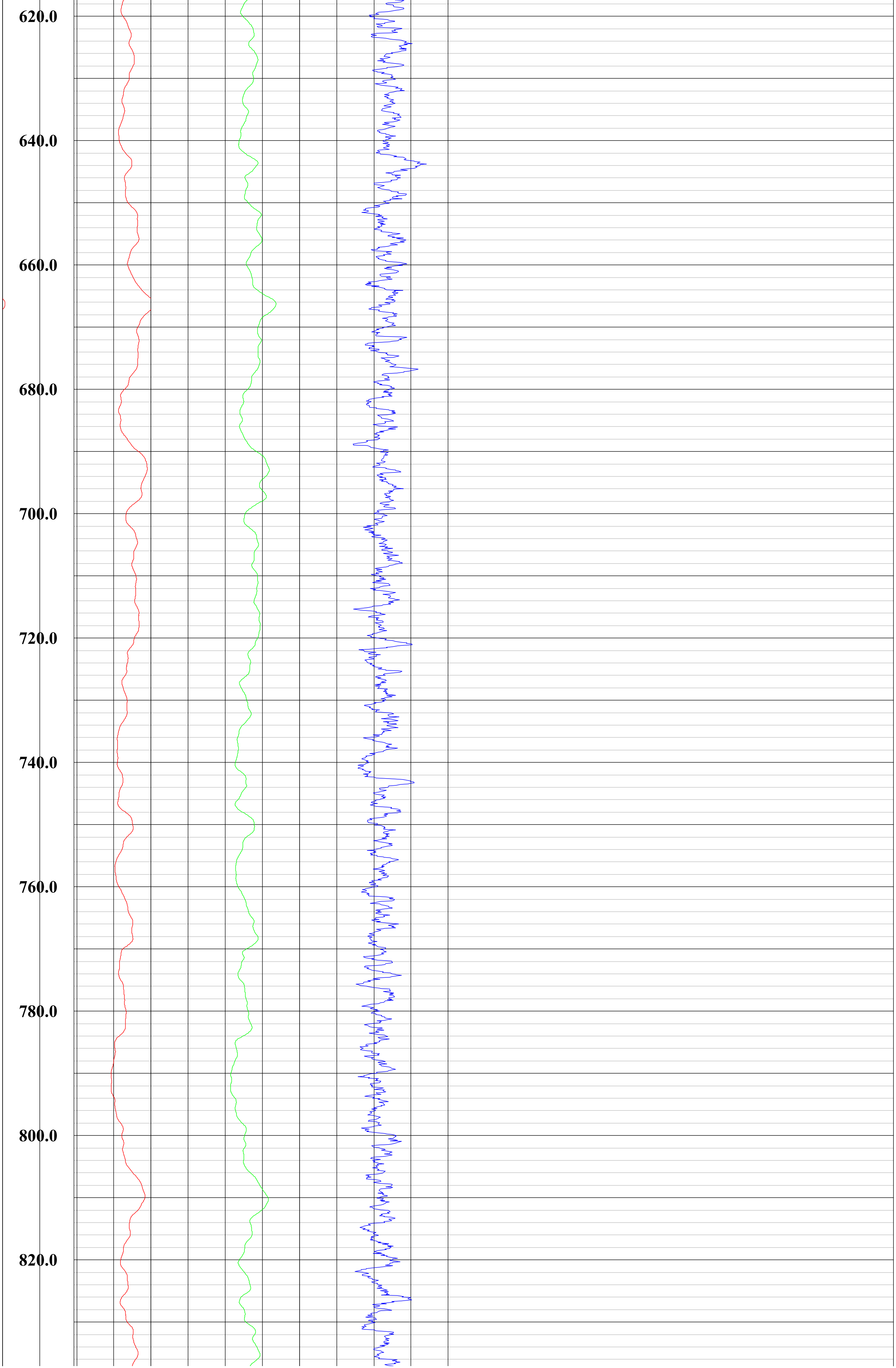
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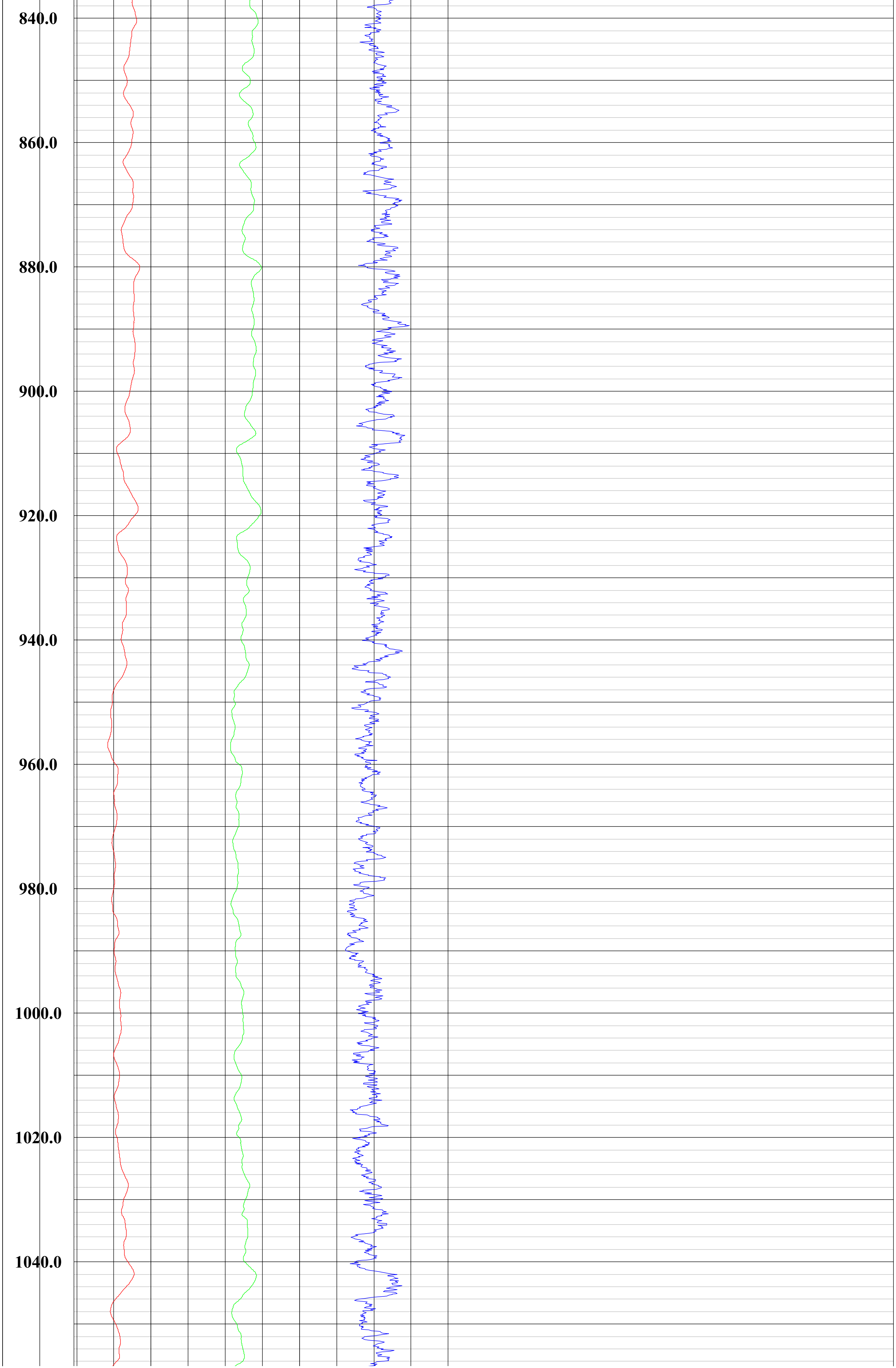
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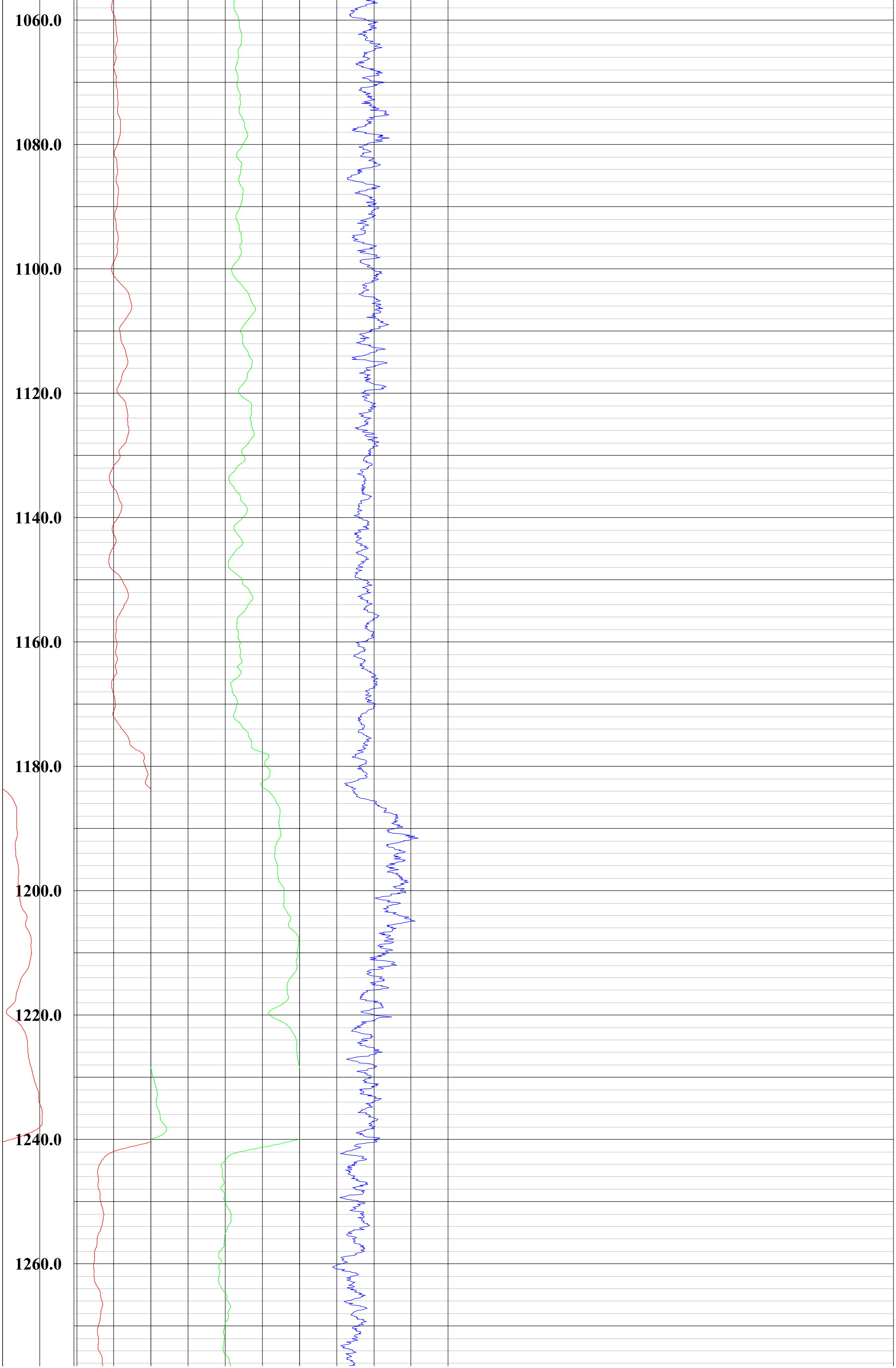
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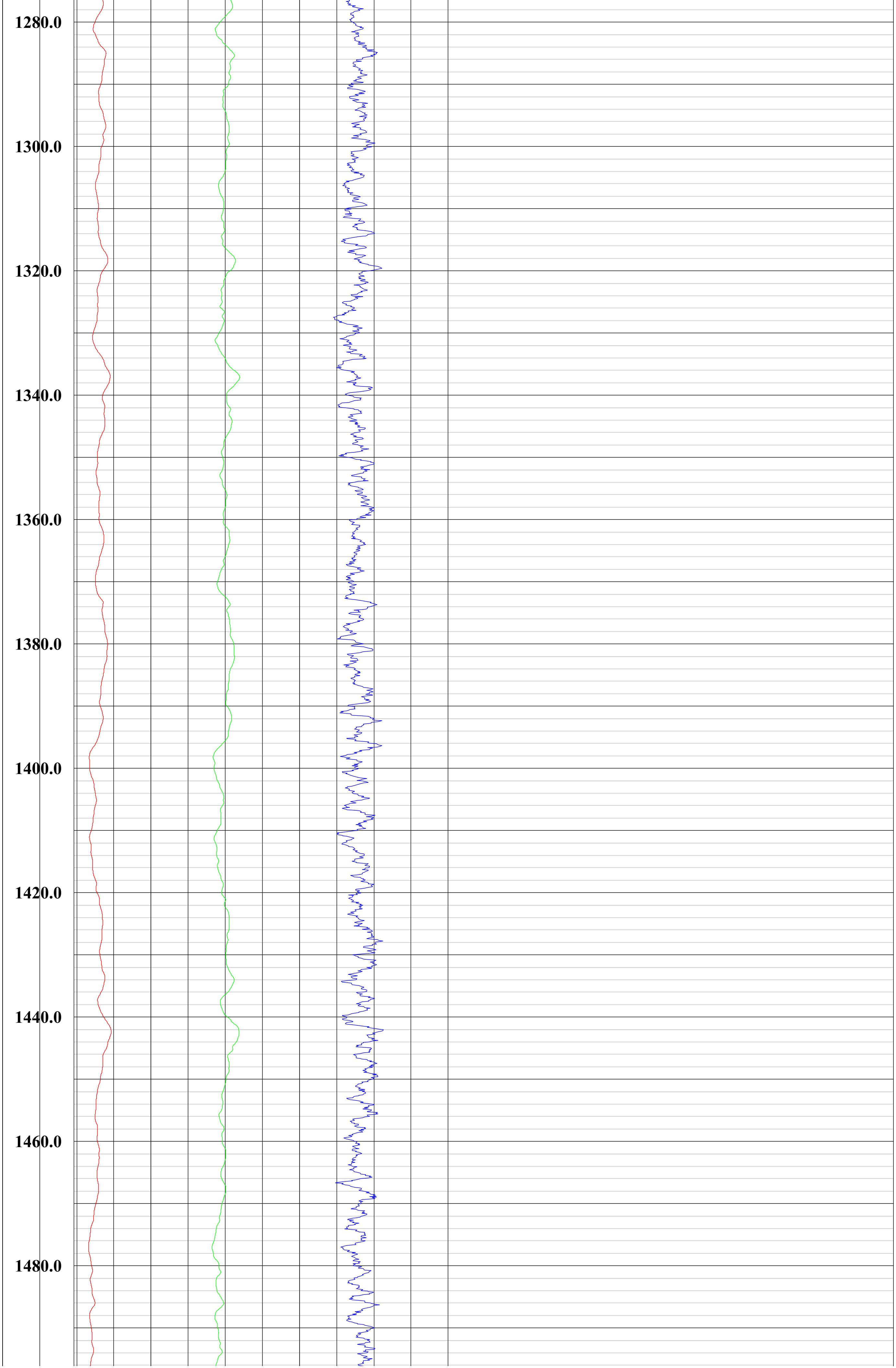
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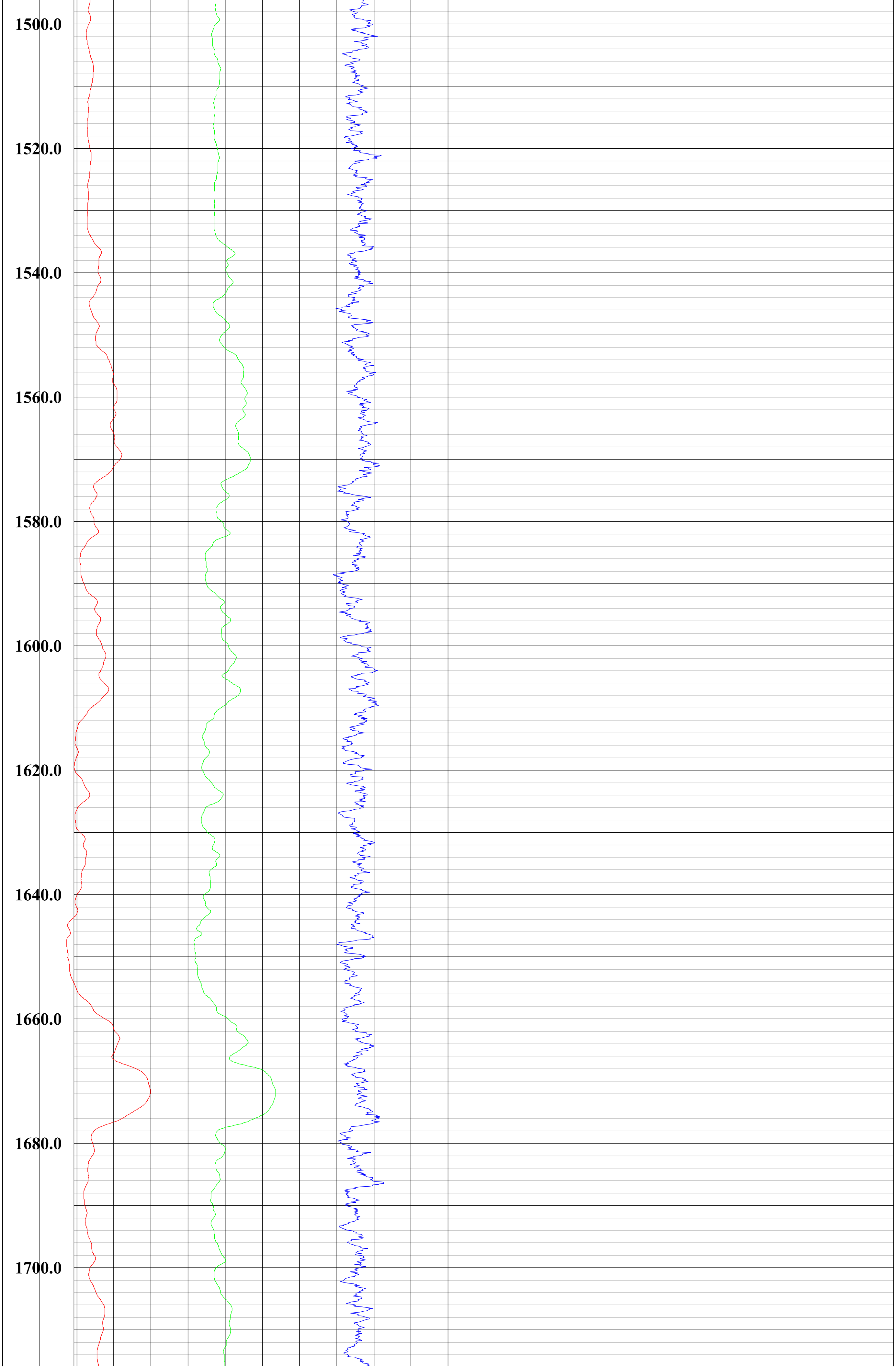
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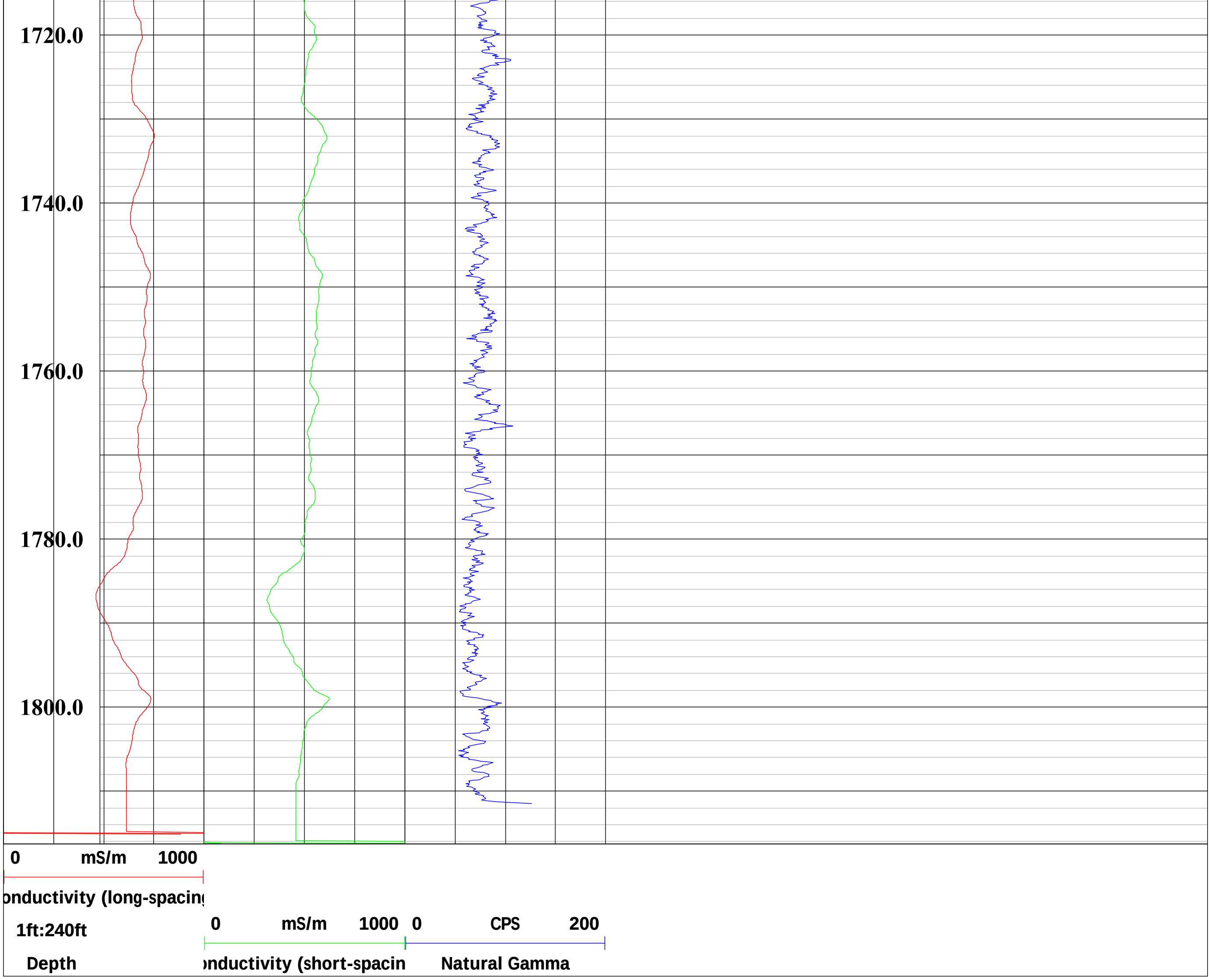
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0 mS/m 1000
onductivity (long-spacing
1ft:240ft
Depth
0 mS/m 1000
onductivity (short-spacin
0 CPS 200
Natural Gamma

Micro Resistivity

COLOG
borehole geophysics / hydrophysics

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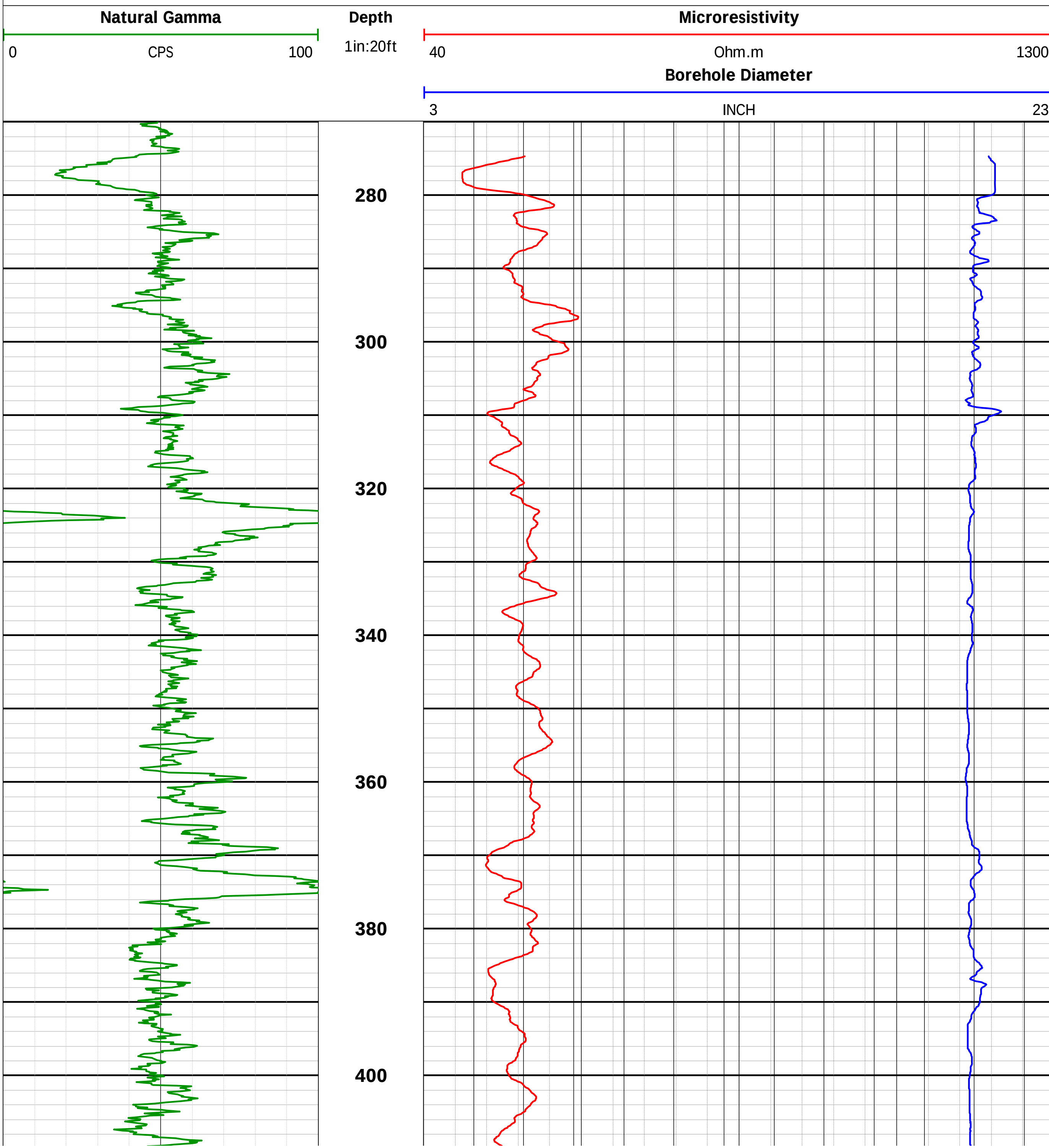
Phone: (775) 777-3433
www.colog.com

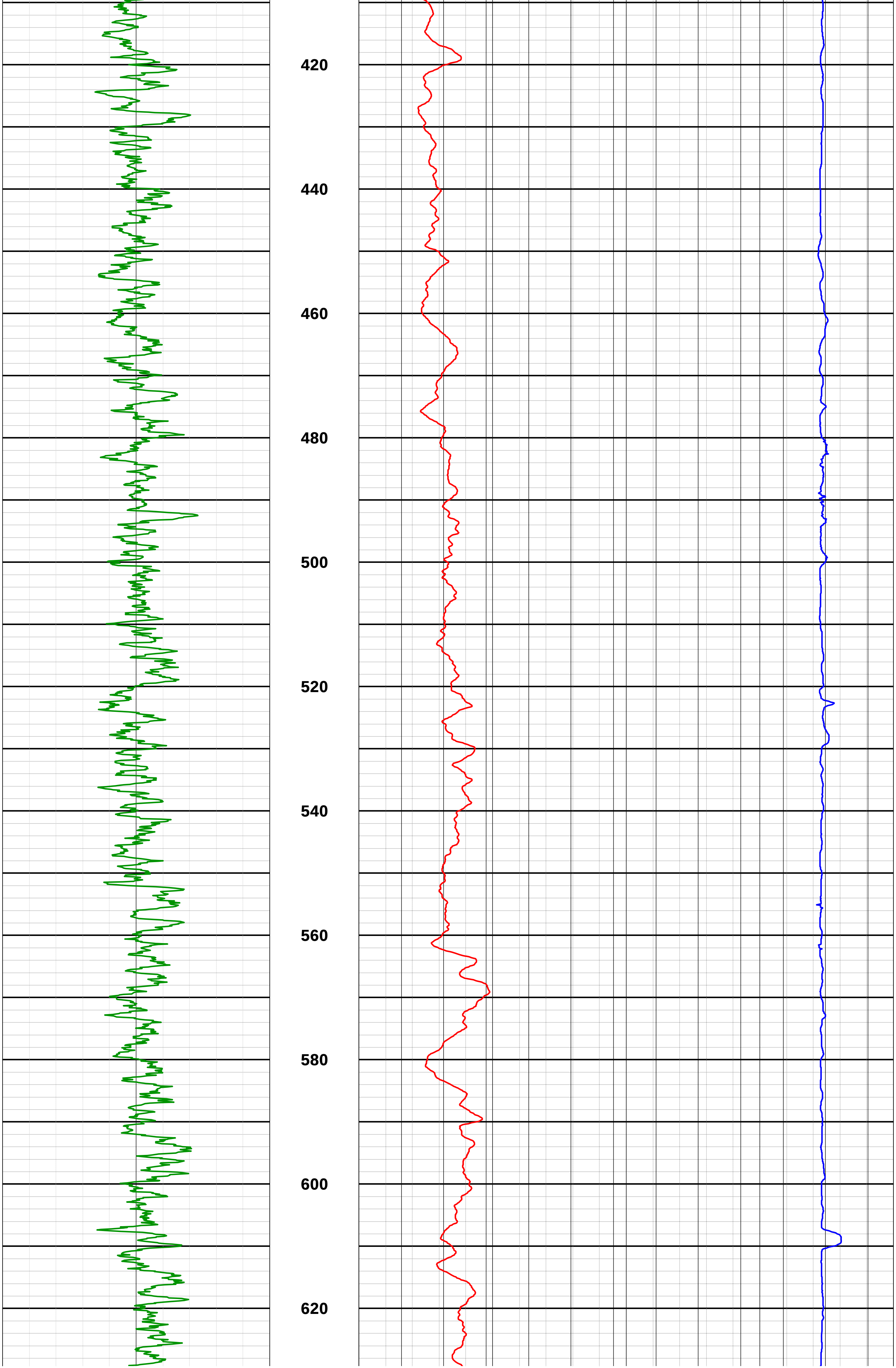
COMPANY: **Harris Drilling**	PROJECT: **ACME: CLAYTON VALLEY**
DATE LOGGED: **24 May 2023**	WELL: **TW-1**

LOCATION: **S of Tonopah, NV**	LOG MEASURED FROM: **Ground Surface**
FIELD ENGINEER(S): **S.Barrus**	TOP & BOTTOM OF CASING: **0-264'**
WITNESSED BY: **Harris Drilling**	BOREHOLE DIAMETER: **14.7"**
DEPTH DRILLER: **1822'**	FLUID LEVEL DEPTH: **--**
DEPTH LOGGER: **1809'**	ORIENTATION REFERENCE: **Mag North**

COMMENTS:

278'-1805'

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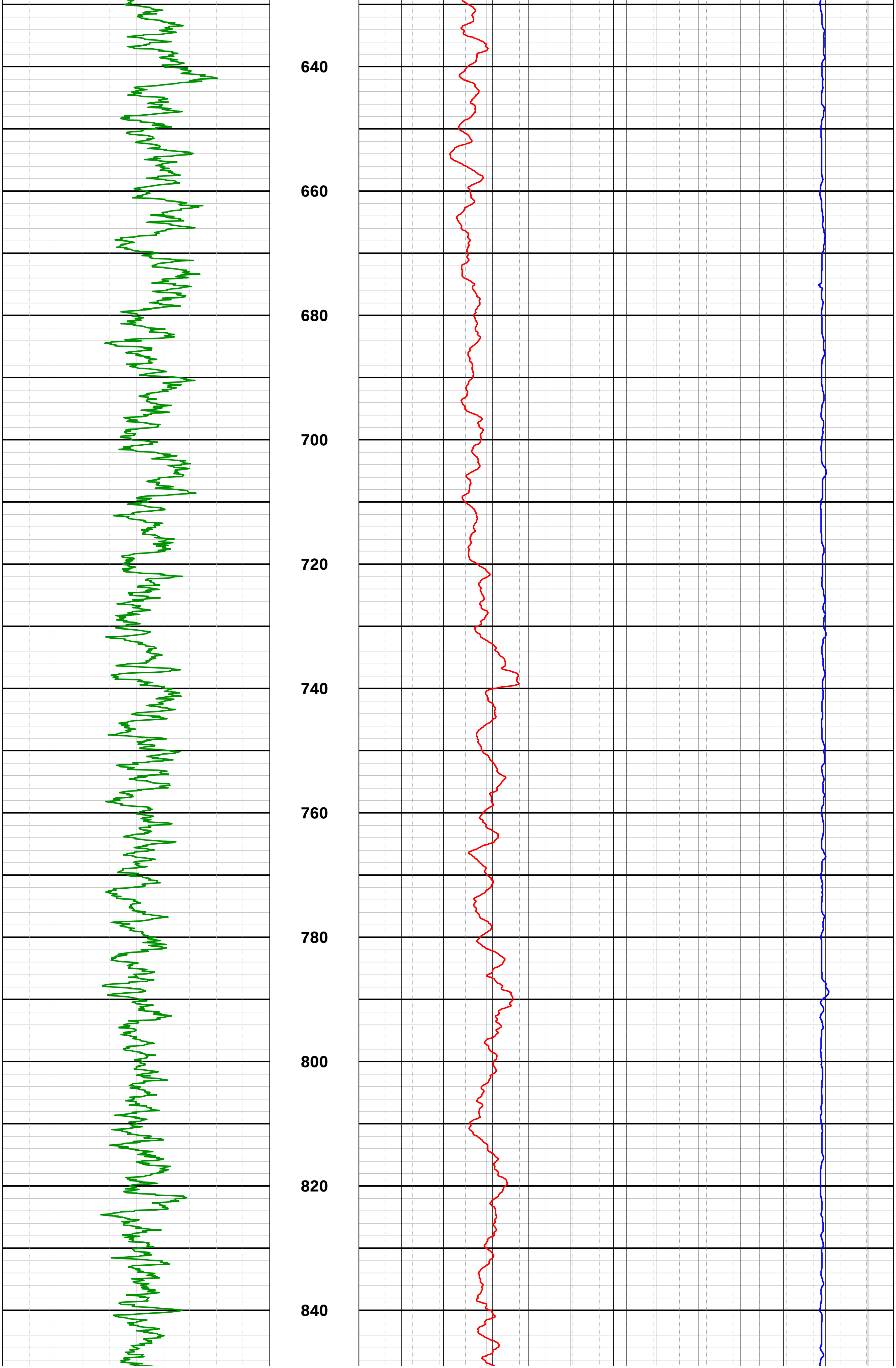
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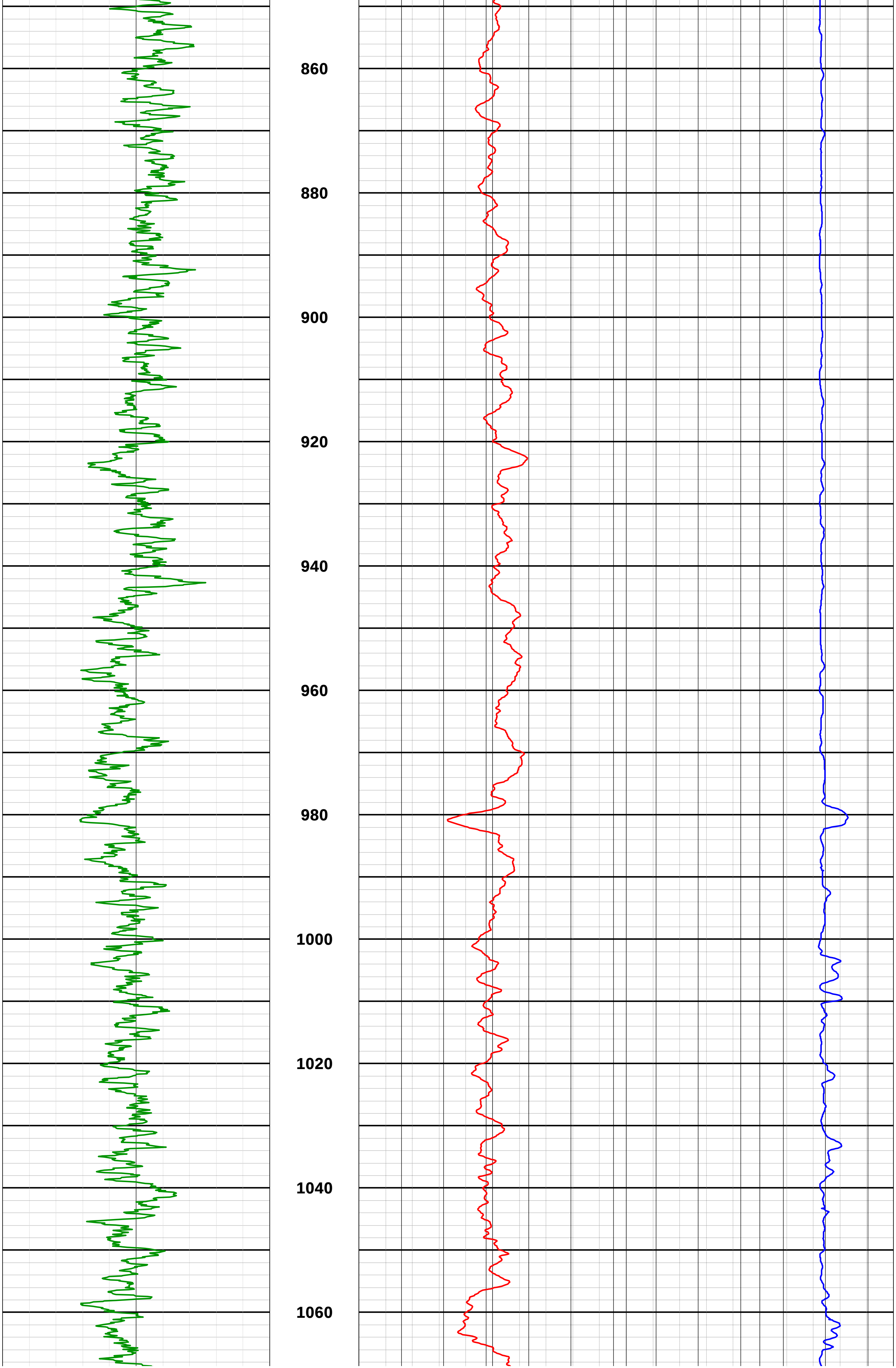

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1000
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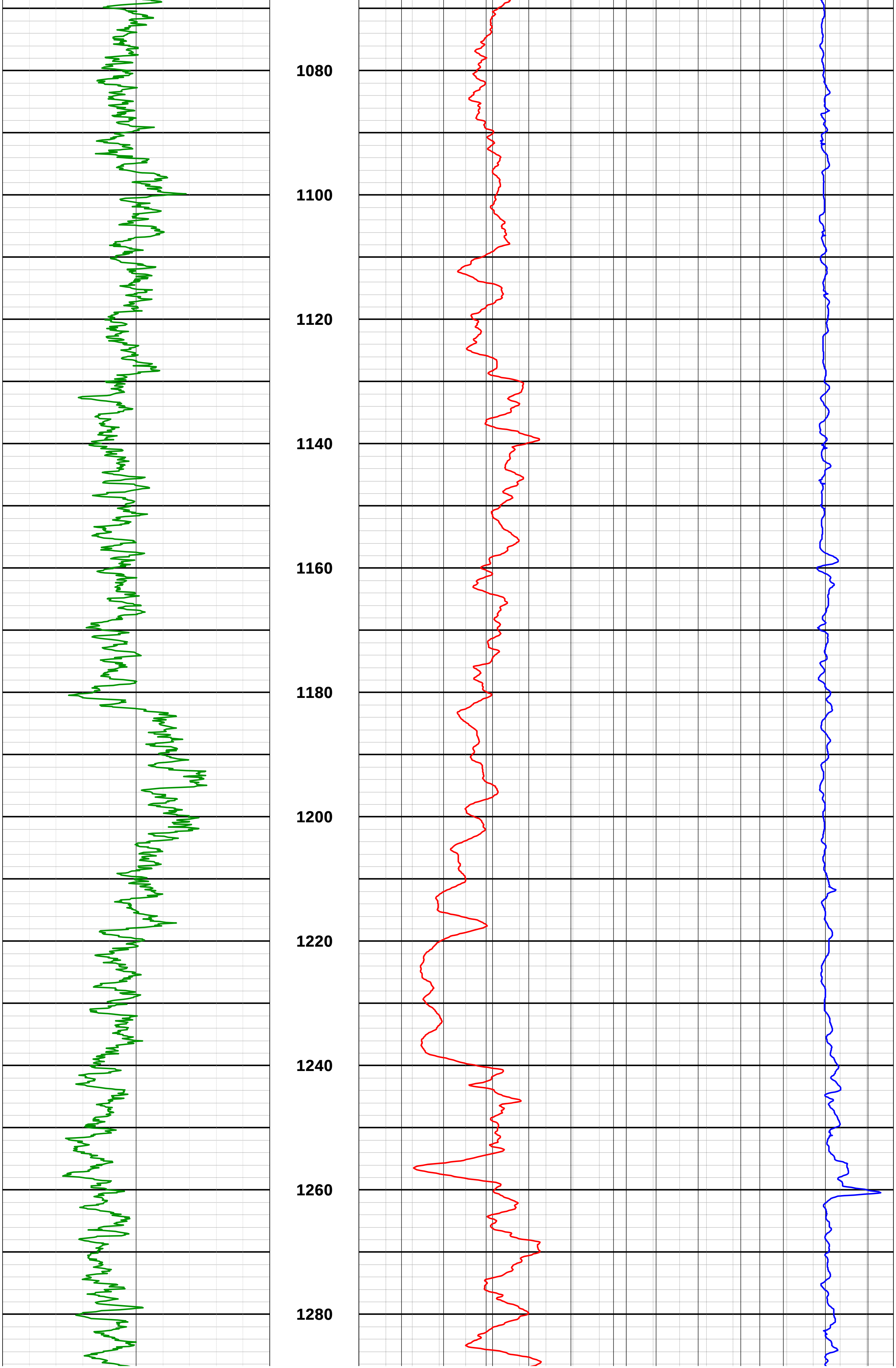
1060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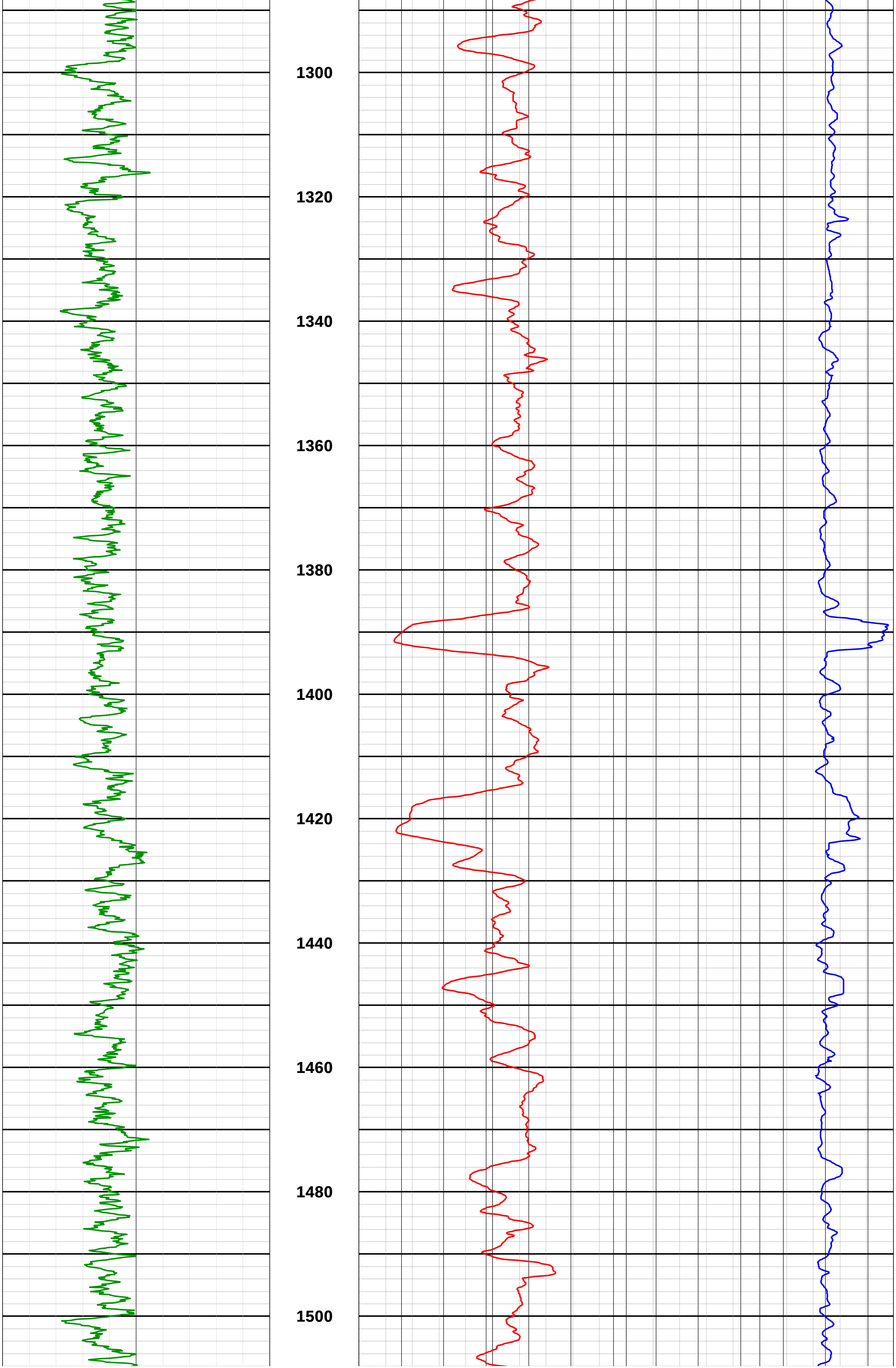
1260
1280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1480
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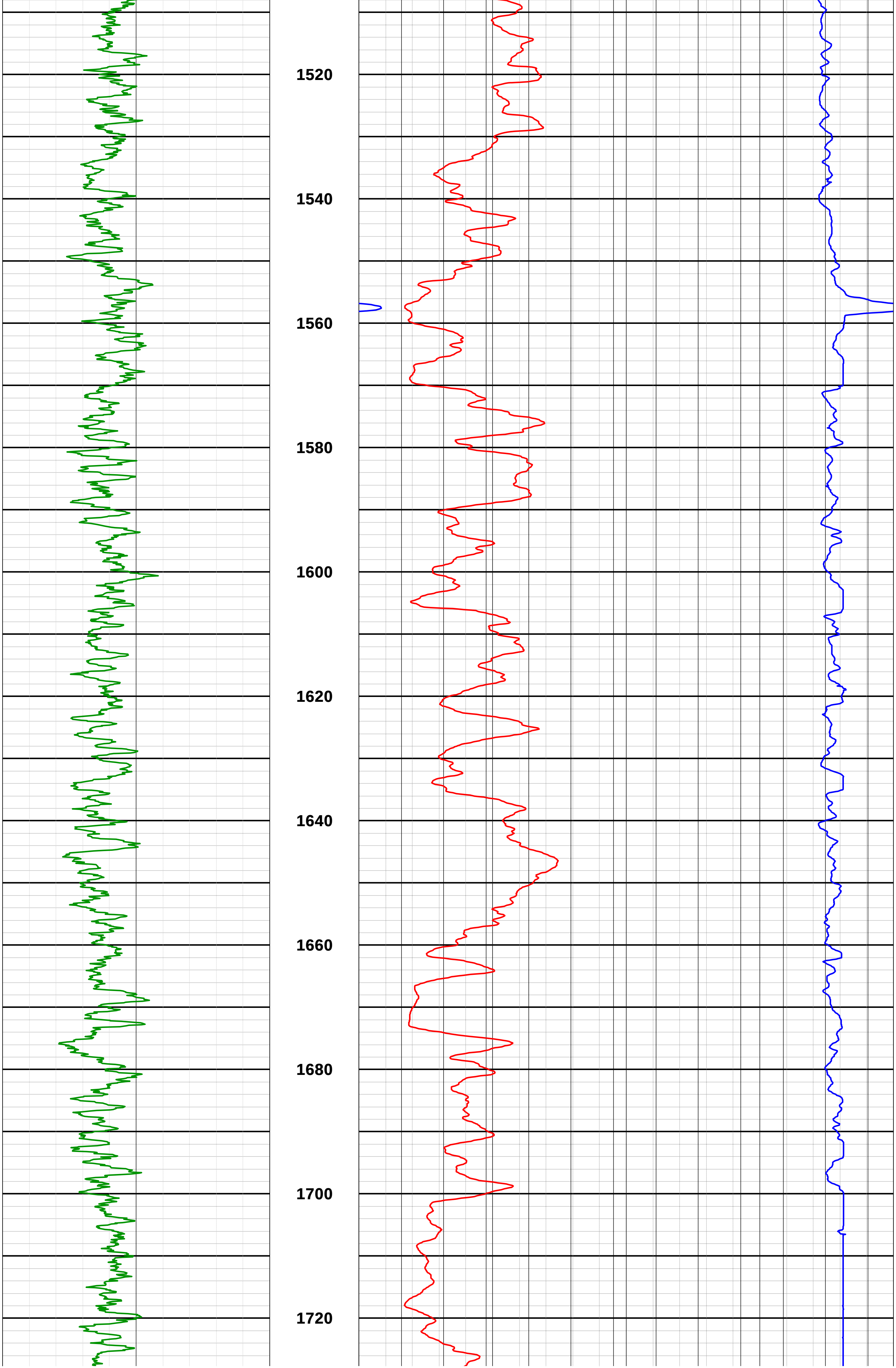
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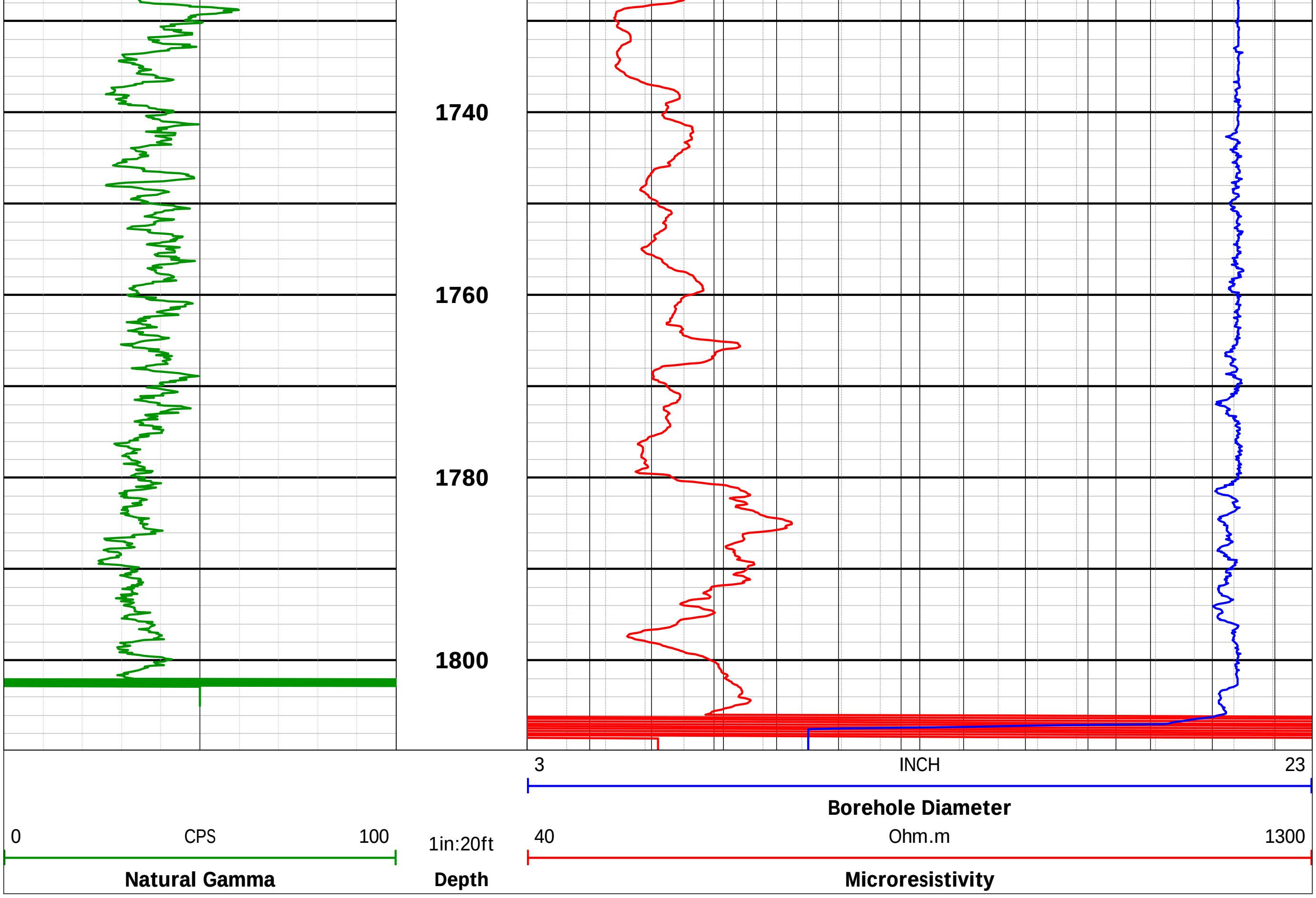
1660
1680
1700
1720



1740
1760
1780
1800
3
INCH
23
Borehole Diameter
0
CPS
100
1in:20ft
40
Ohm.m
1300
Natural Gamma
Depth
Microresistivity

Caliper, Gamma, Volume Calc

COLOG borehole geophysics / hydrophysics	COMPANY: Harris Drilling	PROJECT: ACME: CLAYTON VALLEY
	DATE LOGGED: 24 May 2023	WELL: TW-1

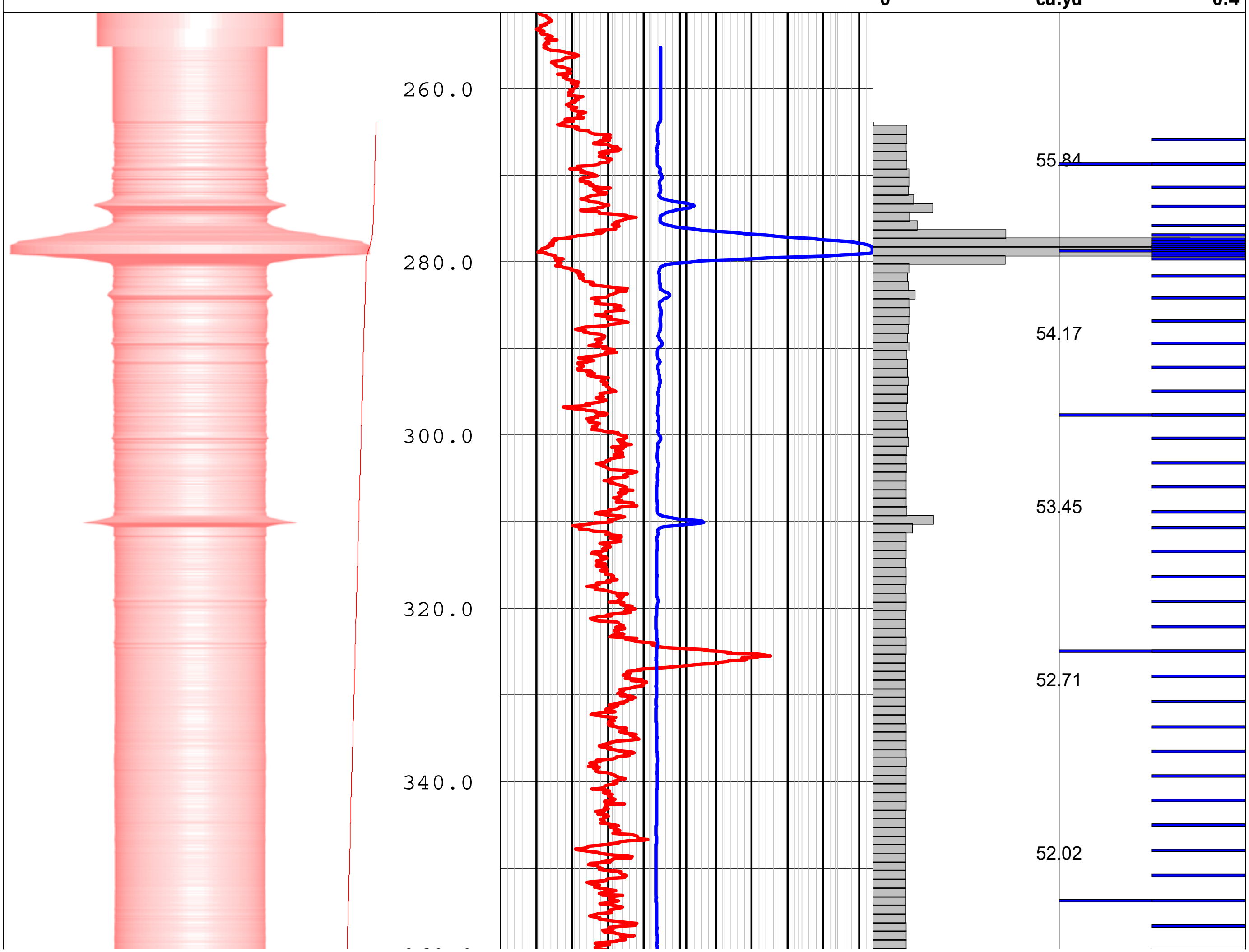
Colog, Inc.
608 River Street, Elko, NV 89801
Phone: (775) 777-3433
www.colog.com

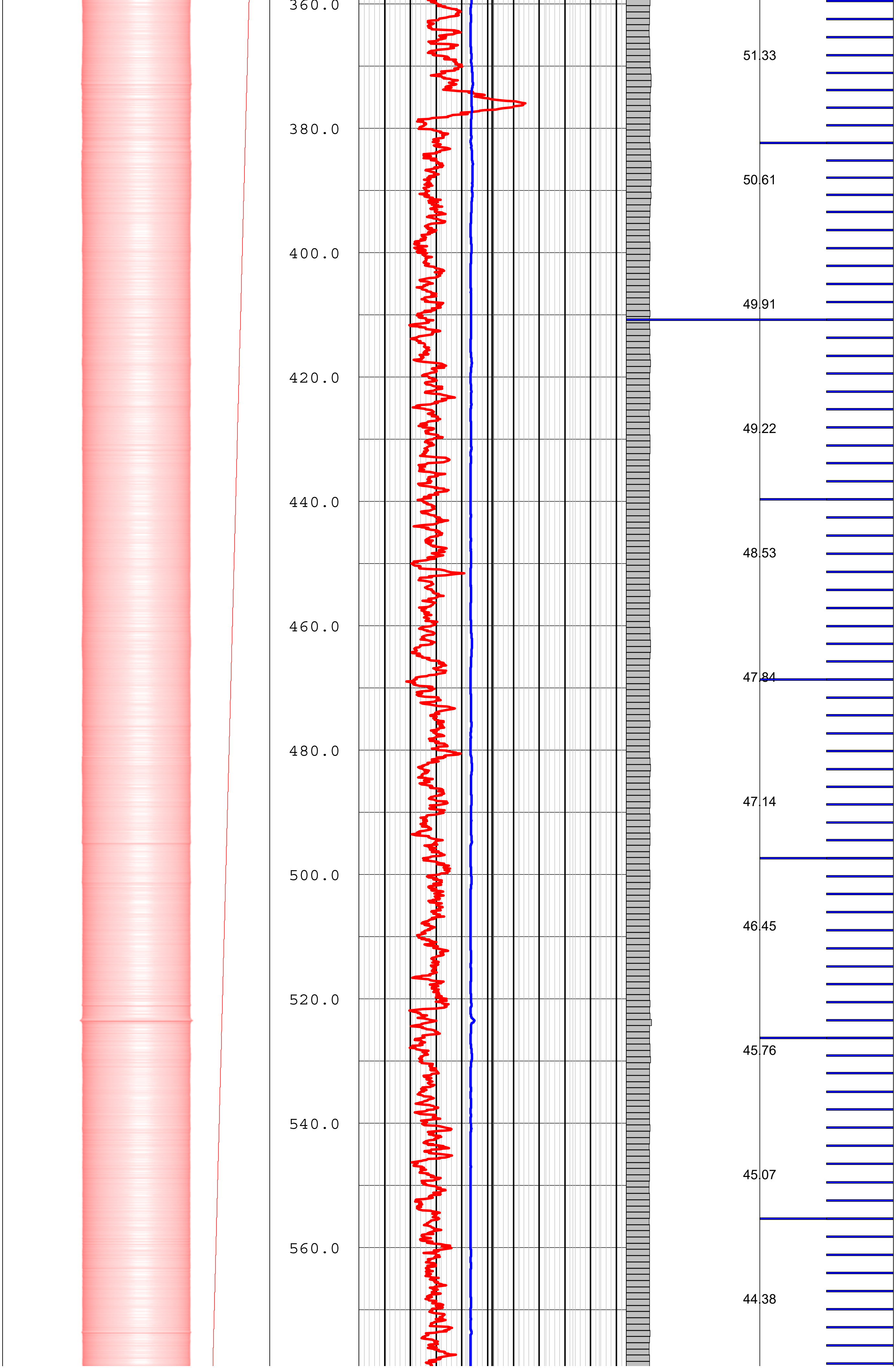
LOCATION: S of Tonopah, NV	LOG MEASURED FROM: Ground Surface
FIELD ENGINEER(S): S.Barrus	TOP & BOTTOM OF CASING: 0-264'
WITNESSED BY: Harris Drilling	BOREHOLE DIAMETER: 14.7"
DEPTH DRILLER: 1822'	FLUID LEVEL DEPTH: 4' @ 11:14
DEPTH LOGGER: 1809'	ORIENTATION REFERENCE: Mag North

COMMENTS:

264'-1809'

Total Volume	Depth	Natural Gamma	Cumulated Volume (cu.yd)
0 cu.yd 159.163	1in:20ft	0 CPS 200	Volume Based on 22" OD Casing
3D Log -0°		Borehole Diameter -6.9 in 45	Interval Volume 0 cu.yd 0.2
Total Volume#1 -0.174813 cu.yd 55.9935			**Cumulated Volume (cu.yd)#1**
3D Borehole Profile -0°			**Interval Volume#1** 0 cu.yd 0.4

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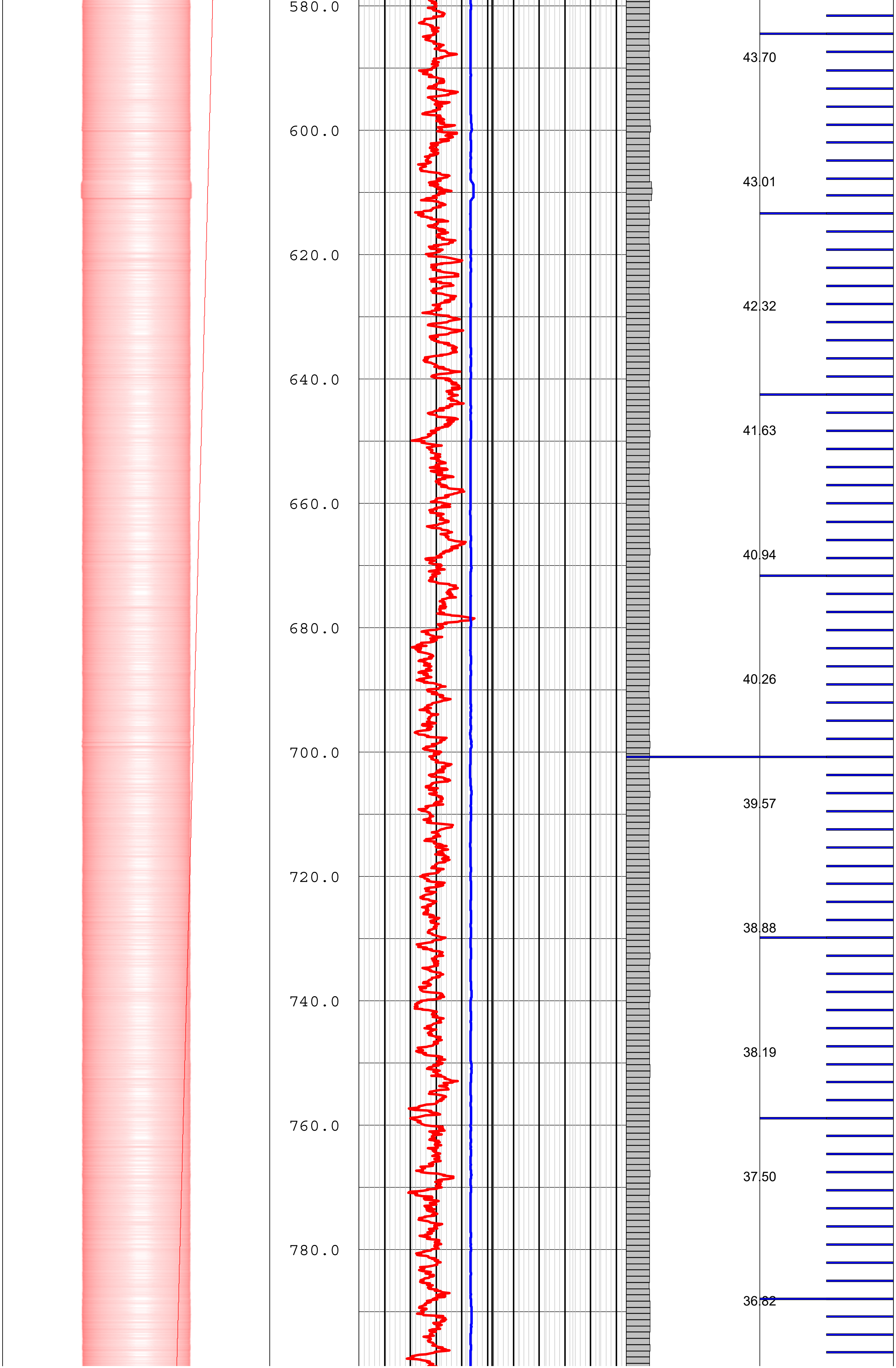
47.14
46.45
45.76
45.07
44.38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39.57
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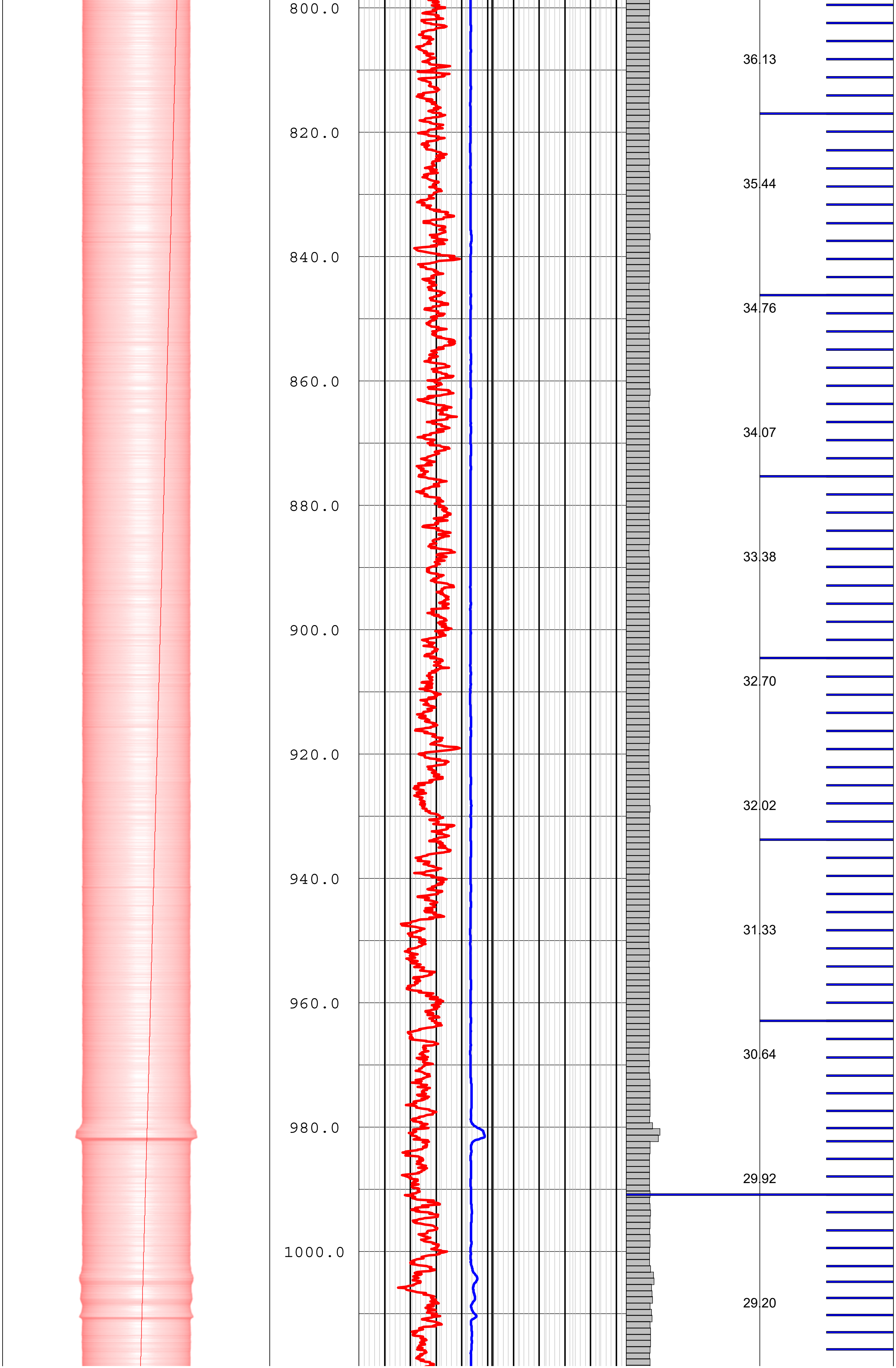
38.19
37.50
36.82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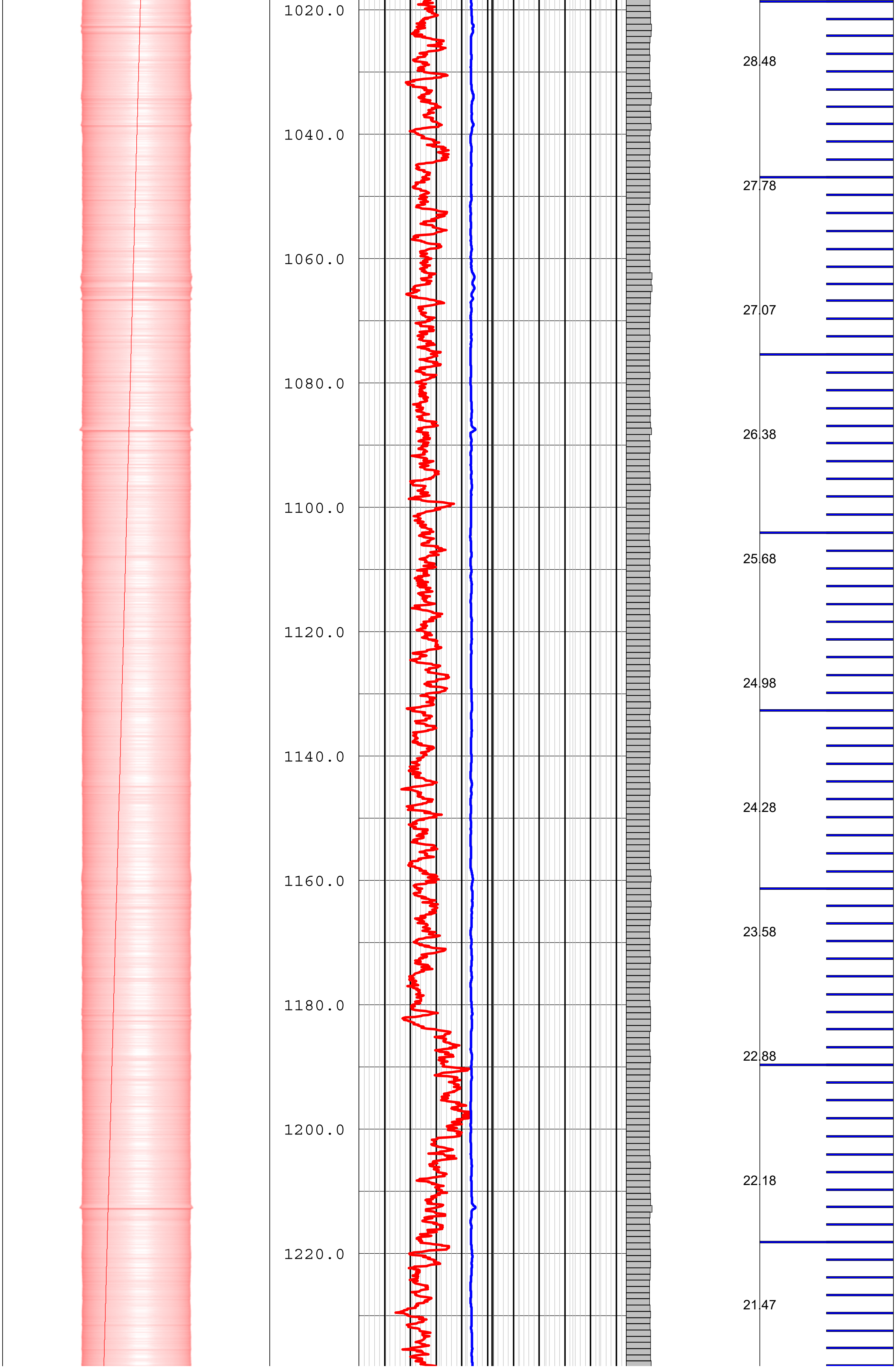
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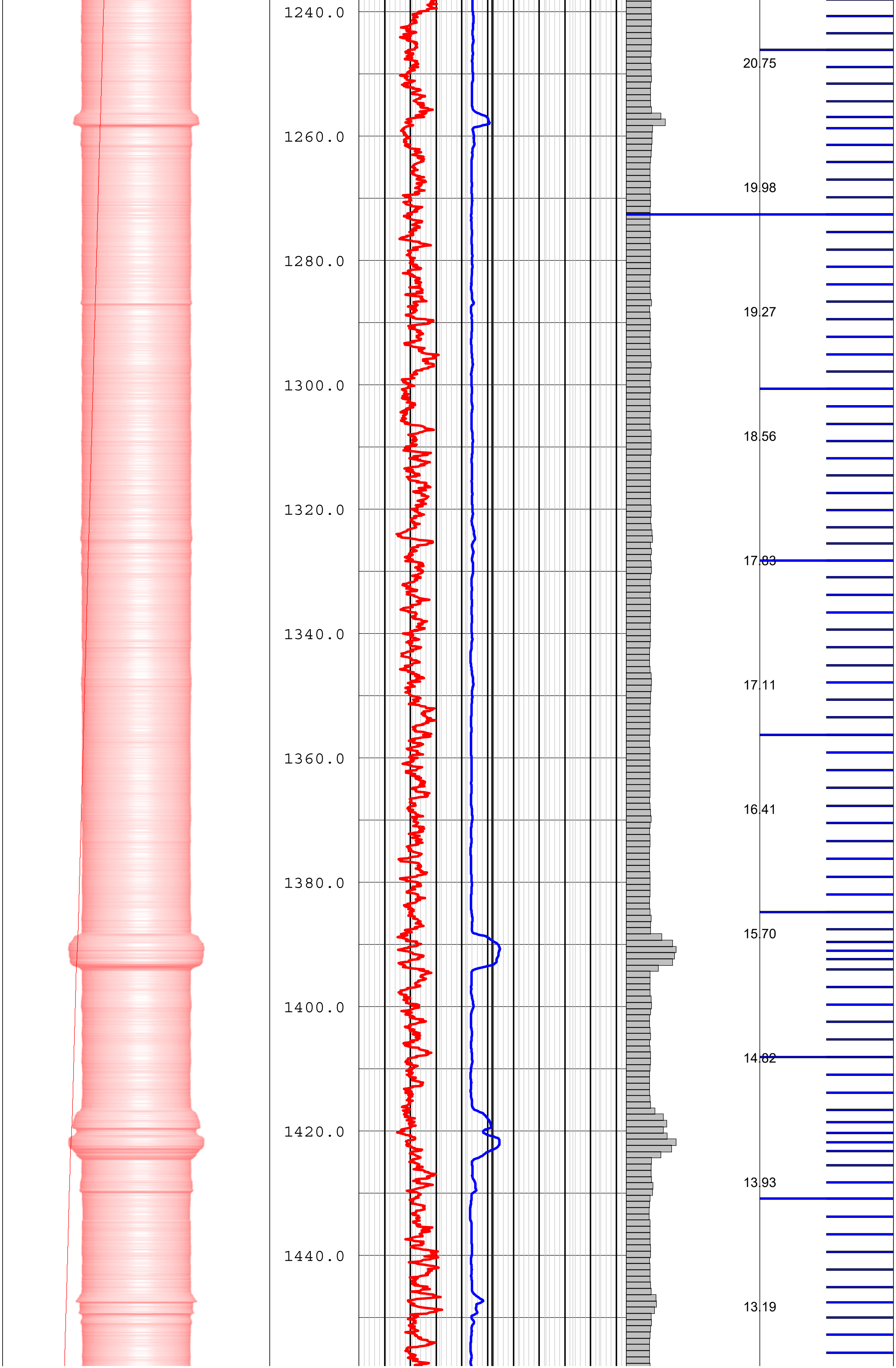
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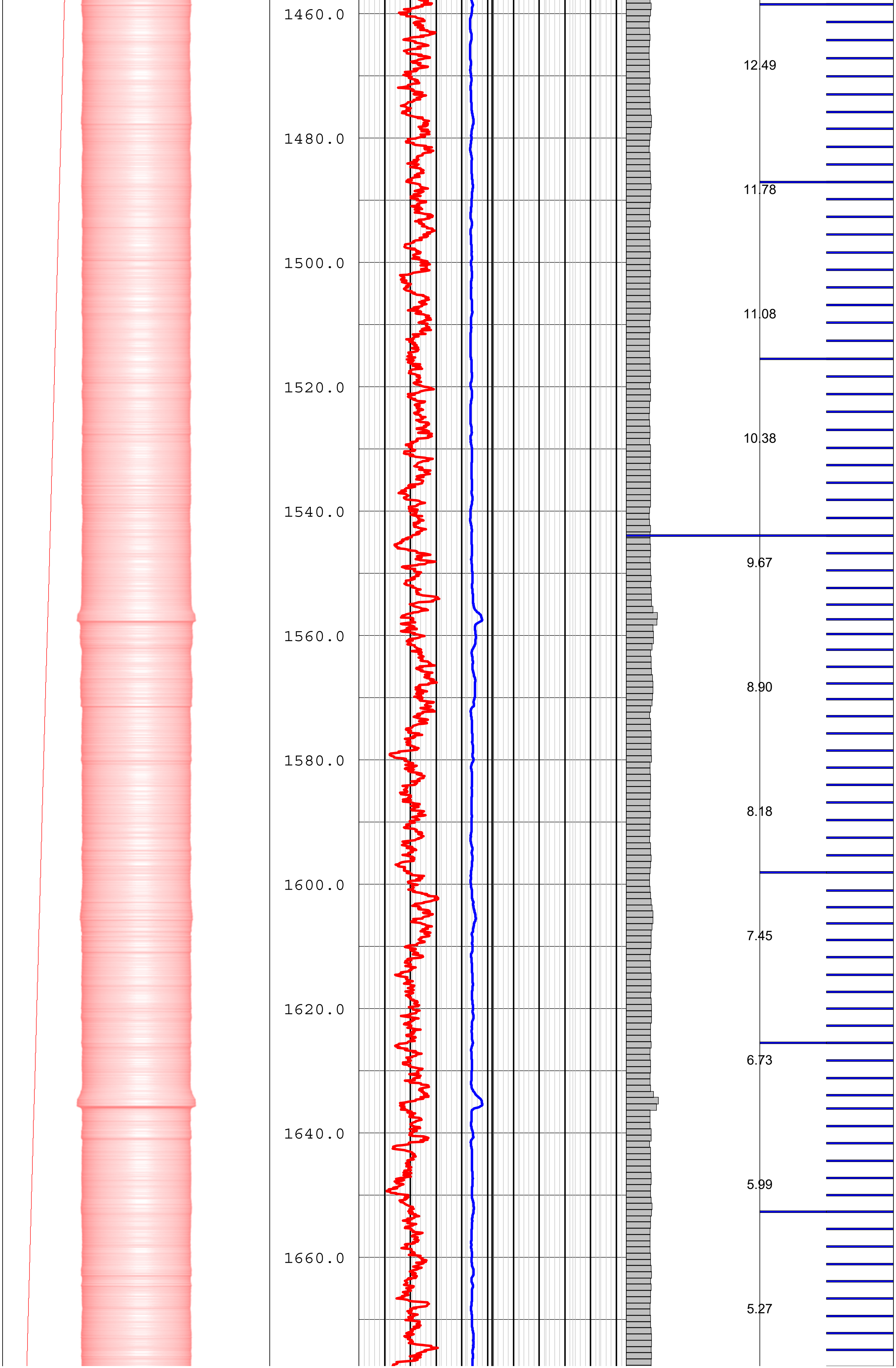
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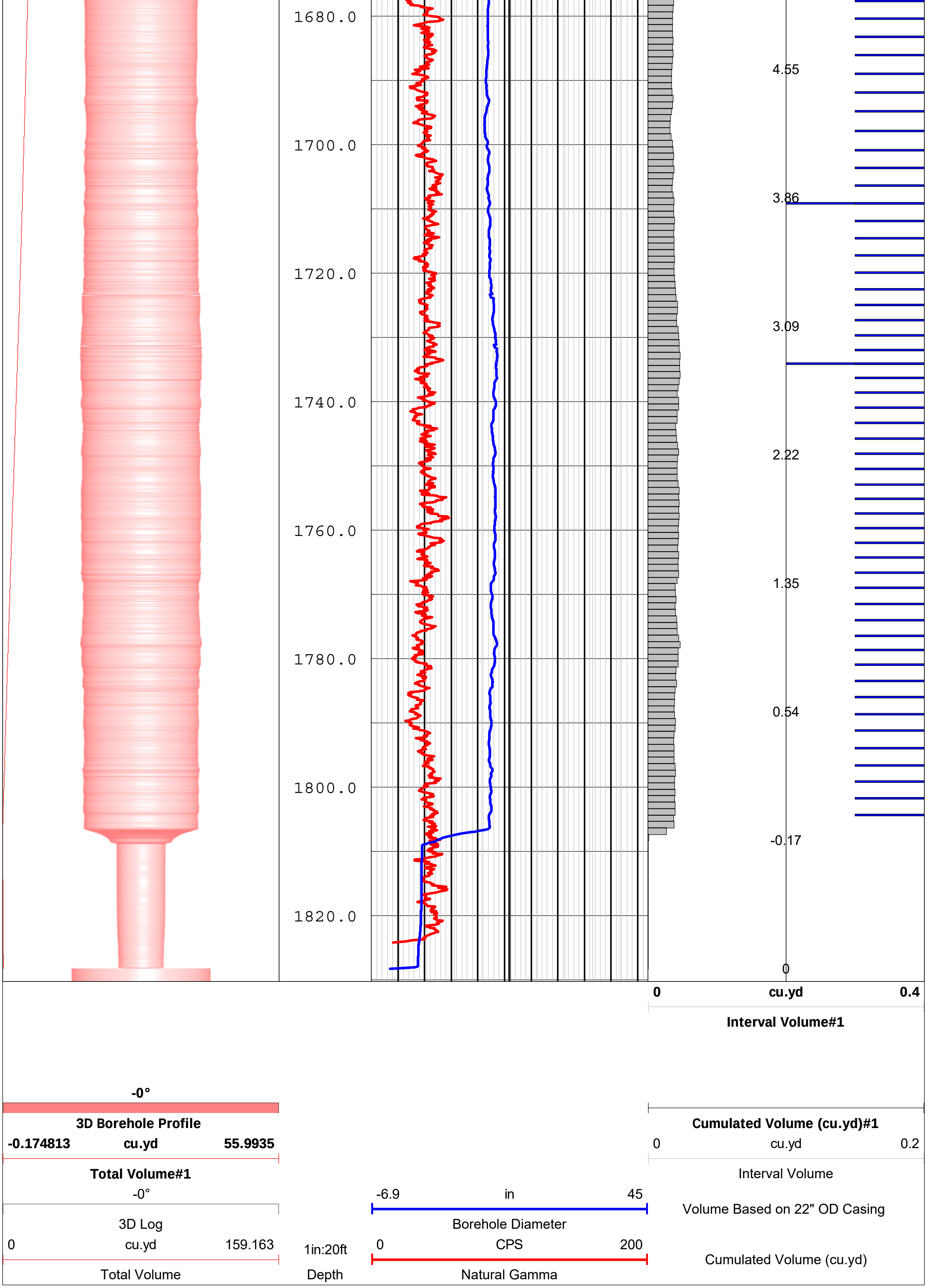
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1780.0
1800.0
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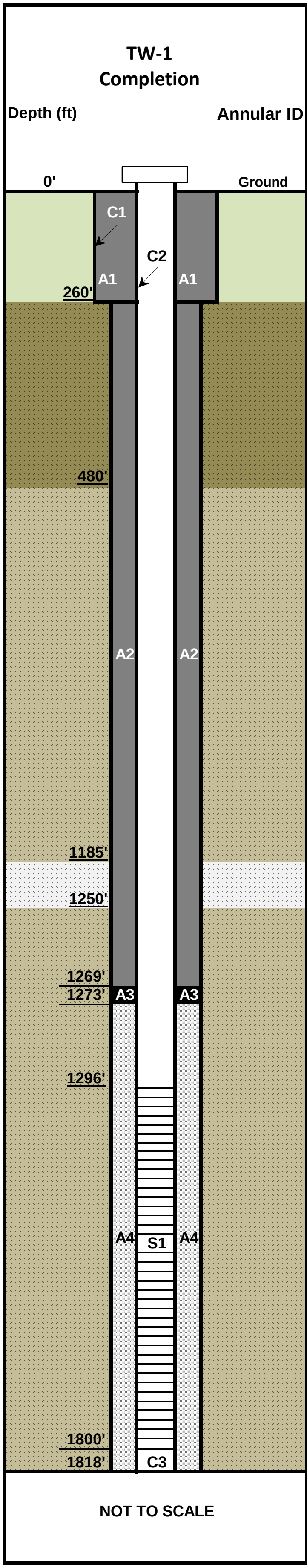
3.09
2.22
1.35
0.54
-0.17
0
0
cu.yd
0.4
Interval Volume#1
-0°
3D Borehole Profile
-0.174813
cu.yd
55.9935
Total Volume#1
-0°
3D Log
0
cu.yd
159.163
Total Volume
1in:20ft
Depth
-6.9
in
45
Borehole Diameter
0
CPS
200
Natural Gamma
Cumulated Volume (cu.yd)#1
0
cu.yd
0.2
Interval Volume
Volume Based on 22" OD Casing
Cumulated Volume (cu.yd)

Appendix E

TW-1 Completion Diagram and Well Drillers Report



ACME Lithium
Clayton Valley Project

Site Location: Esmeralda County, Nevada
Project Number: TW-1 Well
Coordinates: Lat/Long
37.802025° -117.579929

Well No.	**TW-1**
Boring No.	**TW-1**
Est. Elv.	**4276 Ft amsl**
Top of Casing	**2.4 Feet**

Drilling Contractor: Harris-Earth Drilling

Drilling Summary

Total Depth: TBD 1,818 Feet

Static WL: EST 75'

Borehole Nominal Diameters:	24" From 0 to 260' 14.75 From 260 to 1823'
Stickup Height:	2.4 Feet
Depth of Conductor Casing	260 Feet, Steel Monument, 16" Dia
Rig:	RD20
Bits(s):	Tricone
Drilling Fluid:	Polymer and Water
Mud Parameters:	NA
Contractor:	Harris-Earth Drilling
NDWR Drilling License No:	1793

Well Details

ID	Depth (ft)
C1	0 to 260'
C2	0 to 1296'
S1	1296 to 1800'
C3	1800 to 1818'

Casing Type:

C1	16" Dia. Steel Surface Casing, 0.250 Wall
C2	7" Dia. Steel A53B STC 0.272" Wall
C2	7" Dia. Steel A53B STC 0.272" Wall

Screen Type: **S1** 7" Dia. Steel A53B STC 0.272" Wall STC Slotted 12R-2"-6"-.060"

Annular Summary

ID	Description	Depth (Ft)
A1	Type II Ready Mix Cement	0-260'
A2	Cement Bentonite Grout	260-1269
A3	Coated Bentonite Pellets	1269-1273'
A4	Washed #4 Gravel Pack	1273-1823'

Geology Based on DH-1A Corehole

- Paleo Lake Sediments; clay dominated with moderate sand and gravel
- Marginal Basin Fanglomerate; silty sand with gravel and clay
- Lower Gravel Unit, mixed clay with gravel
- Ash

Notes:

Prepared By:

STATE OF NEVADA
DIVISION OF MINERALS

DISSOLVED MINERAL RESOURCE EXPLORATION WELL DRILLER'S REPORT

Report #: ________
For Division Use Only

PRINT OR TYPE IN BLACK INK ONLY
DO NOT WRITE ON BACK

Please complete this form in its entirety in accordance with NAC 534B

PRIVATE LEASE ☒ Yes ☐ No
BLM NOTICE NO. 101026
WELL NAME/NUMBER: TVV-1

1. OPERATOR NAME: GeoXplor Corp
MAILING ADDRESS: 8-650 Clyde Ave West Vancouver, V7T1E2

HYDROLOGIC BASIN NAME AND NUMBER: CLAYTON VALLEY BASIN 143
COUNTY: Esmeralda

2. PLSS LOCATION: NW 1/4 NE 1/4 Section 6
Township 2 ☐ N ☒ S Range 40 E

Latitude ______ UTM N 448947 ☒ NAD 83
Longitude ______ UTM E 4184008 ☐ WGS 84

3. NDOM PERMIT NUMBER

W0817

4. BLOWOUT PREVENTION EQUIPMENT
Type: ☒ Not Required ☐ Annular ☐ Blind ☐ Pipe
Rating: ☐ 2M ☐ 3M ☐ 5M
Size: Surface ______ Intermediate ______

5. RIG TYPE
☐ Core ☒ Rotary ☐ RVC
☐ Air ☒ Mud ☐ Sonic
☐ Other

6. LITHOLOGIC LOG

Material Encountered	Lost Circ.	Water Strata	From	To
please see attached log				
note:cement and bentonite				
grout ratio 2.5/1/0.3				
was pumped by tremie				
from 1269 to surface.				
After 12 hr set time				
it was tagged down 23'				
and well was topped off				
to surface				
with neat cement.				

Date started: 04-15 20 23
Date completed: 06-07 20 23

8. WELL CONSTRUCTION
Depth Drilled: 1823 Feet Depth Cased To: 1818 Feet

HOLE DIAMETER (BIT SIZE)

		From		To	
24"	Inches	0	Feet	260	Feet
14 3/4"	Inches	260	Feet	1823	Feet
	Inches		Feet		Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness/Grade (Inches)	From (Feet)	To (Feet)
16"	42.092	.250	+18	260
7"	20	.272	+18	1818

ANNULAR SEALS
Minimum of 50 feet of surface seal and 2 inch annual space required

	From		To		
☒ Neat Cement	SURFACE	to	260	☒ Pumped	☐ Poured
☐ Cement Grout		to		☐ Pumped	☐ Poured
☒ Bentonite Grout	1269	to	23	☒ Pumped	☐ Poured
☒ Bentonite Chips	1273	to	1269	☐ Pumped	☒ Poured
☒ Gravel Pack [> 0.2 in.]	1823	to	1273	☐ Pumped	☒ Poured
☐ Sand Pack [< 0.2 in.]		to		☐ Pumped	☐ Poured
☒ Other, explain:	23	to	SURFACE	☐ Pumped	☒ Poured

Neat cement inside 16" surface

PERFORATIONS:
Type of perforation: FACTORY SLOT DOUBLE ROW
Size of perforation: 3" X 1/16"

From		To	
1800	Feet	1296	Feet
	Feet		Feet
	Feet		Feet
	Feet		Feet
	Feet		Feet

7. WATER DATA
Static water level: 75 Feet below land surface
Artesian Flow: NA G.P.M. NA P.S.I.
Water Max Temperature: 78.8 ° Fahrenheit

DATE RECEIVED: ______

DATE ENTERED: ______

FOR DIVISION USE ONLY

9. DRILLER'S CERTIFICATION
This well was drilled under my supervision. This report is true to the best of my knowledge.

Name: Harris Exploration Drilling
Contractor
Address: Po Box 5579 Fallon, NV 89407
Contractor
Phone: 760-822-7886
Nevada contractor's license number as issued by the State Contractor's Board: 0026000A
Nevada well driller's license number as issued by the Nevada Division of Water Resources (on-site driller): 1793

Signed: [signature]
By driller performing actual drilling on site
Date: 06-20-2023

USE ADDITIONAL SHEETS IF NECESSARY

ACME Lithium Inc. Drill Hole (Test Well) TW-1
Clayton Valley, Esmeralda County, Nevada

logged by: Laura Millan/Nick Barr
GeoXplor Corp

Drilling Summary:
16" casing 0-266'
7 7/8" tri-cone 'pilot' hole 290-1820'
14 ½" tri-cone rotary to 1824'
7" well casing 0-1824'
(perforated casing set 1300 to 1800')

Collar elev. 4260'
(NAD 83) 448927 E
4183979 N
Vertical, 1824' total depth
Start 4/9/2023 Finish 5/23/2023
Finish Well Construction 6/3/2023

Graphic log

Notes

- Dense silty-clay
- Static water level
- Mostly silty-clay
- Local, well-sorted ash beds
- Drillers note lost circulation zones at 0-263'
- Dense, grey-green 'waxy' clay
- Loose, silt-fn sand, elevated ash
- Ash
- Dense silty-clays, 20-30%, 1" to 3' fn sand interbeds
- Increasing matrix supported cr sand and fn gravel. Local pebble pumice.
- Off-white, silty, well-sorted ash
- Med brown, weakly consolidated silty fn to cr sand + local 30% matrix supported fn gravels. Very minor clay. Sparse sub angular pebbles up to ¾".
- Local 6" angular volcanic cobble

Lithology

0 – 181.5' Lake Sediments:
.2 to 10' interbeds of fn sand/silt/silty-clay, clay. Silts, sands often well sorted. Clays typically dark green, dense, 'waxy'. Rare 1 to 2' thick, fine qtz shard, ash interbeds. Local elevated CaCO3.

181.5 – 195' Air-fall Ash:
Off-white, poorly consolidated, silt to fn sand, quartz rich ash. Sharp contacts, permeable.

249-267' Air-fall (?) Ash:
Med grey-brown, silty, well-sorted, permeable, sharp contacts.

195-249' Lake Sediments: (Similar to 0-181.5')
267-479' Wk to mod consolidated with roughly equal proportions of .2 to 10' thick beds of fn sand silt, silty-clay, clay. Elevated ash content common. Silts/fn sands mostly well-sorted, loose. Clays, silty-clays mostly green-brown with 'waxy' streak. Local elevated CaCO3. Approx. 10% .5 to 3' pale, silty-ash interbeds. Small % disseminated cr sand and rare fine gravel increases with depth.

479-564' Transition from Lacustrine to Marginal Basin Fanglomerates:
Increasing matrix fn to cr sand and fn gravels. Decreasing silty-clay interbeds and matrix clay. Dense, green 'waxy' clays absent. Color change from green-brown to med brown. Angularity and mix of clast lithologies also gradually increasing.

Marginal Basin Fanglomerates:
(continue to contact with basement). Interpreted as stacked, overlapping flood deposits from multiple source areas. % and clast size of gravels increases with depth. Exhibits weak to locally moderate permeability.

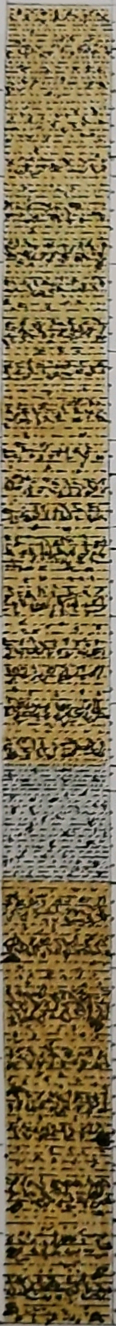
-100' -200 -300 -400 -500 -600 -700

ACME Lithium Inc. Drill Hole (Test Well) TW-1
Clayton Valley, Esmeralda County, Nevada

Page 2 of 3
logged by: Laura Millan/Nick Barr
GeoXplor Corp

Drilling Summary:
16" casing 0-266'
7 7/8" tri-cone 'pilot' hole 290-1820'
14 ¾" tri-cone rotary to 1824'
7" well casing 0-1824'
(perforated casing set 1300 to 1800')

Collar elev 4260'
(NAD 83) 448927 E
4183979 N
Vertical, 1824' total depth
Start 4/9/2023, Finish 5/23/2023
Finish Well Construction 6/3/2023

Graphic log	Notes	Lithology
		

800'

Lost circulation at 801'

Local elevated permeability

Increasing % gravels with transition from matrix to clast supported. Sub-angular, mixed lithology clasts up to 1" +. Weakly consolidated with very minor matrix clay.

479.5 - 1185', 1250 – 1804'
Marginal Basin Fanglomerates:
Upper section fanglomerates typically silt-rich, fn to med sand, minor clay and local matrix supported fn gravels. Steeper gradient, more high-energy deposition evident down section where gravels are coarser, more angular and clast supported. Imbricated textures more common with depth. Down section coarse gravel sections typically more friable.

900

1000

Increase in loose, cr to vy cr pebble gravels. Poor recovery. Rare 3-4" cobbles. Elevated permeability 995-1185"

1100

Med brown, weakly consolidated to loose zones of 40-50% fn to cr gravels and silty sand. Mix of matrix and clast supported gravels. Increasing 6 to 18" horizons of crudely imbricated ¼ to 1.5" pebbles. Mostly moderate permeability.

1185-1250' Tuff Breccia: (air-fall)
Pale brown-grey to pale grey/off-white, silty qtz shard ash. Sharp contacts with fanglomerate. Very homogeneous texture. Yields to moderate thumb pressure. 5 to 15% disseminated pale cr sand to fn pebble pumice clasts + lessor dark fn pebble volcanic clasts. Weak to locally moderate permeability.

1200

1250 – 1804'
Marginal Basin Fanglomerates: (continued)
Approx. 1440-1595', increase in gravel matrix clay noted. Sub-angular to angular gravel clasts mostly 1-3". Rare 4"+ cobbles. Strong HCL reaction indicates elevated $CaCO_3$ throughout fanglomerates. Gravel lithology dominated by meta-sediments/mixed volcanics with lessor intrusives. Local fault-slip slickensides noted below about 1560'. Coarse gravels show increase in silty, grey-black meta-carbonates below about 1625'.

1300

Med brown, weak to locally mod consolidated silty, fn to cr sand matrix. 40-70%, mostly clast supported fn to vy cr angular gravels. Very mixed lithology. Minor, local elevated clay in matrix. Sparse 2.5 to 6" cobbles. Rare obsidian. Local graded bedding at 1390-1400'

1400

1500'

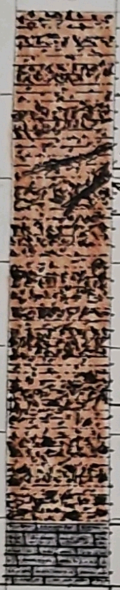
ACME Lithium Inc. Drill Hole (Test Well) TW-1
Clayton Valley, Esmeralda County, Nevada

Page 3 of 3
logged by: Laura Millan/Nick Barr
GeoXplor Corp.

Drilling Summary:
16" casing 0-266'
7 7/8" tri-cone 'pilot' hole 290-1820'
14 ¾" tri-cone rotary to 1824'
7" well casing 0-1824'
(perforated casing set 1300 to 1800')

Collar elev. 4260'
(NAD 83) 448927 E
4183979 N
Vertical, 1824' total depth
Start 4/9/2023, Finish 5/23/2023
Finish Well Construction 6/3/2023

Graphic log	Notes	Lithology



Notes:

- Elevated matrix clay.
- Local 'channel fill' evidence.
- Local graded bedding at 45 deg angle.
- Drillers report 'tight' sections due to abundant loose gravel
- Local loose gravels. Groundwater influx diluting drilling fluids.

Lithology:

1250 – 1804'
Marginal Basin Fanglomerates: (continued)
Sub-angular to angular 1-3" very mixed lithology gravels. Rare 4 to 6" cobbles. Variable clay content in mostly silty, fn sand matrix. Gravels locally poorly consolidated as noted by increased drilling torque.

1804' Contact with playa basement.
Bedrock lithology composed of grey-black, fracture-healed, silty meta-carbonates assigned to the Campito Formation. Basement in sharp contact with overlying basin sediments. Driller noted loose gravels mark bedrock/basin fill contact.

1500
1600
1700
1800
1824'
T.D.

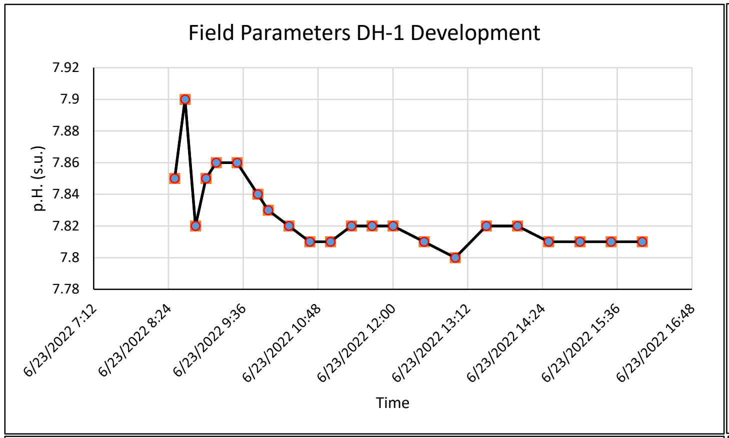
(Sources of information for TW-1 hole log)

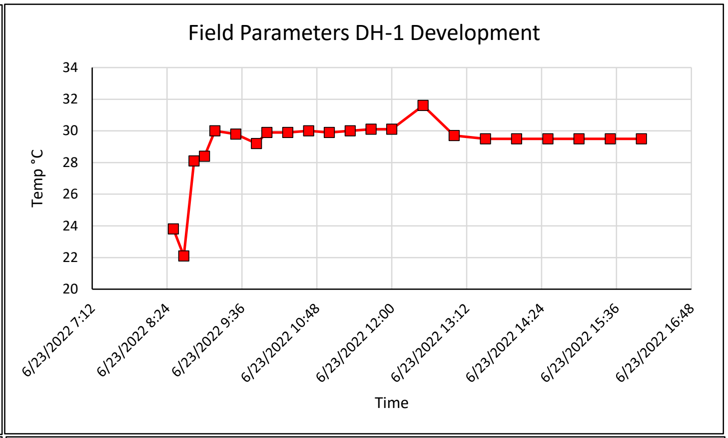
Interpretation of geology for TW-1 utilized rotary tri-cone cuttings and detailed notes provided by drillers. Drill holes DH-1 and twin hole DH-1A, positioned approximately 33m south-southwest of TW-1, generated core samples to a depth of 1644'. For geologic detail purposes, and due to very close proximity of the three holes, the authors assumed characteristics of DH-1, DH-1A & TW-1 should be very similar. Given that, core logging details from DH-1 & DH-1A were projected onto the TW-1 log.

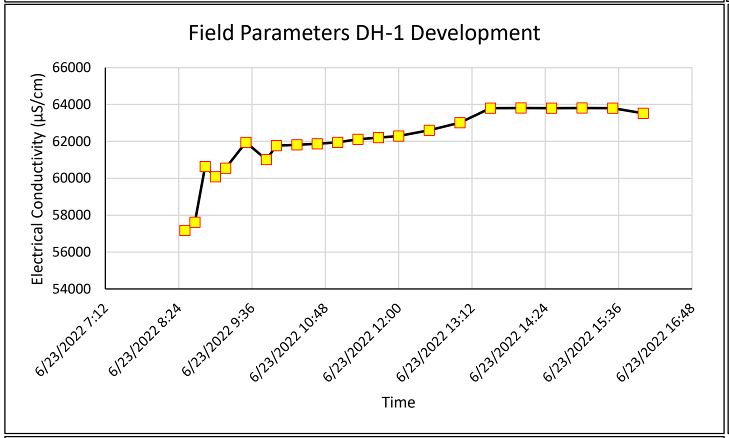
Appendix F

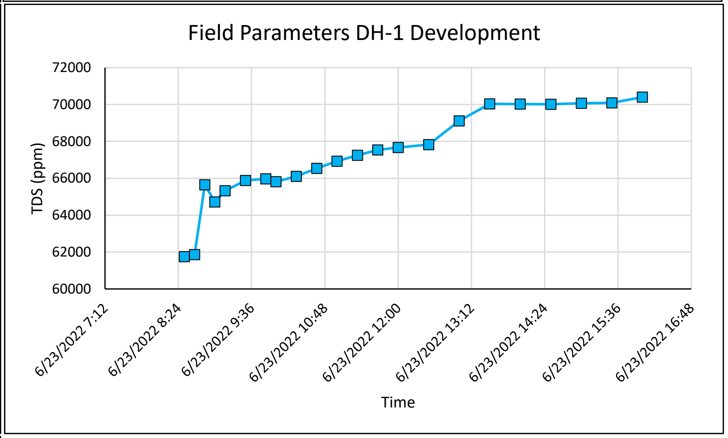
Chemical Field Parameters

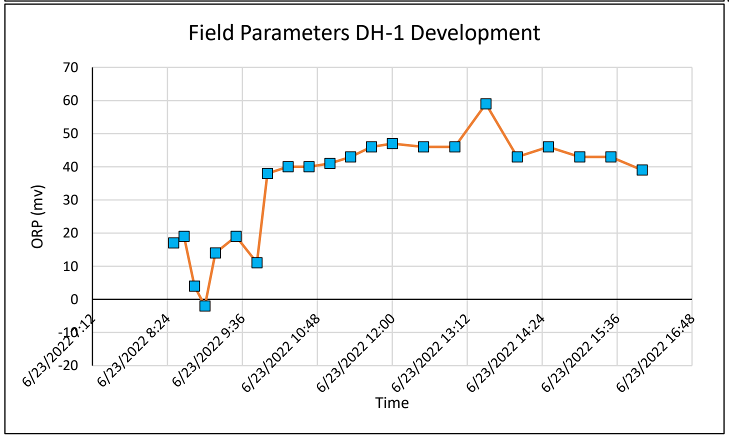
DH-1 Well Development Field Parameters







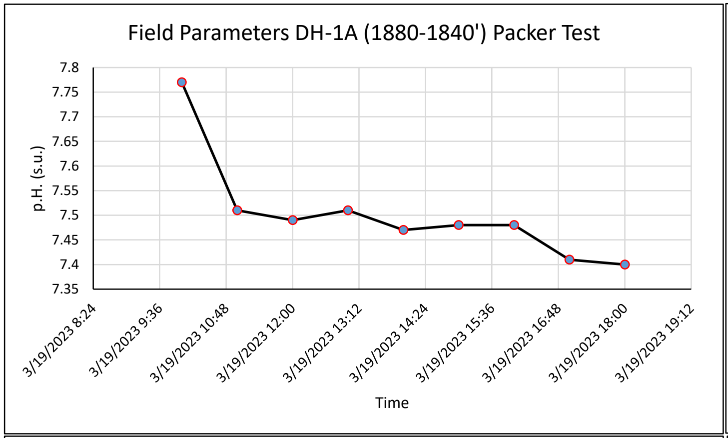


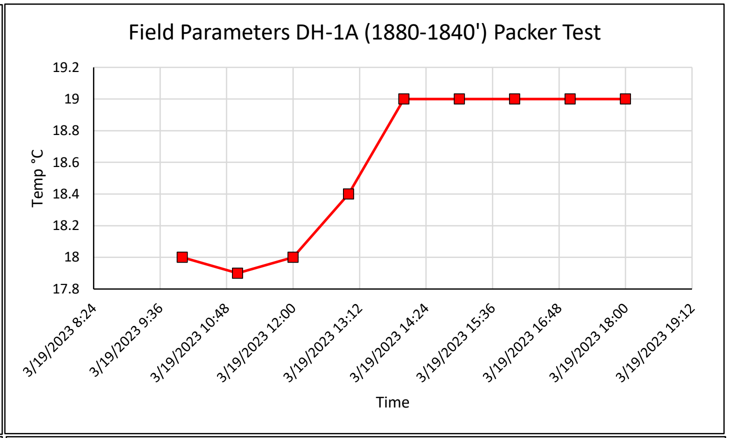


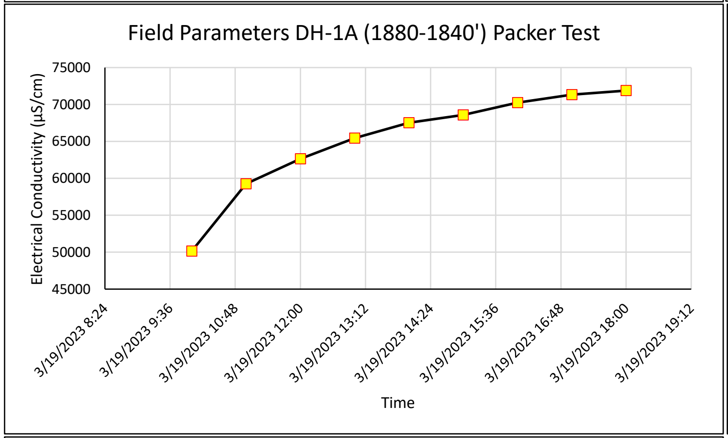
DH-1 HydraSleeve Sampling Field Parameters

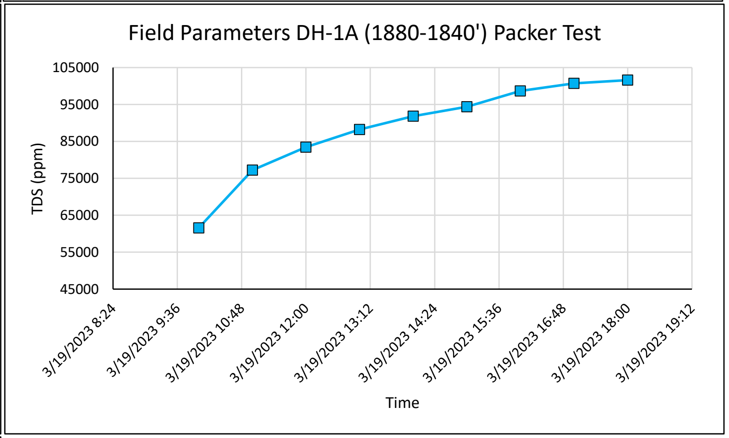
Depth (Feet bgs)	pH. (s.u.)	Temp °C	EC (µs/cm)	TDS (ppm)	ORP (mv)
220.00	7.38	21.8	36970	36360	-79
260.00	7.37	21.8	37610	37150	-76
300.00	7.4	21.8	41820	41520	-77
425.00	7.39	21.8	36750	36170	-92
460.00	7.44	21.9	39860	39720	-86
500.00	7.42	21.9	39370	39230	-85
550.00	7.41	21.9	38670	39340	-77
600.00	7.28	21.9	38000	37560	-77
650.00	7.25	21.9	39930	39730	-87
700.00	7.14	21.9	40700	40730	-91
750.00	7.05	22	45610	46540	-92
775.00	7.25	22.1	44090	44800	-74
825.00	7.18	22.1	49280	50520	-66
850.00	7.05	24.2	49830	51720	-64
900.00	7.03	24.2	54800	58110	-61
950.00	7.19	22.3	47240	48530	-49
1000.00	7.14	23	53790	57340	-41
1050.00	7.41	23.5	41220	41320	-92
1100.00	7.04	24.6	63470	71340	-46
1150.00	6.94	24.6	73010	86200	-22
1200.00	7.08	24.9	79430	95900	-52
1250.00	7	25.3	81900	100800	-46
1300.00	7.07	24.3	77820	93040	-53
1350.00	6.9	30.4	86650	109100	-29
1400.00	7.1	29.3	87400	112200	-12

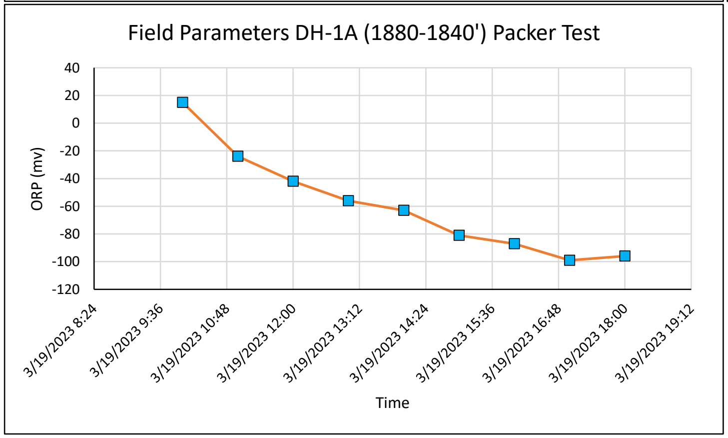
DH-1A (1880 -1840)
Packer Test Field Parameters



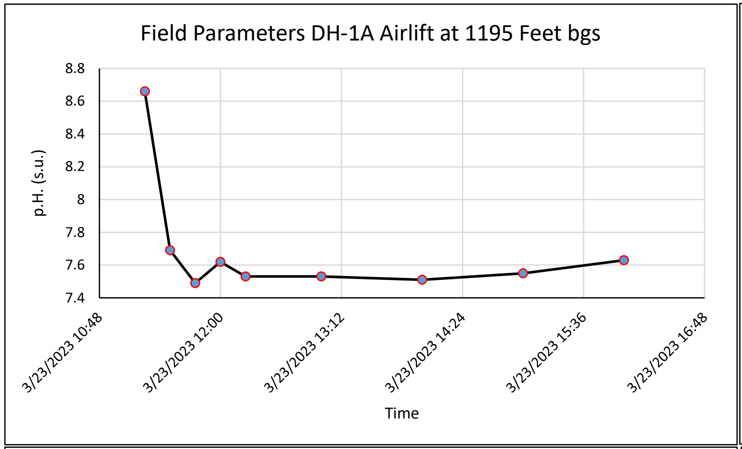


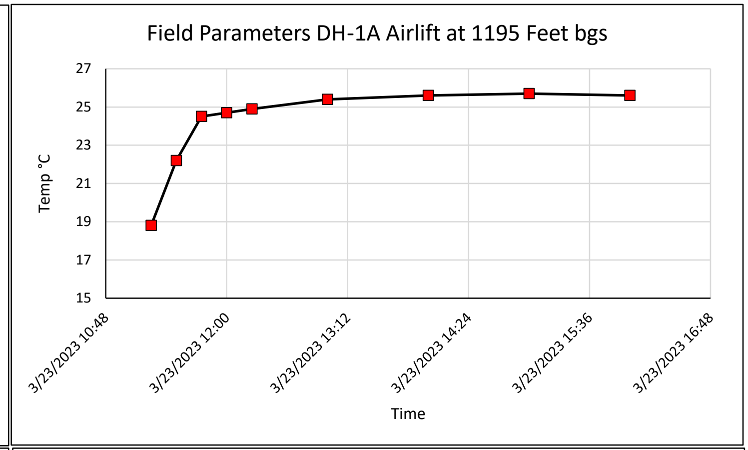


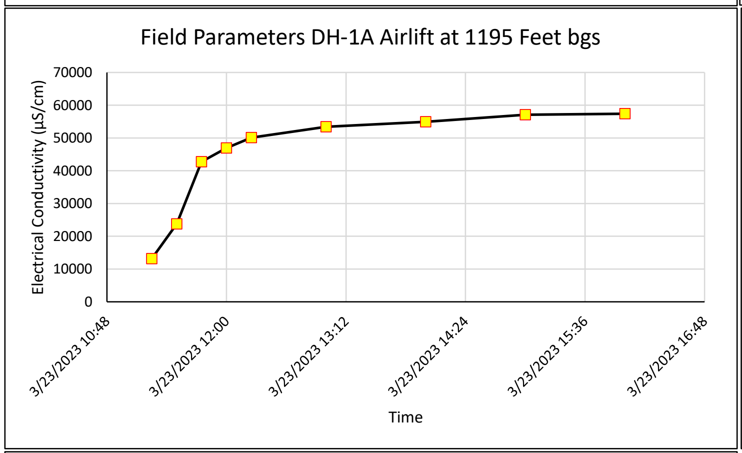


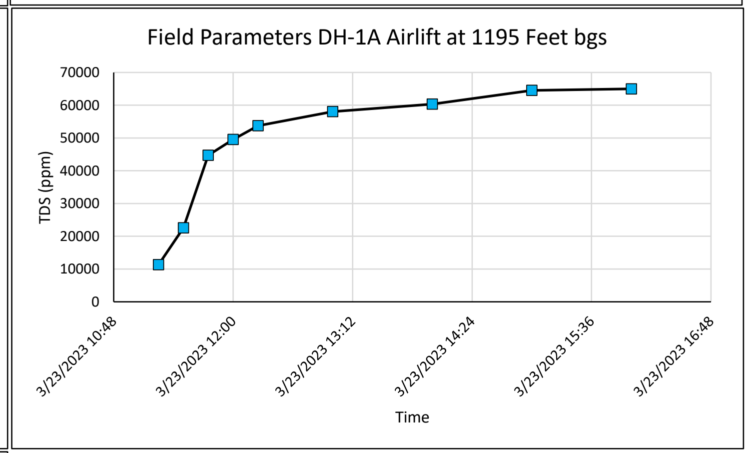


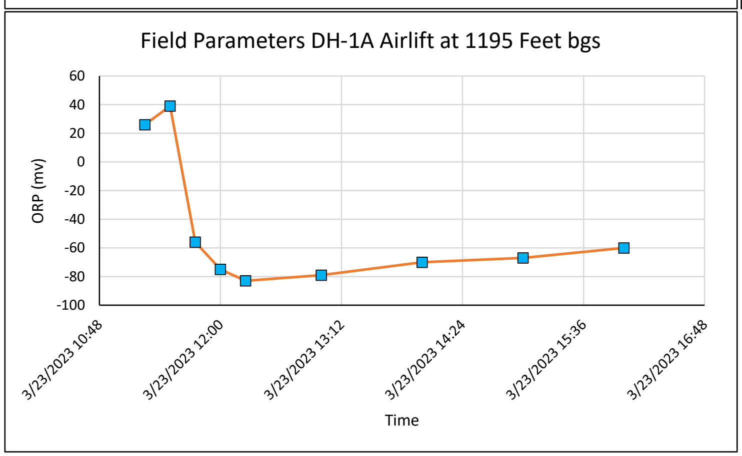
DH-1A Field Parameters
Airlift at 1195 Feet bgs



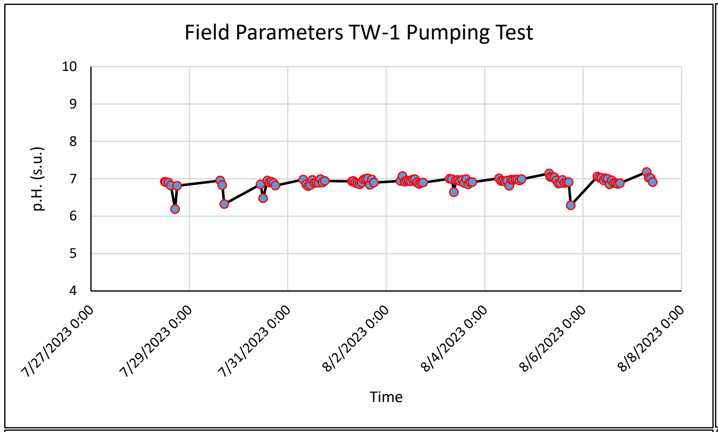


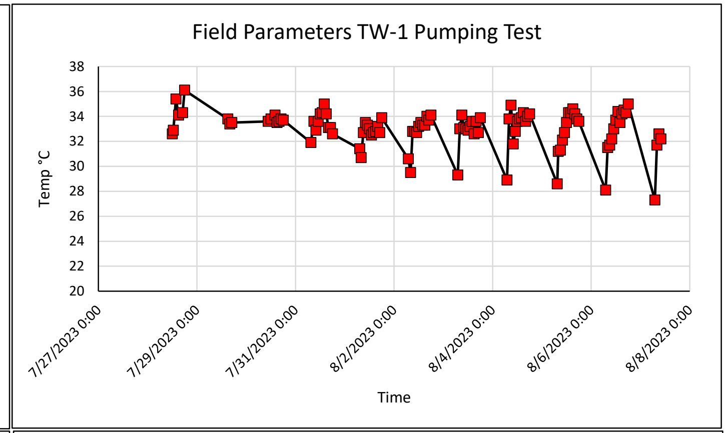


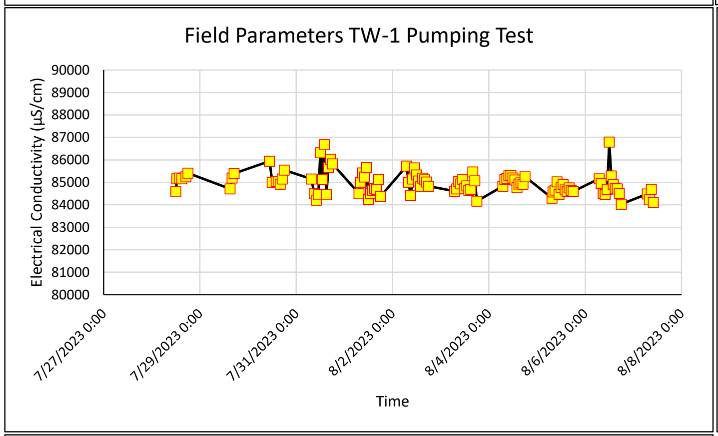


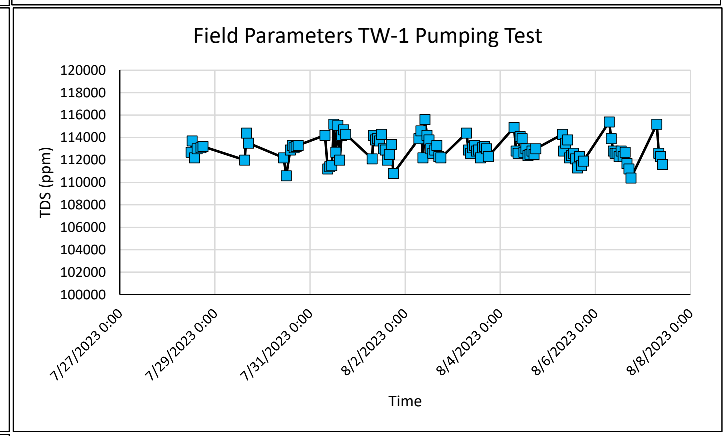


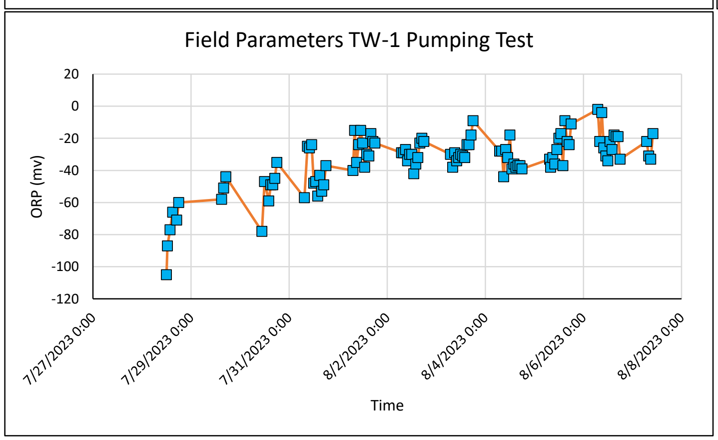
TW-1 Pumping Test
Field Parameters











Appendix G

AHL AQTESOLVE Analysis

Applied Hydrologic LTD
285 Hillcrest Dr
Reno, NV 89509
775-453-8017
GBaldwin@AppliedHydrologic.com

Memo

To:	Matt Banta	**Company:**	Confluence Water Resources LLC
From:	Geoffrey Baldwin	**Date:**	December 4, 2023
Subject:	TW-1 10-Day Pumping Test Analysis		

1 Introduction

Applied Hydrologic LTD (AHL) performed an independent review and analysis of pumping test data upon request from Confluence Water Resources LLC (Confluence). The focus of the analyses was a 10-day pumping test conducted in the well TW-1. Water levels were monitored in the pumping well and in a nearby vibrating wire piezometer (VWP) installation identified as DH-1A. DH-1A consisted of three fully grouted VWP's installed at unique depths below the water level.

AHL reviewed and analyzed the raw data with minimal reference to preexisting processed data to provide an independent assessment.

2 Test Design and Hydrogeologic Assumptions

The 10-day pumping test consisted of a pumping well (TW-1) and a three-instrument VWP string (DH-1A) located laterally 121 feet from TW-1. A step test was conducted on 7/27/2023 and was not assessed by AHL. The 10-Day pumping test was initiated on 7/28/2023 and pumping stopped on 8/7/2023.

The DH-1A installation started recording pressure data on 4/16/2023 and continued, with some omission, until 8/18/2023. Water levels were also recorded in TW-1 from 7/27/2023 through 8/18/2023.

2.1 Well Construction and Water Levels

TW-1 was designed and installed to be a deep aquifer pumping well. The well had a 7-inch nominal diameter and was screened from 1296 to 1800 feet below ground surface (Ft-BGS). Pumping was maintained at a constant rate with a variable frequency drive (VFD) and monitored with a totalizer. The VFD was set to produce 95 gallons per minute (GPM), but the totalizer measured 94 GPM. All analyses assumed a constant 94 GPM pumping rate. Water levels in TW-1 were measured using an In Situ Inc. Level TROLL 700 data recording pressure transducer.

DH-1A was a three instrument, fully grouted VWP installation located 121 feet from TW-1. Fully grouted VWP's measure water levels at a single point at which they were installed. For the purposes of these analyses, the screen interval was artificially set at 0.1 feet long. The VWP names and installed depths are as follows:

- DH-1A_2 was installed at 590 Ft-BGS and measured a pre-test water level of 89.34 Ft-BGS.
- DH-1A_3 was installed at 1220 Ft-BGS and measured a pre-test water level of 97.86 Ft-BGS.
- DH-1A_4 was installed at 1550 Ft-BGS and measured a pre-test water level of 98.41 Ft-BGS.
- Note: to AHL's knowledge, there is no DH-1A_1 VWP in these installations.

AHL used the calibration readings provided by Confluence, and following linear equation to determine the water levels reported by the VWP's:

$$P = G(R_1 - R_0) + K(T_1 - T_0)$$

Where:

- P = Pressure
- G = Linear Gage Factor specific to the instrument
- R_1 and R_0 = the current and initial calibration frequency (B-value) reading, respectively
- K = Thermal factor
- K_1 and K_0 = the current and initial calibration temperature reading, respectively

Water levels from all the VWP's and TW-1 were calculated and plotted. The VWP's were allowed to recover from installation stresses for over three months before the start of the pumping test. The water levels of the deeper two VWP's tracked very closely, while the shallowest VWP was higher by about 9 feet higher. There was a downward pressure gradient.

2.2 Aquifer Thickness

AHL has limited understanding of the lithostratigraphy being tested by TW-1 and utilized a simplistic approach to model the aquifer thickness. While geophysical survey data and geology logs likely indicate multiple semi-distinct aquifers, the hydrographs of all the VWP's report drawdown from TW-1 pumping and perturbations from other unknown sources (i.e., distal pumping wells). This indicates a high degree of vertical hydraulic communication, especially between DH-1A_3 and DH-1A_4 which had similar water levels.

For the purposes of these analyses, AHL assumed a single aquifer saturated thickness equal to the vertical distance between the DH-1A_2 water level and the bottom of the TW-1 screen (1711 feet).

The degree of aquifer confinement from barometric pressure fluctuations is unknown. Considering the alluvial nature of the basin, it is likely that the shallowest groundwater has a high degree of barometric communication. However, clay stratigraphy and distance likely result in gradually increasing confinement with depth.

AHL analyzed all the hydrographs except for DH-1A_2 assuming fully confined conditions. DH-1A_2 was analyzed using both confined and unconfined assumptions. AHL did not compensate the water level data for barometric pressure fluctuations.

2.3 Water Level Data and De-Trending

The approximately four-month period of record revealed a trend of dropping water levels. AHL determined the need to correct, or detrend, the water levels during the period of the pumping test to remove background water level flux from the analyses. Without detrending, the drawdown would be overestimated.

This presented something of a challenge as the water level trend was moderately inconsistent. AHL detrended the water levels by determining the slope of the VWP hydrographs between the pretest and post-test water levels. Each VWP had a unique trend slope.

The best TW-1 water level decline trend was somewhat difficult to determine. After several attempts, AHL found a good value was obtained by taking the arithmetic mean of the VWP trend slopes.

An offset value accounted for minor pretest residual drawdown from the step test. AHL assumed all water levels fully recovered from the 10-day pumping test by the time that data collection ended. The slope and trend-match dates are presented in Table 1:

Table 1: Parameters Used to DeTrend Hydrographs

	DH-1A_2	DH-1A_3	DH-1A_4	TW-1
Pre-Test Match:	7/27/2023 10:10			NA
Post-Test Match:	8/18/2023 13:00			NA
Slope of Trend:	7.55E-05	1.23E-04	1.19E-04	1.21E-04
Step Test Offset (ft):	-0.29	-0.24	-0.17	-2.75

NA - Not Applicable

3 Analysis and Results

AHL utilized the AQTESOLV software to analyze the pumping test data. The Theis (Theis 1935), Theis-Hantush (Hantush 1961a, b), and Cooper-Jacob (Cooper 1946) solutions were used to analyze the drawdown, and the Theis solution for a recovery test (Thies 1935) was used to analyze the residual drawdown following cessation of pumping. Considering the limited level of lithostratigraphic understanding, AHL considered more sophisticated solutions to be unwarranted. Results are presented in Table 2.

The VWP's were simulated in AQTESOLV at the depths outlined in Section 2.1 and set to be 121 feet from TW-1. Each VWP was artificially placed in a distinct cardinal direction around TW-1 to facilitate data management and ensure no software conflicts.

AHL calculated the water level drawdown from the detrended data and associated elapsed time since pumping start. These data, along with TW-1 construction details, were input into AQTESOLV and checked for errors or conflicts.

AHL plotted the derivative of the drawdown data to identify intervals of infinite acting radial flow (IARF), boundary effects, and anomalous drawdown or recharge. Noise in the derivative data was smoothed using the Bourdet (Bourdet et al 1989) or Spane (Spane and Wurstner 1993) methods.

AHL found that interference from intermittent unaccounted pumping or recharge impacted the data from day six through eight of TW-1 pumping. This is clearly illustrated in the DH-1A_4 drawdown curve (Figure 1). AHL attempted to tailor analyses to the least impacted intervals of data and those where IARF conditions were indicated.

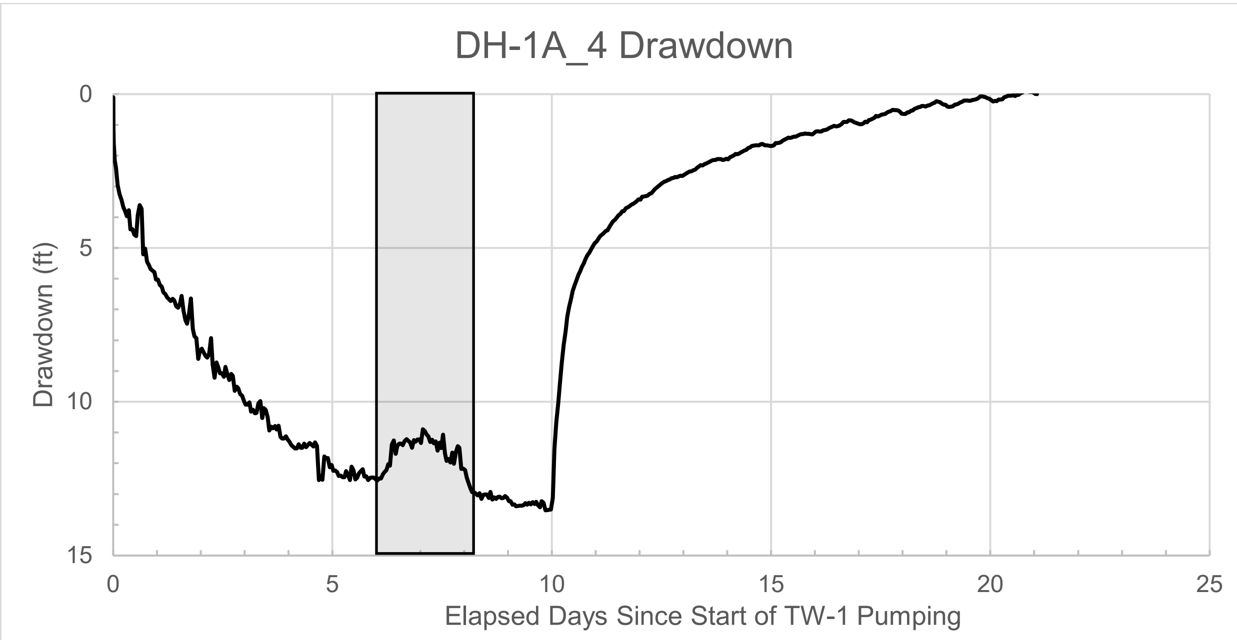


Figure 1: Anomalous Reversal of Drawdown

Table 2: Summary of Analyses

ID	Interval (ft bgs) From	Interval (ft bgs) To	Analysis Type	Confinement Assumption	Aquifer Thickness (ft)	K (ft/day)	T (ft^2/day)	S (Ss or Sy) (Unitless)	S/S'	Analysis Quality	Comment
TW-1	1296	1800	Theis-Hantush	Confined	1711	0.48	825			Good	Reasonably good Theis type-curve match during drawdown and majority of recovery. Although minor deviations during drawdown are noted and may be due to undocumented pumping activities. The Storage Coefficient (S) of the pumping well is effectively meaningless. K calculated from screen interval rather than aquifer thickness.
TW-1	1296	1800	Cooper Jacob	Confined	1711	0.75	1285.1			Very Good	The derivative indicates an excellent IARF signature from days 1 through 4. After day 4, there appears to be either boundary effects or disturbance from undocumented pumping or drilling activities. S is meaningless in the pumping well and not recorded here. K calculated from screen interval rather than aquifer thickness.
TW-1	1296	1800	Theis Residual Drawdown	Confined	1711	1.46	2490			Good	The T/t' curve is impacted by the late time pumping perturbations, but a substantial interval provides a good straight-line match.
DH-1A_2	590	590.1	Theis-Hantush	Unconfined	1711	1.14	1950	0.005		Good	There appears to be some unaccounted for recharge days 6 -10 of pumping that were not matched in the analysis. A good match was achieved Days 2 through 7 and recovery.
DH-1A_2	590	590.1	Cooper Jacob	Unconfined	1711	1.20	2050	0.15		Fair	The derivative clearly indicates recharge or termination of unknown pumping on day 6 of the pump test. However, a good match to days 2 - 6.
DH-1A_2	590	590.1	Theis Residual Drawdown	Confined	1711	0.95	1630		1.9	Fair	Moderately irregular recurve and the unconfined assumption may be questionable. Most likely partially confined.

Table 2 (Continued)

ID	Interval (ft bgs) From	Interval (ft bgs) To	Analysis Type	Confinement Assumption	Aquifer Thickness (ft)	K (ft/day)	T (ft^2/day)	S (Ss or Sy) (Unitless)	S/S'	Analysis Quality	Comment
DH-1A_3	1220	1220.1	Theis-Hantush	Confined	1711	2.90	4970	1.00E-05		Fair	Similar to DH-1A_2, the drawdown reverses at day 6 of pumping. This suggests an unaccounted for source of drawdown ended. Additionally, midway through the first day of recovery, the drawdown may have resumed. This caused a dog-leg in the recovery curve.
DH-1A_3	1220	1220.1	Cooper Jacob	Confined	1711	2.63	4500	1.00E-05		Good	Matched days 2-6 of drawdown. The derivative strongly indicates IARF conditions during this interval.
DH-1A_3	1220	1220.1	Theis Residual Drawdown	Confined	1711	0.99	1690		1.9	Fair	Moderately irregular recovery curve, but good early T/t' straight-line match.
DH-1A_4	1550	1550.1	Theis-Hantush	Confined	1711	0.72	1225	0.02		Good	Drawdown is clearly reversed on day 6 (145 hours into pumping) and recovers on day 8 (198 hours). This drawdown curve clearly illustrates disruptions to the pumping test, although the end result is likely minimally effected. The Theis type-curve was matched to minimally impacted intervals of the hydrograph, to the extent possible.
DH-1A_4	1550	1550.1	Cooper Jacob	Confined	1711	0.42	720	0.0125		Fair	The derivative suggests a constant head boundary condition evident on day 5, but the interference from undocumented drawdown reduces the confidence in this interpretation. The Cooper-Jacob solution matches late time conditions, to the extent possible.
DH-1A_4	1550	1550.1	Theis Residual Drawdown	Confined	1711	0.22	380		1.95	Good	Good match, although recovery is likely somewhat impacted by unquantified drawdown.

4 Conclusion and Limitations

In AHL's estimation, the data analyses are generally fair to good and provide a reasonable estimation of formation Transmissivity and Storage between TW-1 and DH-1A. However, there are several considerations and limitations to the data. These include:

- Interference from undocumented pumping or recharge impacted the analyses of all the water level data.
- Detrending the data was moderately qualitative, and any improvement would require detailed long term water level and atmospheric data.
- The lithostratigraphic conceptual model employed by AHL was highly simplistic. Instead of the single aquifer model, there are likely multiple leaky aquifers present. DH-1A_3 and DH-1A_4 water levels track very closely and at a separate elevation from DH-1A_2, suggesting at least two "leaky" aquifers.

Despite these limitations, AHL considers the pumping test data and analyses to be a reasonable approximation to actual values (within an order of magnitude) and to correlate to published values (Freeze and Cherry, 1970) (Figure 2).

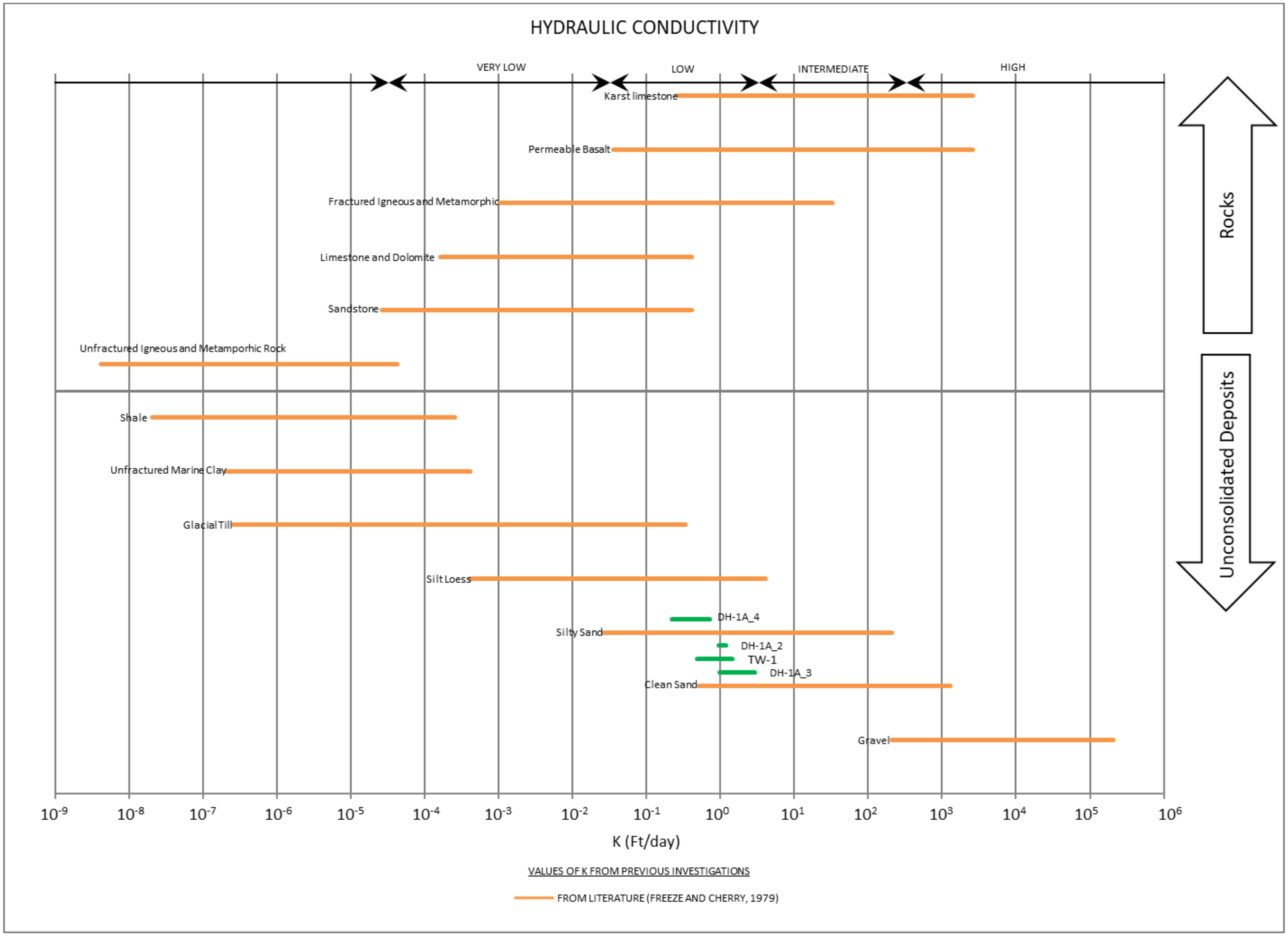


Figure 2: Hydraulic Conductivity Values from Literature

5 References

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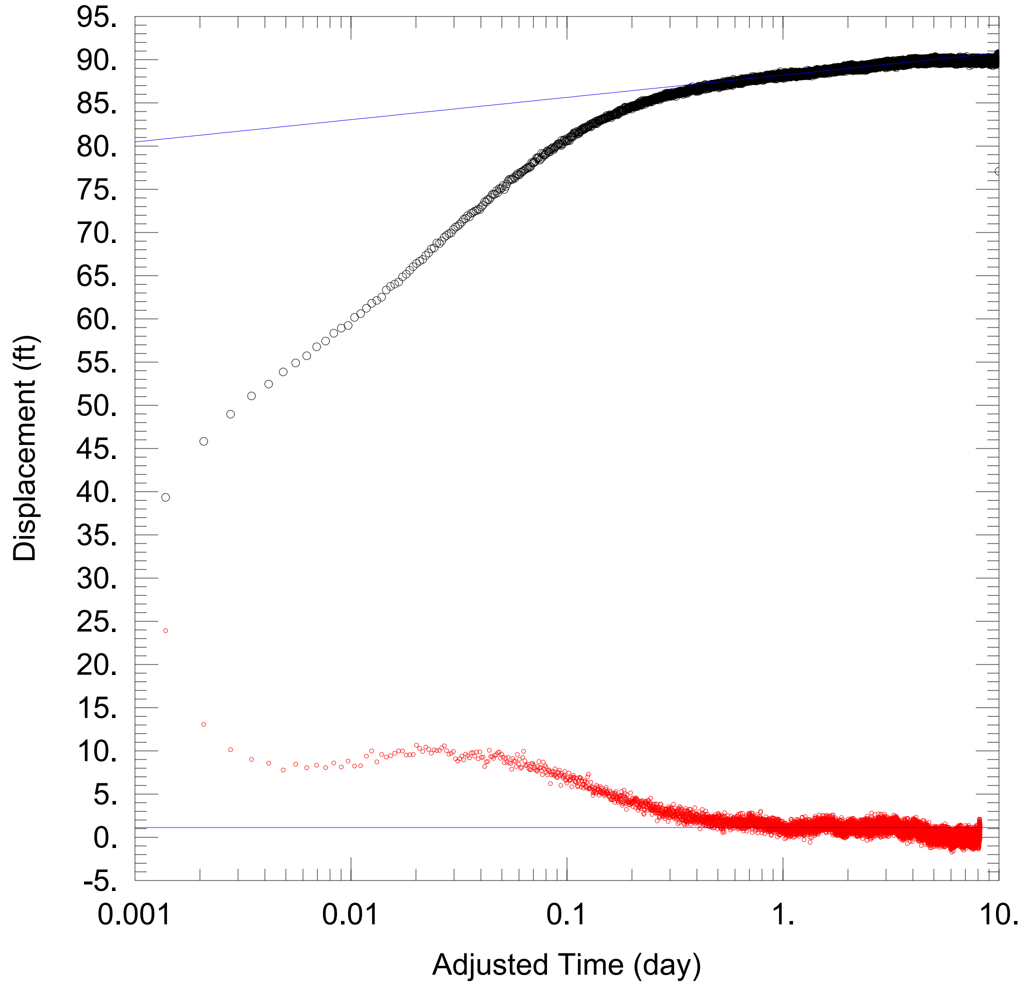


10 DAY PUMPING TEST

Data Set: C:\...\TW-1_Conf_Cooper Jacob.aqt
Date: 11/30/23 Time: 13:09:51

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

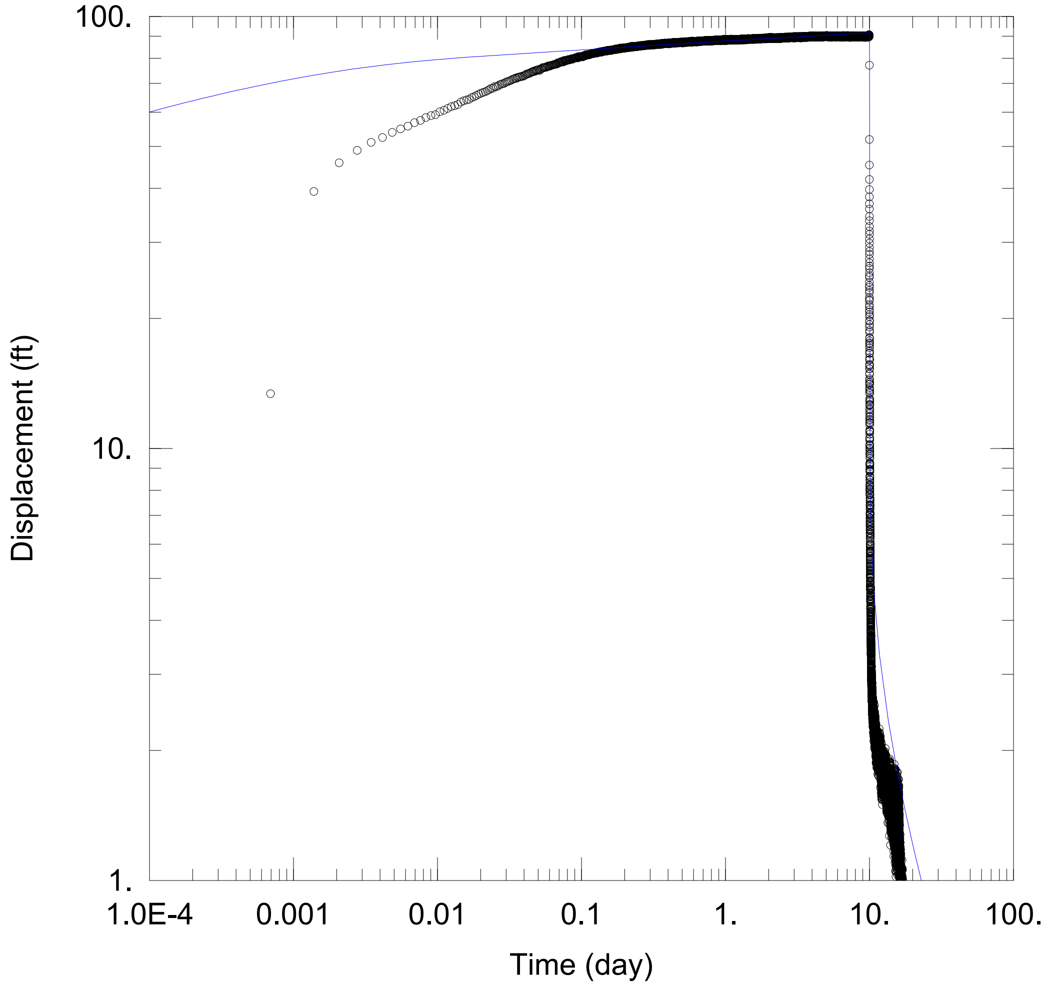
Observation Wells

Well Name	X (ft)	Y (ft)
○ TW-1	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 1285.1 ft^2/day S = 4.949E-31



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Date: 11/30/23 Time: 13:10:50

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

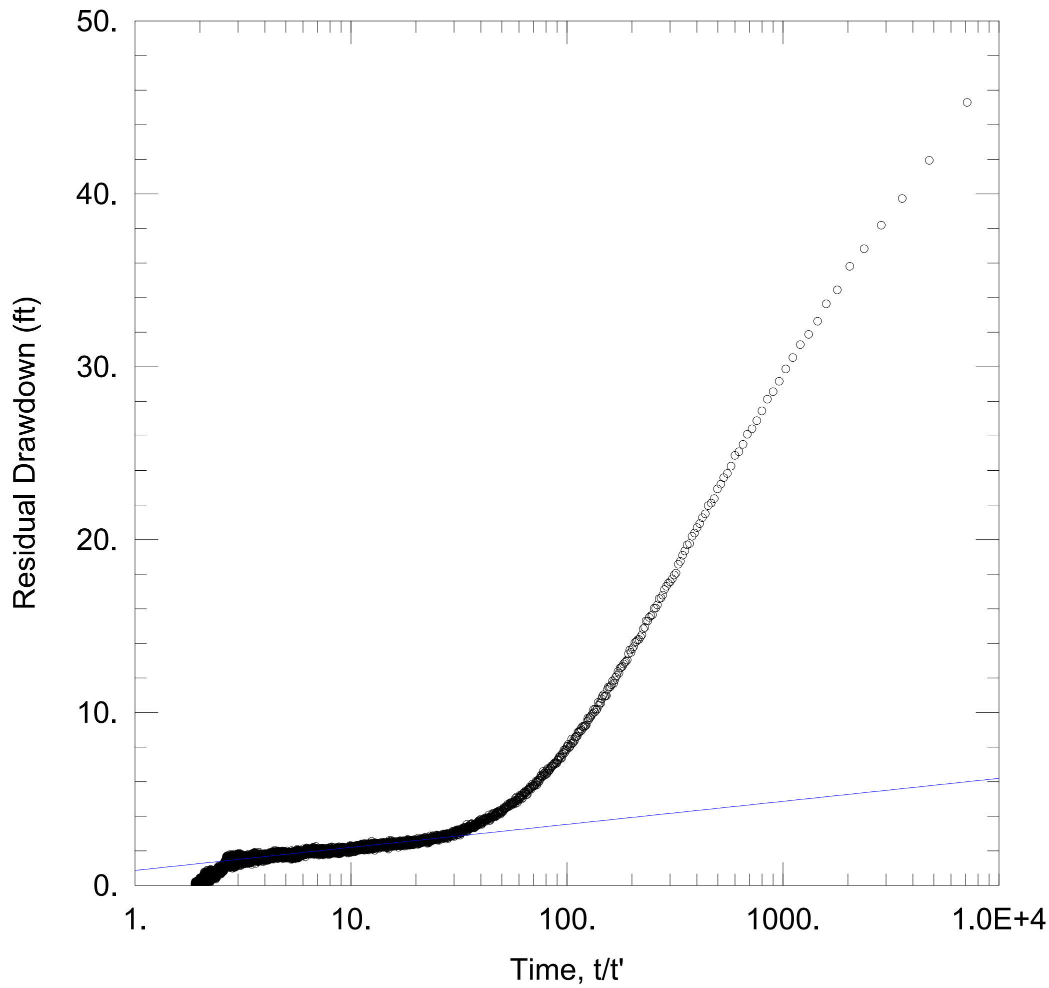
Observation Wells

Well Name	X (ft)	Y (ft)
○ TW-1	0	0

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 825. ft^2/day
S = 1.65E-5
Kz/Kr = 1.
b = 1711. ft



10 DAY PUMPING TEST

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Date: 11/30/23 Time: 13:11:15

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

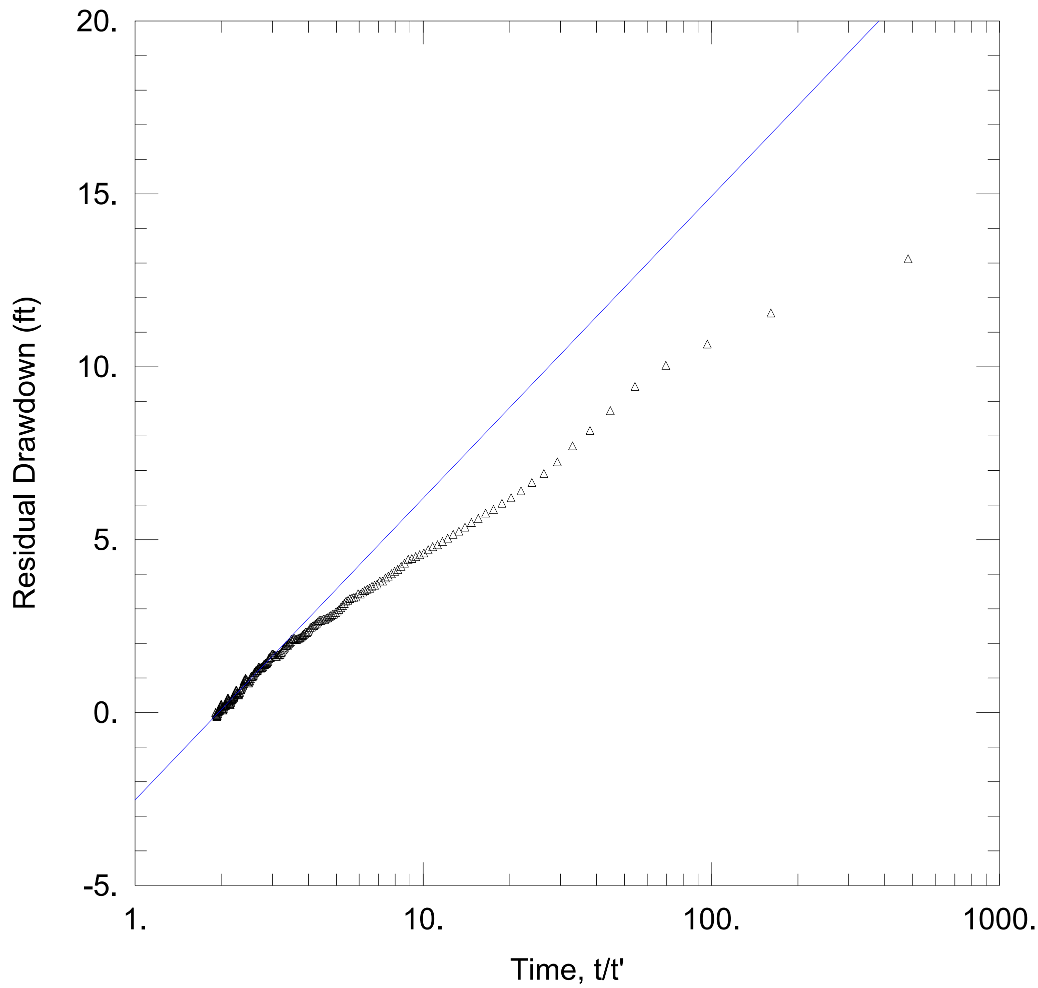
Observation Wells

Well Name	X (ft)	Y (ft)
○ TW-1	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 2490. ft^2/day S/S' = 0.225



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_4_Conf_TheisRDD.aqt
Date: 11/30/23   Time: 13:09:16

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft   Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

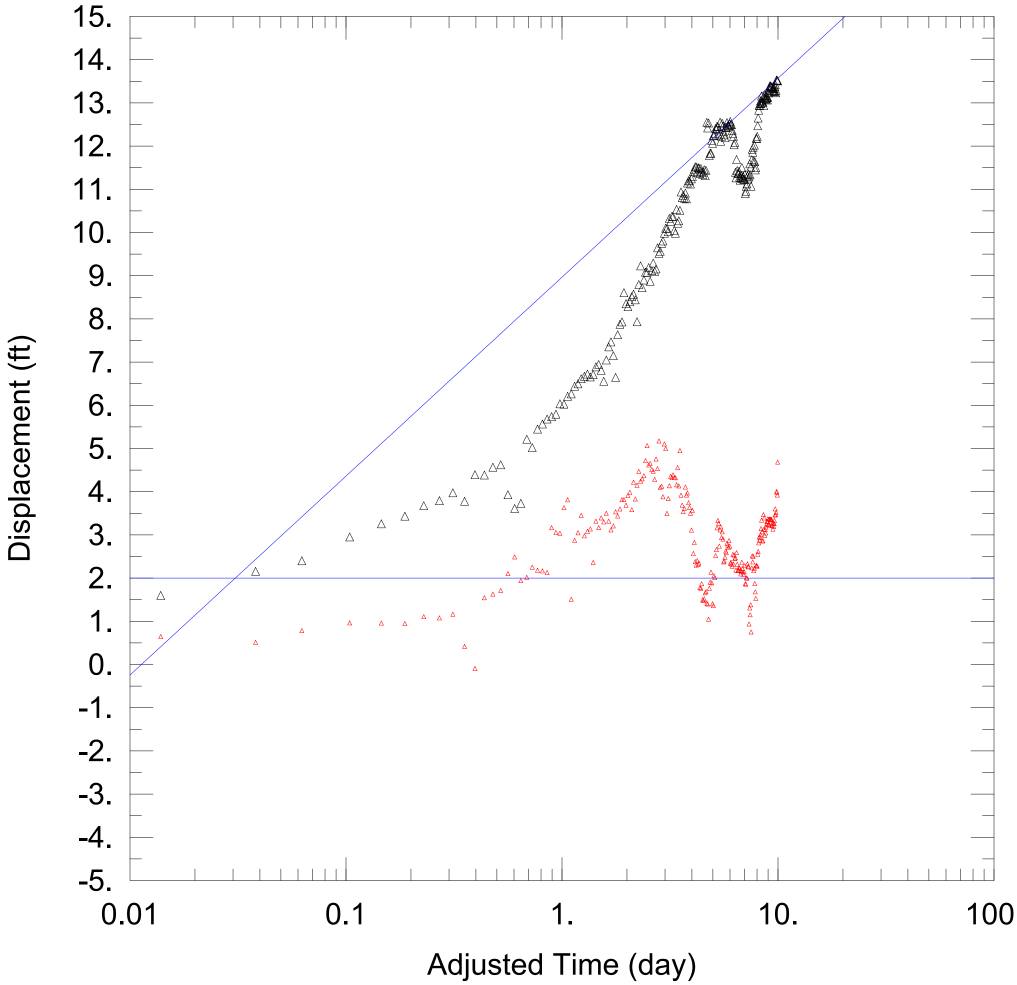
Observation Wells

Well Name	X (ft)	Y (ft)
△ DH-1A_4	0	121

SOLUTION

Aquifer Model: Confined   Solution Method: Theis (Recovery)

T = 380. ft^2/day   S/S' = 1.95



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_4_Conf_CooperJacob.aqt
Date: 11/30/23 Time: 13:08:09

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

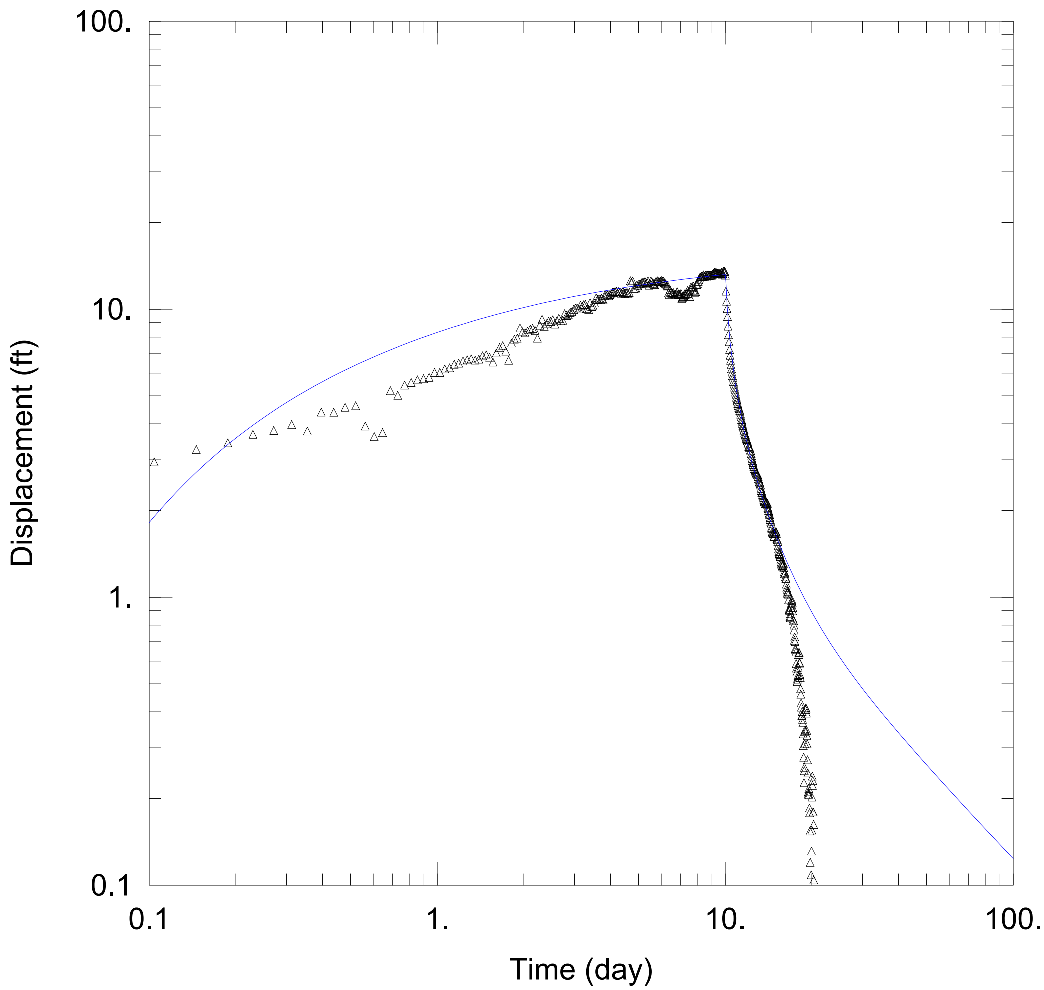
Observation Wells

Well Name	X (ft)	Y (ft)
△ DH-1A_4	0	121

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 720. ft^2/day S = 0.00125



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_4_Conf_Theis.aqt
Date: 11/30/23 Time: 13:08:41

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

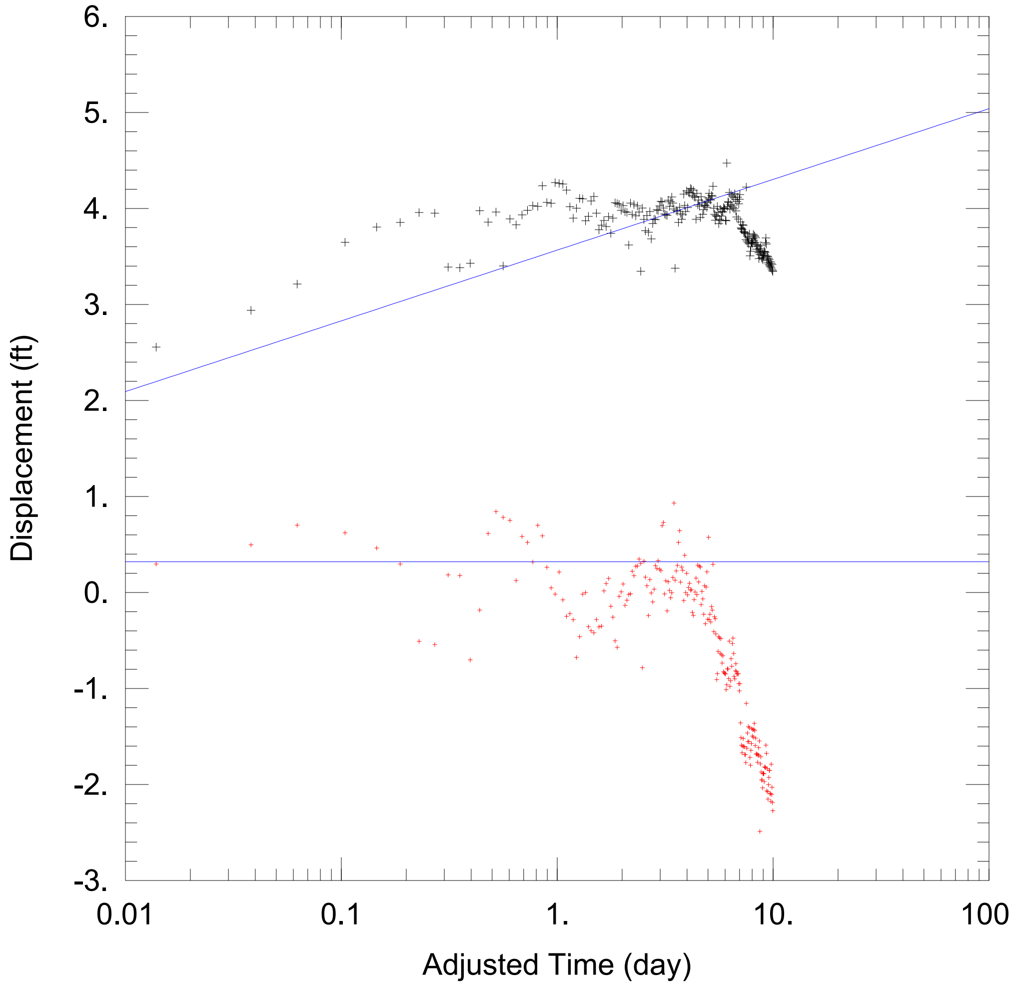
Observation Wells

Well Name	X (ft)	Y (ft)
△ DH-1A_4	0	121

SOLUTION

Aquifer Model: Confined Solution Method: Theis

T = 1225. ft^2/day S = 0.02
Kz/Kr = 1. b = 1711. ft



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_3_Conf_CooperJacob.aqt
Date: 11/30/23 Time: 13:06:37

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

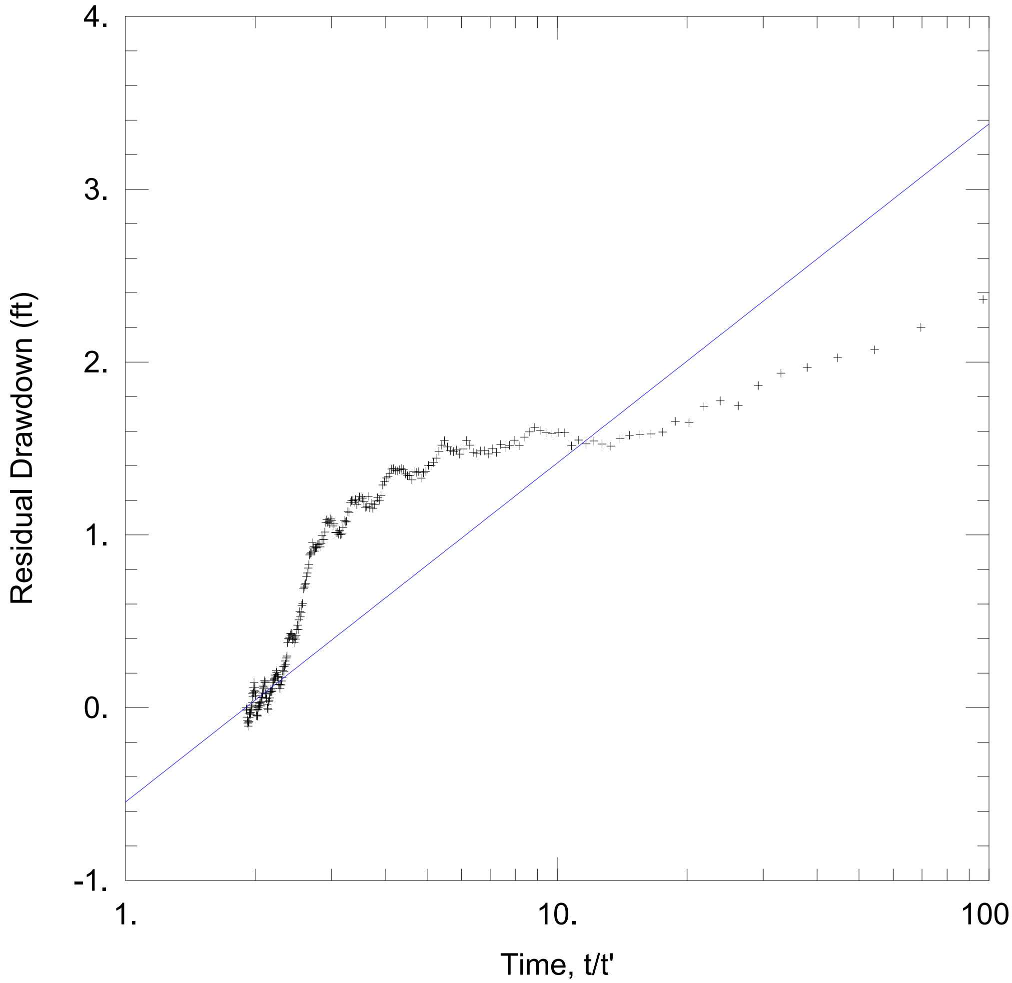
Observation Wells

Well Name	X (ft)	Y (ft)
+ DH-1A_3	-121	0

SOLUTION

Aquifer Model: Confined Solution Method: Cooper-Jacob

T = 4500. ft^2/day S = 1.0E-5



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_3_Conf_TheisRDD.aqt
Date: 11/30/23
Time: 13:07:33

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

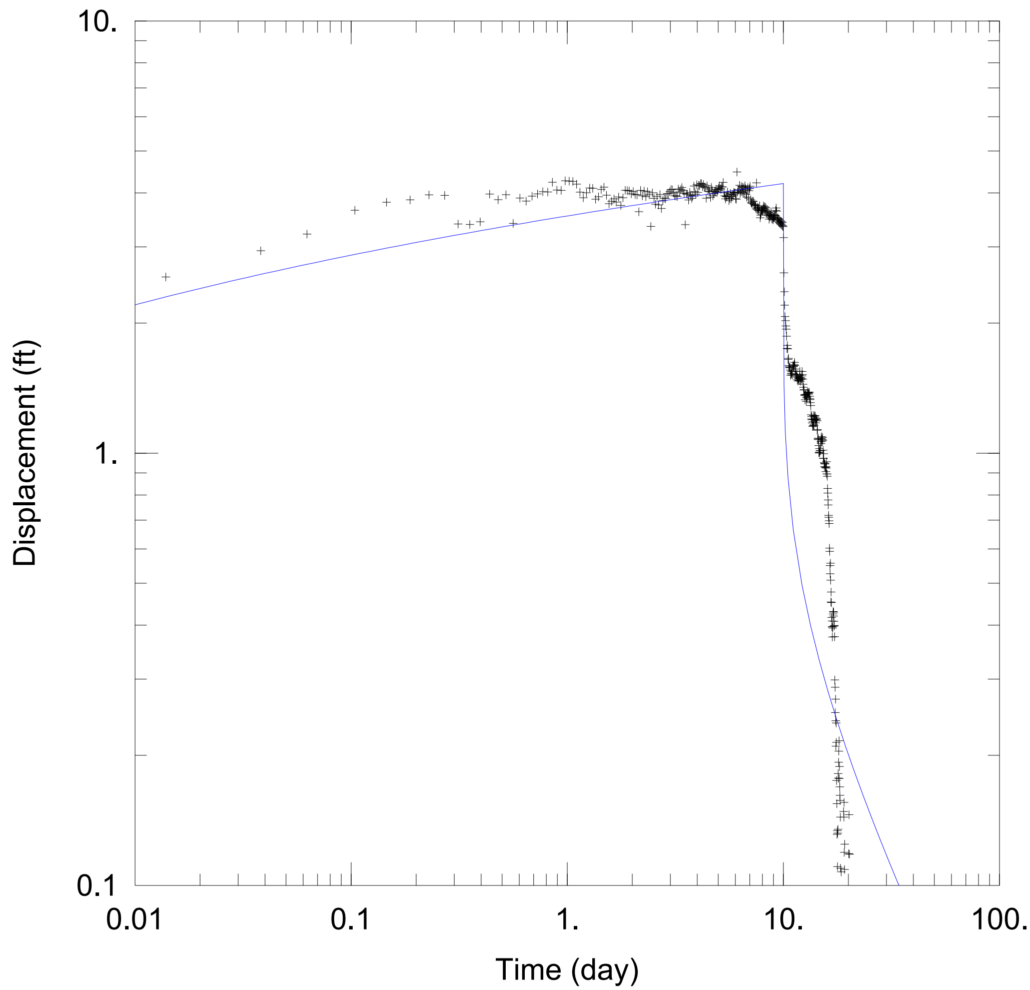
Observation Wells

Well Name	X (ft)	Y (ft)
+ DH-1A_3	-121	0

SOLUTION

Aquifer Model: Confined
Solution Method: Theis (Recovery)

T = 1690. ft^2/day
S/S' = 1.9



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_3_Conf_Theis.aqt
Date: 11/30/23 Time: 13:07:07

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

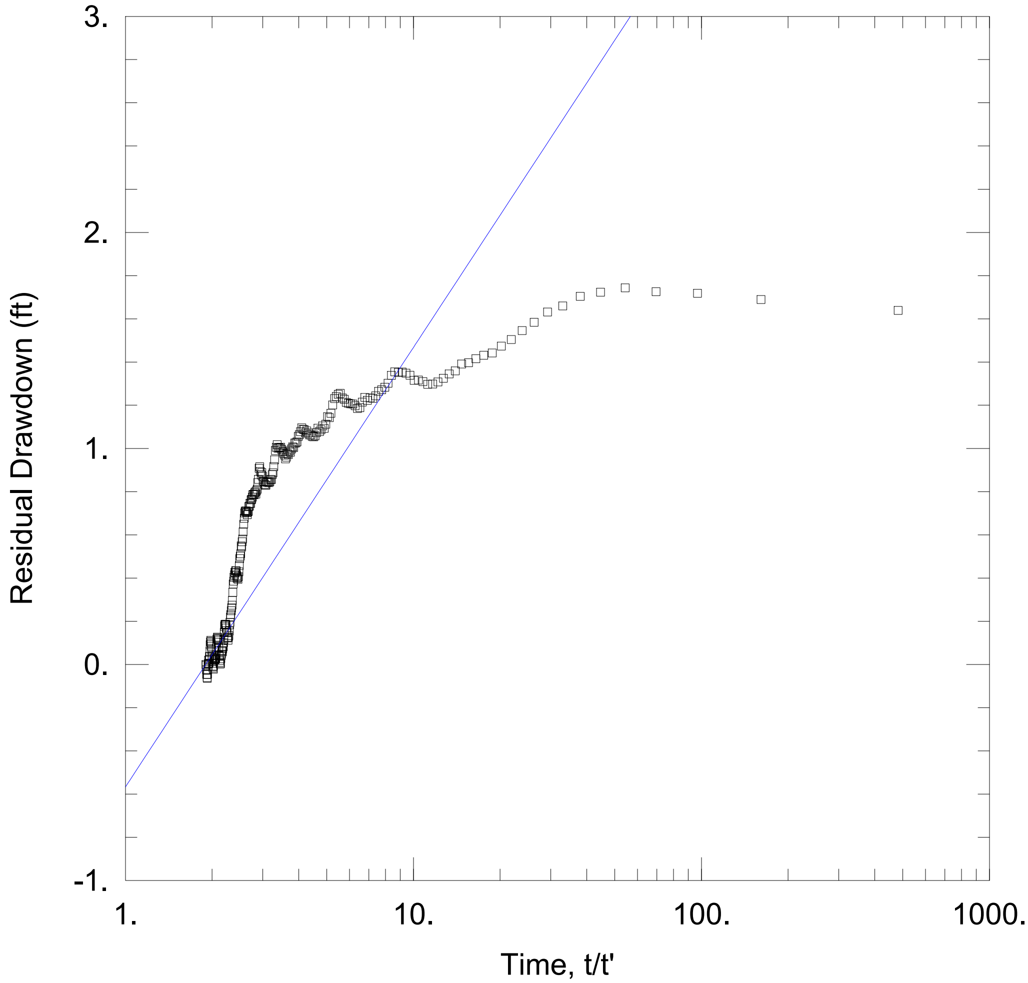
Observation Wells

Well Name	X (ft)	Y (ft)
+ DH-1A_3	-121	0

SOLUTION

Aquifer Model: Confined
Solution Method: Theis

T = 4970. ft^2/day
S = 1.0E-5
Kz/Kr = 1.
b = 1711. ft



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Data Set: C:\...\DH-1A_2_Conf_TheisRDD.aqt
Date: 11/30/23 Time: 13:01:35

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

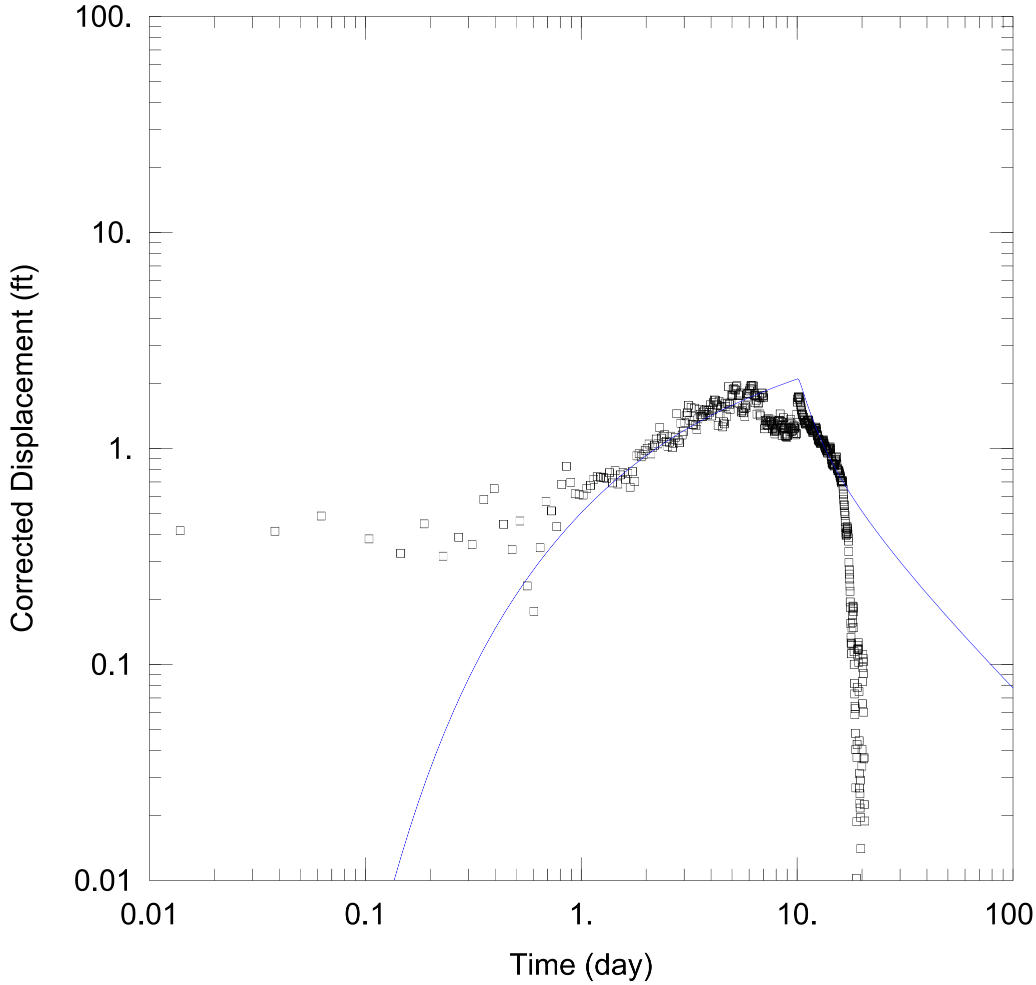
Observation Wells

Well Name	X (ft)	Y (ft)
□ DH-1A_2	121	0

SOLUTION

Aquifer Model: Confined Solution Method: Theis (Recovery)

T = 1630. ft^2/day S/S' = 1.9



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_2_Theis.aqt
Date: 11/30/23 Time: 13:02:33

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

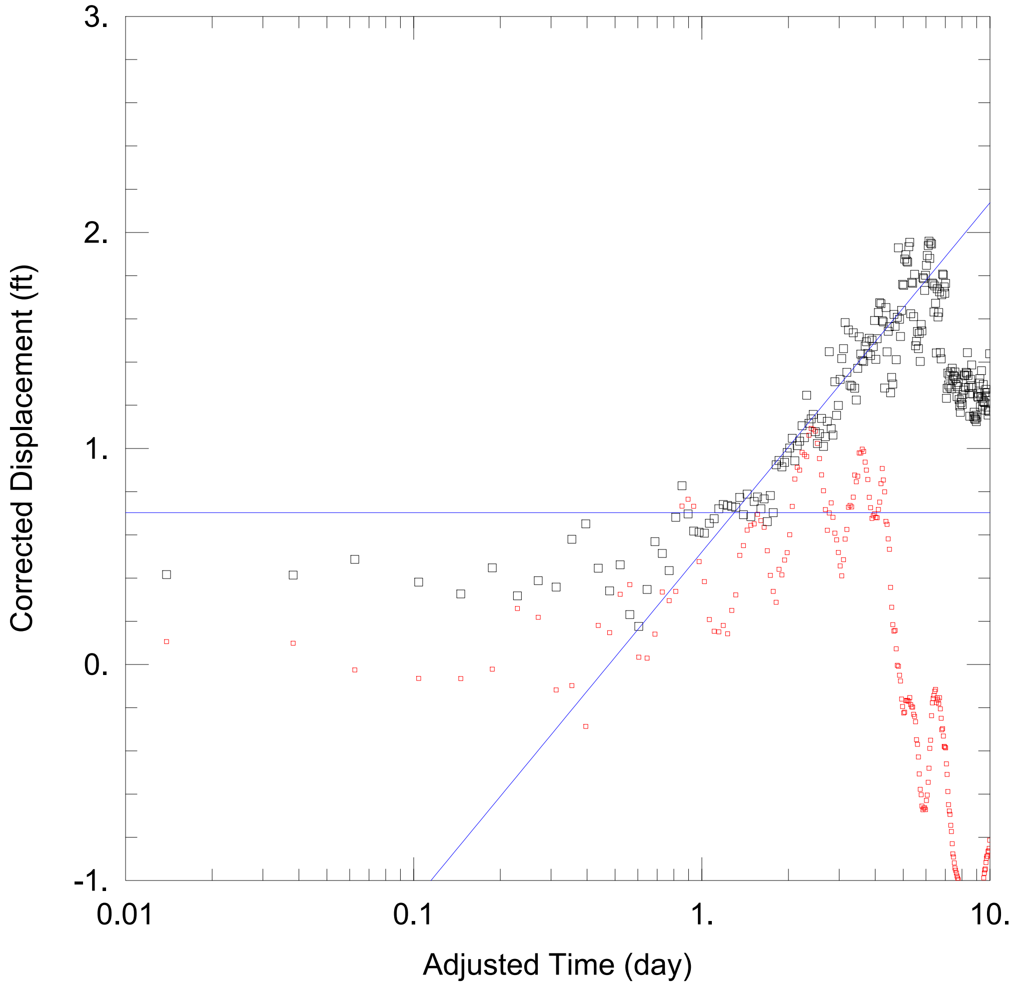
Observation Wells

Well Name	X (ft)	Y (ft)
DH-1A_2	121	0

SOLUTION

Aquifer Model: Unconfined
Solution Method: Theis

T = 1950. ft^2/day
S = 0.005
Kz/Kr = 1.
b = 1711. ft



10 DAY PUMPING TEST

Data Set: C:\...\DH-1A_2_Uncon_CooperJacob.aqt
Date: 11/30/23 Time: 13:04:06

PROJECT INFORMATION

Company: Confluence
Client: ACME
Location: Clayton
Test Well: TW-1
Test Date: 7/28/23

AQUIFER DATA

Saturated Thickness: 1711. ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
TW-1	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ DH-1A_2	121	0

SOLUTION

Aquifer Model: Unconfined Solution Method: Cooper-Jacob

T = 2050. ft^2/day S = 0.15

Appendix H

GeoSystems Analysis Inc.

Drainable Porosity Analysis and Report

DOCUMENT CONTROL SUMMARY

Title:	Porosity Analysis Report		
Client Company:	Confluence Water Resources		
Client Contact:	Matt Banta		
Contract Number:	N/A		
Status:	Final		
GeoSystems Analysis Job #:	92300E		
Project Manager:	Mike Yao		
Author(s):	Celina Vionnet, Layia Asakawa-Ekeland		
Revision Number:	1		
Notes:	Final for client		
Date:	11/27/23		
Checked By:	Mike Yao, Layia Asakawa-Ekeland, Lindsey Bunting		
Issued By:	Mike Yao		
Distribution (Number of Copies):	Client	Other	GSA Library
	1		

This document is the final report. Upon issue of the final report, we request that all draft reports be destroyed or returned to GeoSystems *Analysis*, Inc..

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Tucson, Arizona 85716
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WWW.GEOSYSTEMSANALYSIS.COM

November 27, 2023

Matt Banta
Owner & Principal Hydrogeologist
Confluence Water Resources
14175 Saddlebow Drive
Reno, Nevada 89511

Re: Porosity Analysis for NI43-101 Technical Report– Brine Release Testing, ACME Lithium Total Porosity Analysis – Clayton Valley

Dear Matt,

Enclosed is a technical memorandum which summarizes results of physical and hydraulic property testing of 9 drill core samples from the Clayton Valley project by GeoSystems Analysis, Inc. (GSA). Presentation of test data is formatted in support of the porosity analysis section for the NI43-101 technical report. Testing parameters included total porosity, drainable porosity (specific yield), and specific gravity.

If you have any questions, please feel free to contact me.

Sincerely,

Mike Yao
Laboratory Director
GeoSystems Analysis, Inc.

1.0 INTRODUCTION

This technical memo summarizes the results of physical and hydraulic property laboratory tests conducted by GeoSystems Analysis, Inc. (GSA). Tests were conducted on HQ diamond drill core samples from the Clayton Valley lithium basin in Esmeralda County, Nevada for Confluence Water Resources. Fifteen HQ core samples from various lithologies and depths were provided by Confluence Water Resources, and nine of these samples were tested using the Rapid Brine Release method (Yao et al., 2018) at the GSA Laboratory (Tucson, AZ). Six of the samples were not testable because they have large pebble and cobble fractions with little fine to sand material and/or they are heavily fractured. Tests were conducted to measure specific yield (S_y) and total porosity (P_t). The S_y, or drainable porosity, is the amount of solution that may be released under gravity drainage conditions from saturated porous media. The P_t is the ratio of the pore volume to the bulk soil volume.

The Rapid Brine Release (RBR) method is based on the moisture retention characteristics (MRC) method for direct measurement of total porosity (P_t, MOSA Part 4 Ch. 2, 2.3.2.1), specific retention (S_r, MOSA Part 4 Ch3, 3.3.3.5), and specific yield (S_y, Cassel and Nielson, 1986). A simplified Tempe cell design (Modified ASTM D6836-16) was used to test intact core samples as discussed in Section 2.0. Brine release drainable porosity was measured at 120 mbar and 333 mbar of pressure, where:

1. Brine release at 120 mbar represents S_y from sand dominated sediments and rapid brine release from macropores (Nwankwor et al., 1984), and;
2. Brine release at 333 mbar represents the S_y for intermediate to finer texture sediments (Cassel and Nielsen, 1986).

Within this report, brine release values at 120 mbar are provided for reference and 333 mbar values are presented as the estimated S_y (drainable porosity). The goals of the test work were to provide S_y and P_t values for each sample and summarize statistics of S_y and P_t by lithological group. This porosity analysis report summarizes the findings of the RBR testing and physical property testing.

2.0 METHODS

Confluence Water Resources shipped fifteen HQ core samples to GeoSystems Analysis, Inc. (GSA) from one borehole (DH-1). Table 1 lists the tests, testing laboratories, and standard methods used for all sample testing. Sample IDs, core depths, and geological logs were provided by Confluence Water Resources. Cores were 6.3 cm (HQ) in diameter and 13 cm to 18 cm in length. The HQ samples were delivered in transparent plastic food wrap wrapped in aluminum foil. Figure 1 shows representative examples of samples received by GSA.

A total of nine samples (four volcanic tuff and five conglomerate) were selected for RBR testing based on the lithological type, borehole, and physical characteristics observed during sample check-in. Six samples were found to be untestable because they could not be packed into the cell due to a large pebble/cobble grain percentage and/or because they were highly fractured (Figure 2). In addition to the RBR testing, GSA ran physical property tests to assist in lithologic characterization and interpretation of results. These included visual inspection to provide a QA/QC check on lithologic characterizations. The complete laboratory results are provided in Appendix A.

Table 1. Laboratory tests conducted on Clayton Valley samples

Test Type	Sample Type and Number	Test Method	Testing Laboratory	Standard[1,2]
Physical	9 core samples	Bulk Density	GSA Laboratory, (Tucson, AZ)	ASTM D2937-17e2[1]
Hydraulic		Total Porosity		MOSA Part 4 Ch. 2, 2.3.2.1[2]
		Field Water Capacity		MOSA Part 4 Ch. 3, 3.3.3.2[2]
		Rapid Brine Release (Specific Yield)		Modified ASTM D6836-16[1]
				MOSA Part 4 Ch. 3, 3.3.3.5[2]

[1]American Society for Testing and Materials, Volume 4.08. 2009. West Conshohocken, Pennsylvania
[2] Methods of Soil Analysis, Part 4. 2002. Physical Methods, Soil Science Society of America, Madison Wisconsin

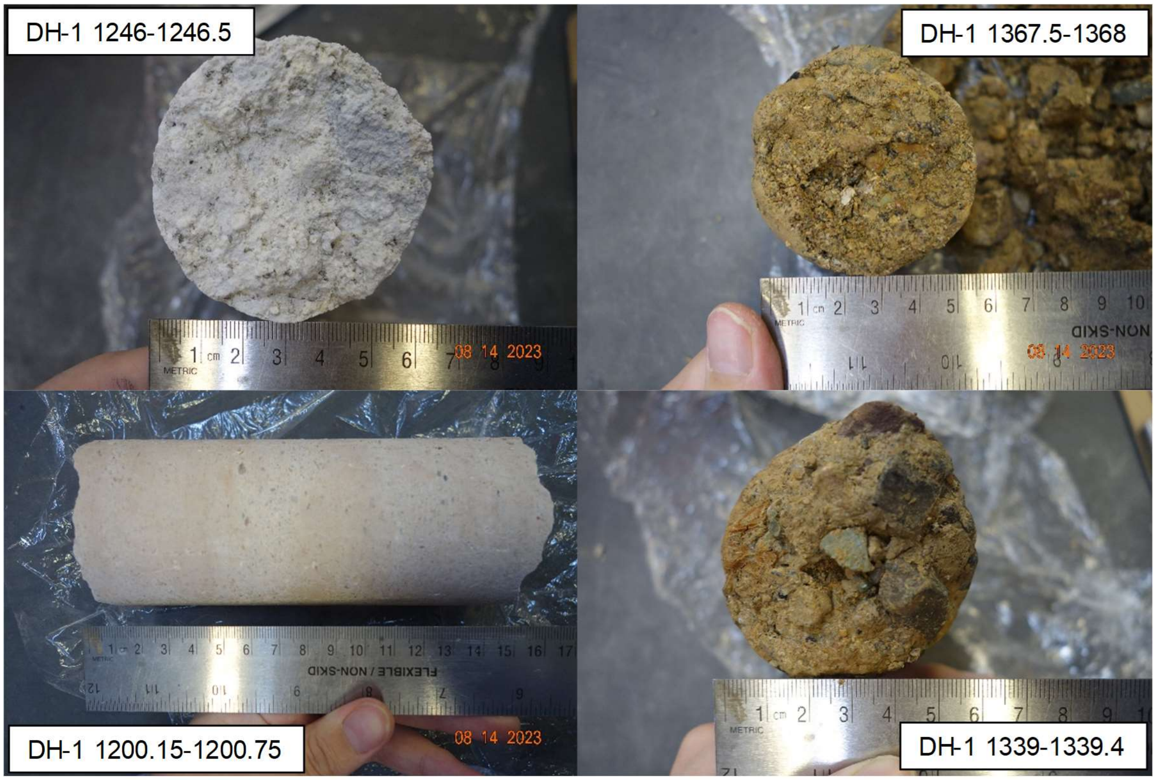

Figure 1. Sample images of core samples received

Figure 2. Untestable sample cores

To interpret the RBR test results, samples were classified by GSA into the following categories: conglomerate/breccia and volcanic material. Samples were assigned to a lithologic group according to physical sample check-in descriptions and photos taken upon arrival at the GSA laboratory. Due to variability in core materials, porosity analysis results are summarized by the lithologic groups. The observed driller lithology groups and corresponding assigned GSA lithology groups are summarized below in Table 2.

Table 2. GSA lithology groups and corresponding driller lithology classifications

GSA Litho Group	Driller's Lithology Classification
Volcanic material	Tuff Breccia
Conglomerate/breccia	Marginal Basin Fanglomerate

2.1 Brine Release Testing Sample Preparation

Sample preparation procedures for RBR testing are described in the following sections.

2.1.1 Core Sample Packing in RBR

Undisturbed cores were sub-sampled by cutting or extruding samples into stainless steel rings with a diameter of 6.85 cm and a height of 5.48 cm. The RBR method rings were sub-sampled from the top of the core. Machined PVC end caps were placed on either side to seal the sample and create RBR Test Cells (Section 2.1.2). Care was taken to reduce core handling that could modify the physical structure of the core samples and therefore affect P_t and S_y measurements.

To prepare RBR core samples, the solid cores were cut with a rock saw to fit GSA's RBR test cells and then fit into a 6.85 cm diameter ring and sealed as discussed below.

The cut consolidated cores had smaller/irregular diameters which created void space between the core and sample ring. To avoid overestimation of P_t and S_y, a two-part silicone rubber (Ecoflex^{TM}) was used to fill in excess void space around the samples (Figure 3). The volume of silicone used was documented for sample volume calculation. If apparent large natural pores or porosities were observed around the edges of the sample prior to silicon sealing, fifty percent of the extra silicone volume used beside the gap filling between the core and sample ring was assumed to represent actual material porosity. If void spaces around the edge were suspected to be due to dissolution of salts during drilling, 100 percent of the silicone volume was subtracted from the actual material porosity.

Figure 3. Silicone packing method for consolidated cores; sample DH-1 1200.15-1200.75

2.1.2 *RBR Sample Saturation and Assembly*

RBR test cells were prepared by placing a pre-wetted micro-pore membrane (rated 1200 mbar air entry value) into the bottom PVC cap (Figure 4). This membrane maintains a permeable saturated bottom boundary for solution flow and prevents air entry under the target air pressures applied during RBR testing. The PVC caps contain gaskets to create an air-tight test cell that maintains constant air pressure and allows continuous solution outflow through the membrane (Figure 5).

The RBR test cell was then saturated with a brine solution provided by the client from the Clayton Valley lithium basin solution (specific gravity = 1.04 g/cm^3). Saturation was achieved by applying brine solution from the bottom of the test cell and then applying a vacuum (30 to 700 mbar) from the top of the test cell at least three times to assist in saturation. Any standing brine solution was carefully removed from the top of the test cell prior to starting the test.

Figure 4. Pre-wetted micro-pore membrane on the bottom PVC cap

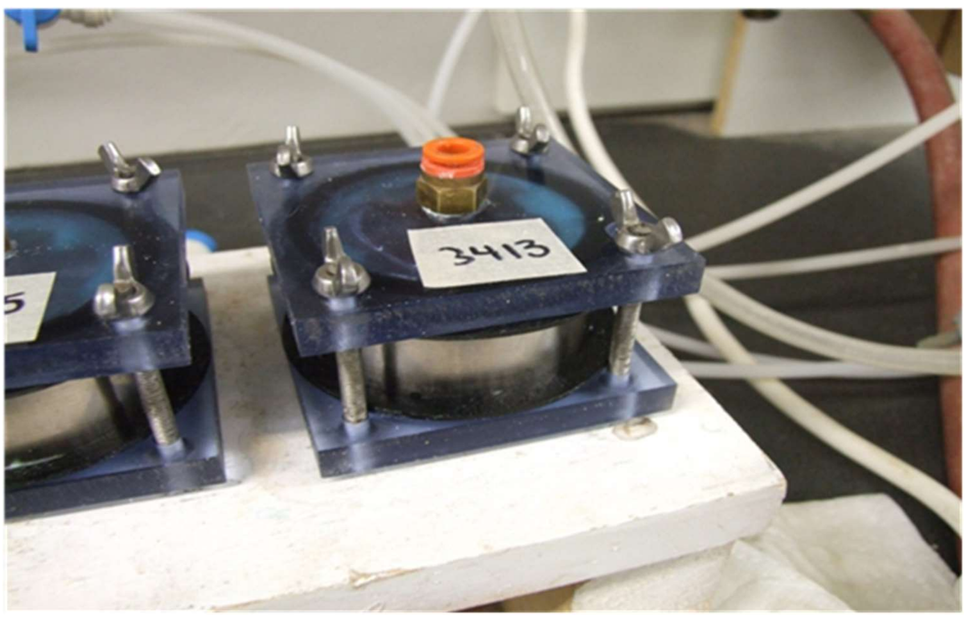

Figure 5. Assembled sample in test cell liner and RBR test cell hardware

2.2 Relative Brine Release (RBR) Sample Testing Methods

The RBR method is based on the moisture retention characteristic method using the Tempe cell design (Modified ASTM D6836-16), whereby S_y is determined by applying pressures equivalent to gravity drainage to the Test Cell and measuring the amount of brine solution released. P_t is also measured in the RBR method, and is equal to the sum of S_y and S_r. Nine (9) core samples were tested.

Each saturated RBR Test Cell was transferred to a test rack for the pressure extraction procedure (Figure 6). Zero pressure was applied for one day to remove any excess water due to core over-saturation. Two sequential pressure steps were used to approximate brine solution release at 120 mbar and 333 mbar of matric potential (MOSA Part 4 Ch. 3, 3.3.3.2).

Figure 6. Rapid Brine Release (RBR) sample testing configuration

The 120-mbar pressure step was maintained for at least two days, and the 333-mbar pressure step was continued for another two to four days until stable readings were observed. Core assemblies were weighed prior to saturation, after saturation, and then two times daily to determine brine solution loss over time. All samples were oven dried for three days at 60°C and one day at 105°C after the final step to determine the specific retention (S_r), dry bulk density, and P_t (MOSA Part 4 Ch. 2, 2.3.2.1), where S_r is the volume of water retained by the sample under 333 mbar soil water potential. If gypsum is present in the core samples, this drying approach allows for quantification of the amount of moisture lost due to crystalline water present in the mineral's lattice. Gypsum was not a primary constituent of any of the samples tested and, therefore, field water capacity and total porosity were estimated using oven dry water content at 105 °C.

Brine solution release volumes at the 120 mbar and at 333 mbar pressure steps were estimated by the weight of brine lost between the initial cell assembly mass and the mass after each pressure plate step divided by the brine specific gravity (Equation 2, MOSA Part 4 Ch3, 3.3.3.5):

$$S_y = \frac{w_s - w_{333\ mbar}}{A * L * Bsg} \qquad \textit{Equation 1}$$

where w_s is the saturated weight, $w_{333\ mbar}$ is the weight at 333 mbar, A is sample core area, L is sample length, and B_{sg} is the specific gravity of the brine solution. The S_y is assumed to approximate the solution release volume from saturation to 333 mbar. Particle density was estimated from the measured porosity and bulk density according to Equation 2.

$$P_t = 1 - \frac{Bulk\ density}{Particle\ density} \qquad \textit{Equation 2}$$

3.0 RESULTS

Complete laboratory results for the samples are provided in Appendix A. Results are summarized by GSA estimated lithologic groups in the following subsections.

3.1 Relationship between Specific Yield, Total Porosity, and Core Lithologic Classification

In order to assess the relationship between the porosity parameters (S_y and P_t) and lithology, samples were classified into the following lithologic categories: conglomerate/breccia and volcanic material. Histograms and normal distributions for the GSA RBR data are shown in Figure 7 by lithologic classification, and a summary of all data is provided in Table 3 for P_t and S_y.

Average P_t values ranged from 0.22 (conglomerate/breccia) to 0.38 (volcanic material). The volcanic material group had the highest mean S_y value (0.18), while the conglomerate/breccia group had an S_y average value almost three times lower (0.06). Conglomerate/breccia samples were more varied in nature; most of them have a matrix with a high proportion of fines which reduces their ability to release water. Mean values for P_t and S_y are in good agreement with literature values for these types of sediments/deposits (Johnson, 1967).

Table 3. Summary of total porosity (P_t), specific yield (S_y), and drainable porosity statistics by GSA estimated lithological group

Lithological Group	n	RBR P_t		RBR S_y		RBR Drainable Porosity @ 120 mbar	
		Mean	StdDev	Mean	StdDev	Mean	StdDev
Conglomerate/Breccia	5	0.22	0.03	0.06	0.04	0.05	0.04
Volcanic material	4	0.38	0.04	0.18	0.01	0.04	0.02

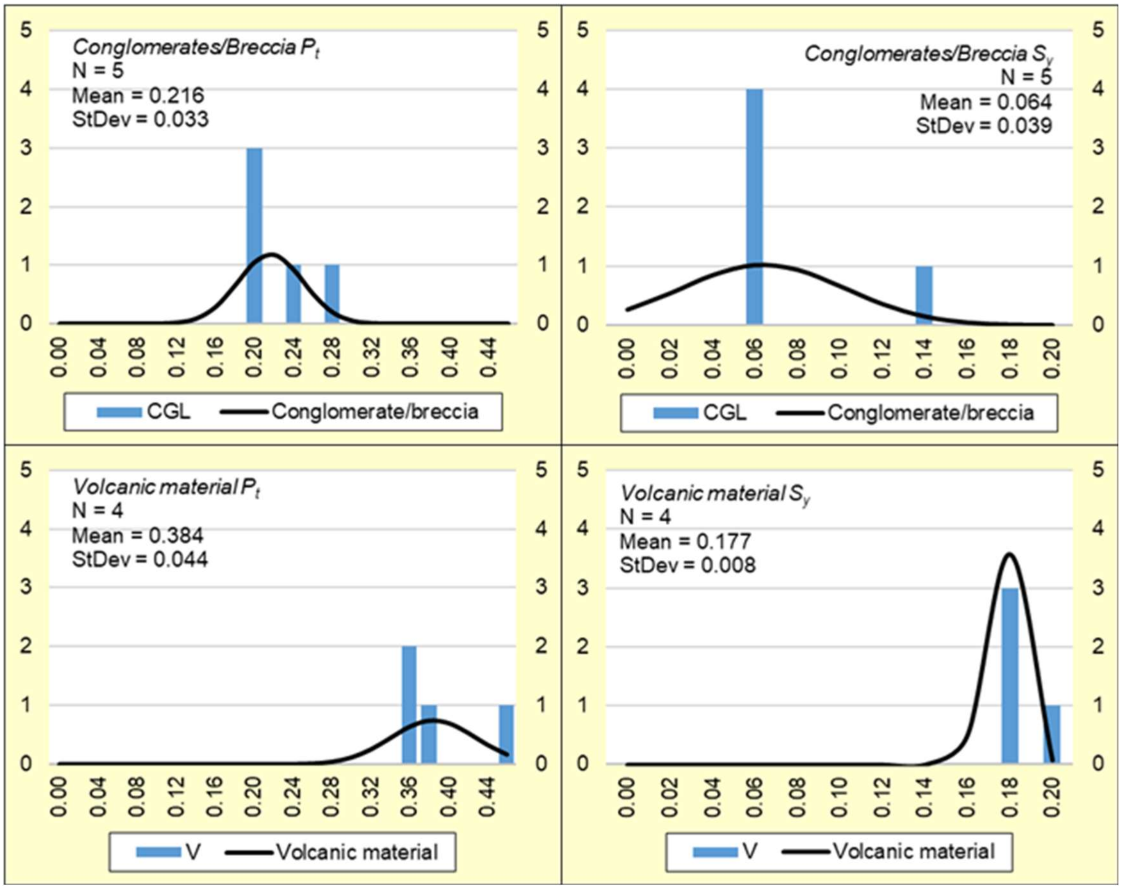

Figure 7. RBR method Pt and Sy frequency distribution statistics for conglomerate/breccia and volcanic material types based on GSA estimated lithology. The curve in each plot is the best fit normal curve.

3.2 Particle Density Results

The average estimated particle density results by lithologic group are provided in Table 4. Particle densities for the siliciclastic group (i.e., conglomerate/breccia) averaged 2.81 g/cm^3 and are within ranges typical of clastic materials (the particle density of quartz is 2.65 g/cm^3). The volcanic material group had a lower average particle density of 2.07 g/cm^3 consistent with its high proportion of volcanic ash and pumice (pumice particle density ranges from 0.7-1.2 g/cm^3, Shipley and Sarna-Wojcicki, 1982).

Table 4. Measured and estimated particle density results summarized according to GSA lithologic group.

Lithological Group	Estimated Particle Density (g/cm^3)[1]		
	n	Mean	StdDev
Conglomerate/Breccia	5	2.81	0.04
Volcanic material	4	2.07	0.12

[1] Estimated using the relationship: porosity = 1-(BD/PD) during brine release testing

3.3 Relationship between Specific Yield and Total Porosity of Core Samples by Borehole

Figure 8 provides trends in P_t and S_y with depth below ground surface (bgs) in borehole DH-1 . In many lithium deposit boreholes, decreasing P_t and S_y is evident with increasing depth below ground surface due to increasing compaction and the tendency for cementation (which reduces porosity) to increase with depth. However, the samples were taken at great depth and from a narrow interval, that those factors likely do not significantly influence P_t and S_y. The deeper conglomerate samples were observed to have an increasing percentage of gravel content. The cause of decreasing P_t and S_y with depth is likely due to a change in lithology (from volcanic tuff to conglomerate) and a larger gravel fraction with depth.

Nine core samples were analyzed from borehole DH-1 from depths of 1200.5 to 1393.7 ft bgs. There was a clear distribution of material type within the investigated depth, with the section from 1200 to 1250 ft bgs consisting of volcanic material, mainly rhyolite/dacite tuff with pumice and lithic fragments up to 2 cm. Conglomerates and breccias were dominant between 1339.2 to 1393.7 ft bgs.

Volcanic material P_t values averaged 0.38, while their S_y values were below 0.19 at all depths and showed a slightly decreasing trend with increasing depth. Volcanic tuff samples released small quantities of brine in the initial pressure step, with yield for 0 - 120 mbar values ranging from 0.02 to 0.05. Most of their capacity was reflected in the 120 – 333 mbar step, which suggests that most of the porosity of the volcanic material is due to micropores. This also suggests that they will take a longer time to release brine under drain conditions. P_t values ranged from 0.18 to 0.26 for conglomerates and breccias, and a gradual decline was observed in S_y values, with all but one sample (1367.8 ft bgs) having values less than 0.06. This sample had higher P_t (0.26) and S_y (0.13) values compared to the average for this lithologic group due to its very coarse sandy matrix, while other core samples have finer sandy matrices with a higher proportion of fines.

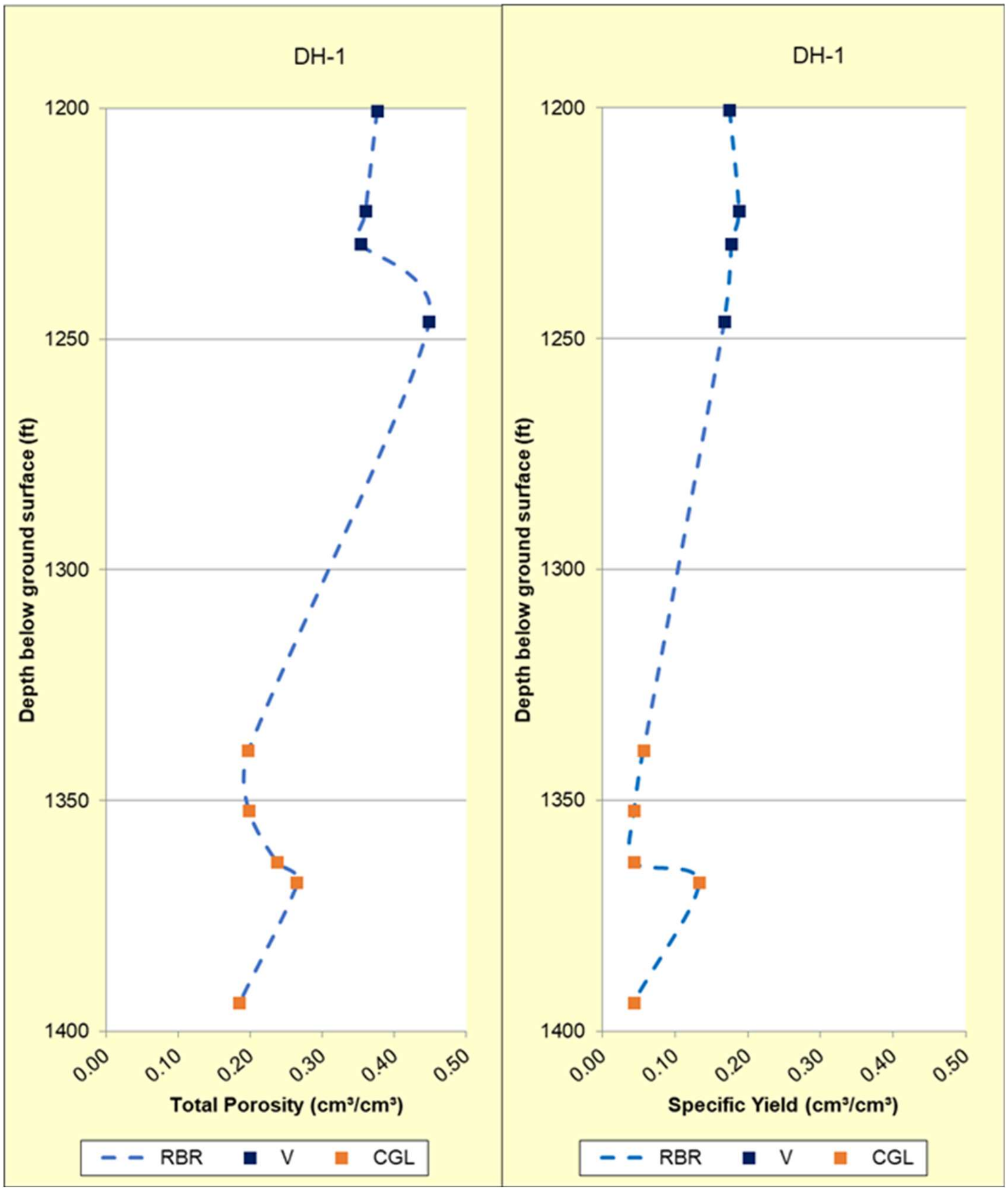

Figure 8. Total porosity and specific yield with depth below ground surface for borehole DH-1; CGL = conglomerate/breccia, V = volcanic material.

3.4 Application of Specific Yield and Porosity Results to Client/Driller Lithology

Detailed profiles of P_t and S_y can be developed for each borehole by assigning client/driller lithologic descriptions into the two classifications developed for this analysis (conglomerate/breccia and volcanic material). A discussion of which common client/driller lithology descriptions fit within each category is provided in Section 2.0 above and Table 2. The average P_t and S_y associated with each lithologic group (Table 3) can then be applied to the contiguous borehole logs to develop a detailed profile of overall borehole porosity, specific yield, and depth intervals with favorable brine solution yield properties. This testing focused on a narrow depth interval for one borehole (DH-1); additional testing may be required to assess physical and hydraulic properties of other materials present within this borehole or across the project site.

4.0 REFERENCES

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APPENDIX A

Laboratory Results Report

Rapid Brine Release (RBR):

GeoSystems Analysis, Inc., Tucson, Arizona

3393 N Dodge Blvd
Tucson, AZ 85716
520-628-9330
Fax: 520-628-1122
www.gsanalysis.com

Date: October 10, 2023
Project Number: **92300E**
Project Name: **Confluence**
Job Description: Brine Release Testing
Client: Confluence Water Resources
Project Contact: Matt Banta
Billing Address: 14175 Saddlebow Drive
Reno, Nevada 89511

Test	***Method***	***Qty***
Specific Gravity of Soils	ASTM D 854 - 02	9
Bulk Density	ASTM D 2937 - 00	9
Total Porosity, Field Water Capacity, and Specific Yield	MOSA Part 4 Ch. 2, 2.3.2.1, Ch. 3, 3.3.3.2 and 3.3.3.5/Horton et al	9

Thank you for choosing GeoSystems Analysis for your material testing needs. We look forward to working with you again. If you have any questions or require additional information, please contact us at 1-520-628-9330

Sincerely,

Prepared By: Nate Blevens

Reviewed By: Mike Yao

GSA GeoSystems Analysis, Inc.
Innovations in Hydrology

3393 N Dodge Blvd
Tucson, AZ 85716
520-628-9330
Fax: 520-628-1122
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Laboratory Test Results - Soil Particle Density

Date: October 10, 2023
Project Number: **92300E**
Project Name: **Confluence**
Client: Confluence Water Resources

Sample ID	Post RBR Assumed Particle Density (g/cm^3)
DH-1 1200.15-1200.75	2.18
DH-1 1219-1219.4	NT
DH-1 1222-1222.5	2.01
DH-1 1229-1229.8	2.15
DH-1 1246-1246.5	1.93
DH-1 1262-1262.58	NT
DH-1 1312.3-1312.7	NT
DH-1 1339-1339.4	2.77
DH-1 1341.2-1341.8	NT
DH-1 1351.8-1352.4	2.77
DH-1 1363-1363.6	2.85
DH-1 1367.5-1368	2.86
DH-1 1393.41-1394	2.78
DH-1 1395.5-1396	NT
DH-1 1398.3-1398.7	NT

Note: NT = Not Testable

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520-628-9330
Fax: 520-628-1122
www.gsanalysis.com

Laboratory Test Results - Bulk Density and Lithology

Date: October 10, 2023
Project Number: **92300E**
Project Name: **Confluence**
Client: Confluence Water Resources

Sample ID	Bulk Density (g/cm^3)	Core type	Estimated Texture
DH-1 1200.15-1200.75	1.36	HQ	Semiconsolidated to consolidated, dry, white/beige rhyolite/dacite tuff, with pumice fragments up to 1 cm
DH-1 1219-1219.4	NT	HQ	Semiconsolidated, slightly moist, tan/buff rhyolite/dacite tuff, with pumice fragments up to 1 cm
DH-1 1222-1222.5	1.28	HQ	Semiconsolidated to consolidated, dry, white/beige rhyolite/dacite tuff, with pumice fragments up to 2 cm
DH-1 1229-1229.8	1.39	HQ	Semiconsolidated, dry, white rhyolite/dacite tuff, with lithic fragments, and pumice up to 1 cm, fractured
DH-1 1246-1246.5	1.07	HQ	Consolidated, dry, white rhyolite/dacite tuff, with lithic fragments, and pumice up to 2 cm
DH-1 1262-1262.58	NT	HQ	Consolidated, dry, variegated polymict breccia or paraconglomerate, fractured, may not be testable
DH-1 1312.3-1312.7	NT	HQ	Consolidated, dry, variegated polymict paraconglomerate, with clasts up to 5 cm, fractured, may not be testable
DH-1 1339-1339.4	2.22	HQ	Consolidated, slightly moist, light brown polymict paraconglomerate, with clay and fine to very coarse sand matrix
DH-1 1341.2-1341.8	NT	HQ	Consolidated, dry, beige polymict paraconglomerate or breccia, clast-supported in places, may not be testable
DH-1 1351.8-1352.4	2.23	HQ	Consolidated, slightly moist, beige/variegated polymict paraconglomerate or breccia, clast-supported in places
DH-1 1363-1363.6	2.17	HQ	Consolidated, dry, beige polymict paraconglomerate or breccia, with clasts up to 5 cm, fractured
DH-1 1367.5-1368	2.10	HQ	Consolidated, slightly moist, beige polymict paraconglomerate or breccia, with medium to very coarse sand matrix, fractured
DH-1 1393.41-1394	2.26	HQ	Consolidated, dry, beige polymict breccia, matrix-supported, fractured
DH-1 1395.5-1396	NT	HQ	Consolidated, dry, beige polymict conglomerate or breccia, fractured, may not be testable
DH-1 1398.3-1398.7	NT	HQ	Consolidated, slightly moist, light brown polymict conglomerate or breccia, matrix-supported in places

Note: NT = Not Testable

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Laboratory Test Results - Porosity

Date: October 10, 2023
Project Number: **92300E**
Project Name: **Confluence**
Client: Confluence Water Resources

Sample ID	Porosity (cm^3/cm^3)	Field Water Capacity (cm^3/cm^3)	Yield for 0-120 mbar (cm^3/cm^3)	Specific Yield (cm^3/cm^3)
DH-1 1200.15-1200.75	0.376	0.201	0.050	0.175
DH-1 1219-1219.4	NT	NT	NT	NT
DH-1 1222-1222.5	0.360	0.172	0.052	0.187
DH-1 1229-1229.8	0.353	0.176	0.019	0.178
DH-1 1246-1246.5	0.448	0.281	0.049	0.167
DH-1 1262-1262.58	NT	NT	NT	NT
DH-1 1312.3-1312.7	NT	NT	NT	NT
DH-1 1339-1339.4	0.197	0.141	0.047	0.056
DH-1 1341.2-1341.8	NT	NT	NT	NT
DH-1 1351.8-1352.4	0.198	0.154	0.032	0.044
DH-1 1363-1363.6	0.237	0.193	0.016	0.044
DH-1 1367.5-1368	0.265	0.132	0.114	0.132
DH-1 1393.41-1394	0.185	0.142	0.037	0.043
DH-1 1395.5-1396	NT	NT	NT	NT
DH-1 1398.3-1398.7	NT	NT	NT	NT

Note: NT = Not Testable

Appendix I

Nevada Profile 1 Multi-Element

Analytical Results

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 Airlift	22060833-001	Ground Water	Gravimetric	6/23/2022	18:00	6/27/2022	Density	1.04	g/cubic cm	1		0.00400	6/29/2022
DH-1 Airlift	22060833-001	Ground Water	SM 4500-H+ B	6/23/2022	18:00	6/27/2022	pH	7.98	pH Units	1	HT		6/28/2022
DH-1 Airlift	22060833-001	Ground Water	SM 2550B	6/23/2022	18:00	6/27/2022	Temperature at pH	23	°C	1			6/28/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.2	6/23/2022	18:00	6/27/2022	Trace Metals Digestion	W220720-1A		1			7/20/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.2	6/23/2022	18:00	6/27/2022	Trace Metals Digestion, Dissolved	W220720-1A		1			7/22/2022
DH-1 Airlift	22060833-001	Ground Water	SM 2320B	6/23/2022	18:00	6/27/2022	Total Alkalinity	590	mg/L as CaCO3	1		1.0	6/28/2022
DH-1 Airlift	22060833-001	Ground Water	SM 2320B	6/23/2022	18:00	6/27/2022	Bicarbonate (HCO3)	590	mg/L as CaCO3	1		1.0	6/28/2022
DH-1 Airlift	22060833-001	Ground Water	SM 2320B	6/23/2022	18:00	6/27/2022	Carbonate (CO3)	<1.0	mg/L as CaCO3	1	U	1.0	6/28/2022
DH-1 Airlift	22060833-001	Ground Water	SM 2320B	6/23/2022	18:00	6/27/2022	Hydroxide (OH)	<1.0	mg/L as CaCO3	1	U	1.0	6/28/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 300.0	6/23/2022	18:00	6/27/2022	Chloride	25000	mg/L	200		200	6/28/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 300.0	6/23/2022	18:00	6/27/2022	Fluoride	<20	mg/L	200	U,D	20	6/28/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 300.0	6/23/2022	18:00	6/27/2022	Sulfate	1000	mg/L	200		300	6/28/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 353.2	6/23/2022	18:00	6/27/2022	Nitrate + Nitrite Nitrogen	<0.10	mg/L	5	J	0.10	7/5/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 351.2	6/23/2022	18:00	6/27/2022	Total Kjeldahl Nitrogen	0.99	mg/L	1		0.40	7/11/2022
DH-1 Airlift	22060833-001	Ground Water	Calc.	6/23/2022	18:00	6/27/2022	Total Nitrogen	1.0	mg/L	1		0.50	7/11/2022
DH-1 Airlift	22060833-001	Ground Water	SM 2540C	6/23/2022	18:00	6/27/2022	Total Dissolved Solids (TDS)	43000	mg/L	1		25	6/30/2022
DH-1 Airlift	22060833-001	Ground Water	SM 2510B	6/23/2022	18:00	6/27/2022	Electrical Conductivity	100000	µmhos/cm	20		20	7/6/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Aluminum, Dissolved	<0.40	mg/L	25	U,D	0.40	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Barium, Dissolved	<0.50	mg/L	25	U,D	0.50	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Beryllium, Dissolved	<0.010	mg/L	25	J,U,D	0.010	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Boron	30	mg/L	25		2.5	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Cadmium, Dissolved	<0.010	mg/L	25	U,D	0.010	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Calcium, Dissolved	350	mg/L	25		12	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Chromium, Dissolved	<0.025	mg/L	25	U,D	0.025	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Copper, Dissolved	<0.15	mg/L	25	J,U,D	0.15	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Iron, Dissolved	<1.0	mg/L	25	J,U,D	1.0	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Lithium	71	mg/L	25		2.5	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Magnesium, Dissolved	190	mg/L	25		12	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Manganese, Dissolved	1.1	mg/L	25		0.25	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Nickel, Dissolved	<0.25	mg/L	25	U,D	0.25	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Potassium, Dissolved	1500	mg/L	25		25	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Silver, Dissolved	<0.040	mg/L	25	J,U,D	0.040	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Sodium, Dissolved	16000	mg/L	50		75	7/27/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.7	6/23/2022	18:00	6/27/2022	Zinc, Dissolved	<0.50	mg/L	25	U,D	0.50	7/25/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.8	6/23/2022	18:00	6/27/2022	Antimony, Dissolved	<0.015	mg/L	25	J,U,D	0.015	8/1/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.8	6/23/2022	18:00	6/27/2022	Arsenic, Dissolved	<0.050	mg/L	25	J,U,D	0.050	8/1/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.8	6/23/2022	18:00	6/27/2022	Lead, Dissolved	<0.025	mg/L	25	J,U,D	0.025	8/1/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.8	6/23/2022	18:00	6/27/2022	Selenium, Dissolved	<0.050	mg/L	25	J,U,D	0.050	8/1/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.8	6/23/2022	18:00	6/27/2022	Thallium, Dissolved	0.011	mg/L	25	J	0.0050	8/1/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 200.8	6/23/2022	18:00	6/27/2022	Uranium, Dissolved	<0.025	mg/L	25	U,D	0.025	8/1/2022
DH-1 Airlift	22060833-001	Ground Water	EPA 245.1	6/23/2022	18:00	6/27/2022	Mercury, Dissolved	<0.00045	mg/L	1	U	0.00045	7/6/2022
DH-1 Airlift	22060833-001	Ground Water	Calculation	6/23/2022	18:00	6/27/2022	Anions	738	meq/L	1		0.100	
DH-1 Airlift	22060833-001	Ground Water	Calculation	6/23/2022	18:00	6/27/2022	Cations	768	meq/L	1		0.100	
DH-1 Airlift	22060833-001	Ground Water	Calculation	6/23/2022	18:00	6/27/2022	Error	1.97	%	1		1.00	
DH-1 Airlift	22060833-001	Ground Water	N/A	6/23/2022	18:00	6/27/2022	Split_Filter_HNO3	Complete		1			6/29/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 220 feet	22060833-002	Ground Water	Gravimetric	6/24/2022	11:30	6/27/2022	Density	1.02	g/cubic cm	1		0.00400	6/29/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.2	6/24/2022	11:30	6/27/2022	Trace Metals Digestion	W220720-1A		1			7/22/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.2	6/24/2022	11:30	6/27/2022	Trace Metals Digestion, Dissolved	W220720-1A		1			7/22/2022
DH-1 @ 220 feet	22060833-002	Ground Water	SM 2320B	6/24/2022	11:30	6/27/2022	Total Alkalinity	430	mg/L as CaCO3	1		1.0	6/28/2022
DH-1 @ 220 feet	22060833-002	Ground Water	SM 2320B	6/24/2022	11:30	6/27/2022	Bicarbonate (HCO3)	430	mg/L as CaCO3	1		1.0	6/28/2022
DH-1 @ 220 feet	22060833-002	Ground Water	SM 2320B	6/24/2022	11:30	6/27/2022	Carbonate (CO3)	<1.0	mg/L as CaCO3	1	U	1.0	6/28/2022
DH-1 @ 220 feet	22060833-002	Ground Water	SM 2320B	6/24/2022	11:30	6/27/2022	Hydroxide (OH)	<1.0	mg/L as CaCO3	1	U	1.0	6/28/2022
DH-1 @ 220 feet	22060833-002	Ground Water	SM 2540C	6/24/2022	11:30	6/27/2022	Total Dissolved Solids (TDS)	18000	mg/L	1		25	6/29/2022
DH-1 @ 220 feet	22060833-002	Ground Water	SM 2510B	6/24/2022	11:30	6/27/2022	Electrical Conductivity	63000	µmhos/cm	20		20	7/6/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Aluminum, Dissolved	0.51	mg/L	10		0.50	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Barium, Dissolved	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Beryllium, Dissolved	<0.010	mg/L	10	J,D	0.010	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Boron	16	mg/L	10		1.0	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Cadmium, Dissolved	<0.010	mg/L	10	U,D	0.010	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Calcium, Dissolved	210	mg/L	10		5.0	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Chromium, Dissolved	<0.050	mg/L	10	U,D	0.050	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Copper, Dissolved	<0.40	mg/L	10	J,D	0.40	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Iron, Dissolved	2.1	mg/L	10		1.0	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Lithium	38	mg/L	10		1.0	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Magnesium, Dissolved	110	mg/L	10		5.0	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Manganese, Dissolved	0.51	mg/L	10		0.10	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Nickel, Dissolved	<0.30	mg/L	10	U,D	0.30	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Potassium, Dissolved	700	mg/L	10		10	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Silver, Dissolved	<0.050	mg/L	10	U,D	0.050	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Sodium, Dissolved	8300	mg/L	50		75	7/27/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.7	6/24/2022	11:30	6/27/2022	Zinc, Dissolved	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.8	6/24/2022	11:30	6/27/2022	Antimony, Dissolved	<0.025	mg/L	10	J,D	0.025	8/1/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.8	6/24/2022	11:30	6/27/2022	Arsenic, Dissolved	<0.050	mg/L	10	J,D	0.050	8/1/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.8	6/24/2022	11:30	6/27/2022	Lead, Dissolved	<0.025	mg/L	10	J,D	0.025	8/1/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.8	6/24/2022	11:30	6/27/2022	Selenium, Dissolved	<0.050	mg/L	10	J,D	0.050	8/1/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.8	6/24/2022	11:30	6/27/2022	Thallium, Dissolved	<0.010	mg/L	10	J,D	0.010	8/1/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 200.8	6/24/2022	11:30	6/27/2022	Uranium, Dissolved	<0.050	mg/L	10	D	0.050	8/1/2022
DH-1 @ 220 feet	22060833-002	Ground Water	EPA 245.1	6/24/2022	11:30	6/27/2022	Mercury, Dissolved	<0.00045	mg/L	1	U	0.00045	7/6/2022
DH-1 @ 220 feet	22060833-002	Ground Water	N/A	6/24/2022	11:30	6/27/2022	Split_Filter_HNO3	Complete		1			6/29/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 260 feet	22060833-003	Ground Water	EPA 200.2	6/24/2022	12:00	6/27/2022	Trace Metals Digestion	W220720-1A		1			7/22/2022
DH-1 @ 260 feet	22060833-003	Ground Water	EPA 200.7	6/24/2022	12:00	6/27/2022	Boron	17	mg/L	10		1.0	7/25/2022
DH-1 @ 260 feet	22060833-003	Ground Water	EPA 200.7	6/24/2022	12:00	6/27/2022	Lithium	42	mg/L	10		1.0	7/25/2022
DH-1 @ 300 feet	22060833-004	Ground Water	EPA 200.2	6/24/2022	12:15	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 300 feet	22060833-004	Ground Water	EPA 200.7	6/24/2022	12:15	6/27/2022	Boron	17	mg/L	10	SC	1.0	7/25/2022
DH-1 @ 300 feet	22060833-004	Ground Water	EPA 200.7	6/24/2022	12:15	6/27/2022	Lithium	42	mg/L	10	SC	1.0	7/25/2022
DH-1 @ 425 feet	22060833-005	Ground Water	EPA 200.2	6/24/2022	12:30	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 425 feet	22060833-005	Ground Water	EPA 200.7	6/24/2022	12:30	6/27/2022	Boron	16	mg/L	10		1.0	7/25/2022
DH-1 @ 425 feet	22060833-005	Ground Water	EPA 200.7	6/24/2022	12:30	6/27/2022	Lithium	38	mg/L	10		1.0	7/25/2022
DH-1 @ 460 feet	22060833-006	Ground Water	EPA 200.2	6/24/2022	12:45	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 460 feet	22060833-006	Ground Water	EPA 200.7	6/24/2022	12:45	6/27/2022	Boron	19	mg/L	10		1.0	7/25/2022
DH-1 @ 460 feet	22060833-006	Ground Water	EPA 200.7	6/24/2022	12:45	6/27/2022	Lithium	47	mg/L	10		1.0	7/25/2022
DH-1 @ 500 feet	22060833-007	Ground Water	EPA 200.2	6/24/2022	13:00	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 500 feet	22060833-007	Ground Water	EPA 200.7	6/24/2022	13:00	6/27/2022	Boron	18	mg/L	10		1.0	7/25/2022
DH-1 @ 500 feet	22060833-007	Ground Water	EPA 200.7	6/24/2022	13:00	6/27/2022	Lithium	45	mg/L	10		1.0	7/25/2022
DH-1 @ 550 feet	22060833-008	Ground Water	EPA 200.2	6/24/2022	14:00	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 550 feet	22060833-008	Ground Water	EPA 200.7	6/24/2022	14:00	6/27/2022	Boron	17	mg/L	2		0.20	7/25/2022
DH-1 @ 550 feet	22060833-008	Ground Water	EPA 200.7	6/24/2022	14:00	6/27/2022	Lithium	43	mg/L	2		0.20	7/25/2022
DH-1 @ 600 feet	22060833-009	Ground Water	EPA 200.2	6/24/2022	14:15	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 600 feet	22060833-009	Ground Water	EPA 200.7	6/24/2022	14:15	6/27/2022	Boron	16	mg/L	2		0.20	7/25/2022
DH-1 @ 600 feet	22060833-009	Ground Water	EPA 200.7	6/24/2022	14:15	6/27/2022	Lithium	42	mg/L	2		0.20	7/25/2022
DH-1 @ 650 feet	22060833-010	Ground Water	EPA 200.2	6/24/2022	14:30	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 650 feet	22060833-010	Ground Water	EPA 200.7	6/24/2022	14:30	6/27/2022	Boron	18	mg/L	2		0.20	7/25/2022
DH-1 @ 650 feet	22060833-010	Ground Water	EPA 200.7	6/24/2022	14:30	6/27/2022	Lithium	45	mg/L	2		0.20	7/25/2022
DH-1 @ 700 feet	22060833-011	Ground Water	EPA 200.2	6/24/2022	14:45	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 700 feet	22060833-011	Ground Water	EPA 200.7	6/24/2022	14:45	6/27/2022	Boron	18	mg/L	2		0.20	7/26/2022
DH-1 @ 700 feet	22060833-011	Ground Water	EPA 200.7	6/24/2022	14:45	6/27/2022	Lithium	46	mg/L	2		0.20	7/26/2022
DH-1 @ 750 feet	22060833-012	Ground Water	EPA 200.2	6/24/2022	15:00	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 750 feet	22060833-012	Ground Water	EPA 200.7	6/24/2022	15:00	6/27/2022	Boron	20	mg/L	5		0.50	7/29/2022
DH-1 @ 750 feet	22060833-012	Ground Water	EPA 200.7	6/24/2022	15:00	6/27/2022	Lithium	63	mg/L	5		0.50	7/27/2022
DH-1 @ 775 feet	22060833-013	Ground Water	EPA 200.2	6/24/2022	16:00	6/27/2022	Trace Metals Digestion	W220720-1B		1			7/22/2022
DH-1 @ 775 feet	22060833-013	Ground Water	EPA 200.7	6/24/2022	16:00	6/27/2022	Boron	25	mg/L	5		0.50	7/29/2022
DH-1 @ 775 feet	22060833-013	Ground Water	EPA 200.7	6/24/2022	16:00	6/27/2022	Lithium	74	mg/L	5		0.50	7/27/2022
DH-1 @ 825 feet	22060833-014	Ground Water	EPA 200.2	6/24/2022	16:15	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 825 feet	22060833-014	Ground Water	EPA 200.7	6/24/2022	16:15	6/27/2022	Boron	25	mg/L	10	SC	1.0	8/2/2022
DH-1 @ 825 feet	22060833-014	Ground Water	EPA 200.7	6/24/2022	16:15	6/27/2022	Lithium	64	mg/L	10	SC	1.0	8/2/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 850 feet	22060833-015	Ground Water	Gravimetric	6/24/2022	16:30	6/27/2022	Density	1.02	g/cubic cm	1		0.00400	6/29/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.2	6/24/2022	16:30	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.2	6/24/2022	16:30	6/27/2022	Trace Metals Digestion, Dissolved	W220720-1A		1			7/22/2022
DH-1 @ 850 feet	22060833-015	Ground Water	SM 2320B	6/24/2022	16:30	6/27/2022	Total Alkalinity	460	mg/L as CaCO3	1		1.0	6/28/2022
DH-1 @ 850 feet	22060833-015	Ground Water	SM 2320B	6/24/2022	16:30	6/27/2022	Bicarbonate (HCO3)	460	mg/L as CaCO3	1		1.0	6/28/2022
DH-1 @ 850 feet	22060833-015	Ground Water	SM 2320B	6/24/2022	16:30	6/27/2022	Carbonate (CO3)	<1.0	mg/L as CaCO3	1	U	1.0	6/28/2022
DH-1 @ 850 feet	22060833-015	Ground Water	SM 2320B	6/24/2022	16:30	6/27/2022	Hydroxide (OH)	<1.0	mg/L as CaCO3	1	U	1.0	6/28/2022
DH-1 @ 850 feet	22060833-015	Ground Water	SM 2540C	6/24/2022	16:30	6/27/2022	Total Dissolved Solids (TDS)	24000	mg/L	1		25	6/29/2022
DH-1 @ 850 feet	22060833-015	Ground Water	SM 2510B	6/24/2022	16:30	6/27/2022	Electrical Conductivity	72000	µmhos/cm	20		20	7/6/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Aluminum, Dissolved	<1.2	mg/L	25	J,D	1.2	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Barium, Dissolved	<0.50	mg/L	25	J,D	0.50	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Beryllium, Dissolved	<0.025	mg/L	25	J,D	0.025	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Boron	25	mg/L	25		2.5	8/2/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Cadmium, Dissolved	<0.025	mg/L	25	U,D	0.025	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Calcium, Dissolved	270	mg/L	25		12	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Chromium, Dissolved	<0.12	mg/L	25	U,D	0.12	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Copper, Dissolved	<1.0	mg/L	25	J,D	1.0	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Iron, Dissolved	<2.5	mg/L	25	J,D	2.5	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Lithium	62	mg/L	25		2.5	8/2/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Magnesium, Dissolved	140	mg/L	25		12	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Manganese, Dissolved	0.78	mg/L	25		0.25	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Nickel, Dissolved	<0.75	mg/L	25	U,D	0.75	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Potassium, Dissolved	820	mg/L	25		25	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Silver, Dissolved	<0.12	mg/L	25	J,D	0.12	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Sodium, Dissolved	8400	mg/L	25		38	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.7	6/24/2022	16:30	6/27/2022	Zinc, Dissolved	<0.50	mg/L	25	U,D	0.50	7/25/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.8	6/24/2022	16:30	6/27/2022	Antimony, Dissolved	<0.062	mg/L	25	J,D	0.062	8/1/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.8	6/24/2022	16:30	6/27/2022	Arsenic, Dissolved	<0.12	mg/L	25	J,D	0.12	8/1/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.8	6/24/2022	16:30	6/27/2022	Lead, Dissolved	<0.062	mg/L	25	J,D	0.062	8/1/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.8	6/24/2022	16:30	6/27/2022	Selenium, Dissolved	<0.12	mg/L	25	J,D	0.12	8/1/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.8	6/24/2022	16:30	6/27/2022	Thallium, Dissolved	<0.025	mg/L	25	J,D	0.025	8/1/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 200.8	6/24/2022	16:30	6/27/2022	Uranium, Dissolved	<0.12	mg/L	25	D	0.12	8/1/2022
DH-1 @ 850 feet	22060833-015	Ground Water	EPA 245.1	6/24/2022	16:30	6/27/2022	Mercury, Dissolved	<0.00045	mg/L	1	U	0.00045	7/6/2022
DH-1 @ 850 feet	22060833-015	Ground Water	N/A	6/24/2022	16:30	6/27/2022	Split_Filter_HNO3	Complete		1			6/29/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.2	6/24/2022	16:45	6/27/2022	Trace Metals Digestion	W220720-1A		1			7/22/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Aluminum	0.54	mg/L	10	M	0.50	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Barium	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Beryllium	<0.010	mg/L	10	J,D	0.010	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Boron	25	mg/L	10	SC	1.0	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Cadmium	<0.010	mg/L	10	U,D	0.010	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Calcium	330	mg/L	10		5.0	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Chromium	<0.050	mg/L	10	U,D	0.050	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Copper	<0.40	mg/L	10	J,D	0.40	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Iron	2.8	mg/L	10		1.0	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Lithium	61	mg/L	10		1.0	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Magnesium	170	mg/L	10		5.0	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Manganese	1.2	mg/L	10		0.10	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Nickel	<0.30	mg/L	10	U,D	0.30	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Potassium	1400	mg/L	10		10	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Silver	<0.050	mg/L	10	U,D	0.050	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Sodium	17000	mg/L	50	SC	75	7/26/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.7	6/24/2022	16:45	6/27/2022	Zinc	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.8	6/24/2022	16:45	6/27/2022	Antimony	<0.025	mg/L	10	J,D	0.025	8/1/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.8	6/24/2022	16:45	6/27/2022	Arsenic	<0.050	mg/L	10	J,D	0.050	8/1/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.8	6/24/2022	16:45	6/27/2022	Lead	<0.025	mg/L	10	J,D	0.025	8/1/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.8	6/24/2022	16:45	6/27/2022	Selenium	<0.050	mg/L	10	J,D	0.050	8/1/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.8	6/24/2022	16:45	6/27/2022	Thallium	<0.010	mg/L	10	J,D	0.010	8/1/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 200.8	6/24/2022	16:45	6/27/2022	Uranium	<0.050	mg/L	10	J,D	0.050	8/1/2022
DH-1 @ 900 feet	22060833-016	Ground Water	EPA 245.1	6/24/2022	16:45	6/27/2022	Mercury	<0.00045	mg/L	1	U	0.00045	7/6/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 950 feet	22060833-017	Ground Water	EPA 200.2	6/24/2022	17:00	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 950 feet	22060833-017	Ground Water	EPA 200.7	6/24/2022	17:00	6/27/2022	Boron	28	mg/L	10		1.0	8/2/2022
DH-1 @ 950 feet	22060833-017	Ground Water	EPA 200.7	6/24/2022	17:00	6/27/2022	Lithium	77	mg/L	10		1.0	8/2/2022
DH-1 @ 1000 feet	22060833-018	Ground Water	EPA 200.2	6/24/2022	18:00	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 1000 feet	22060833-018	Ground Water	EPA 200.7	6/24/2022	18:00	6/27/2022	Boron	31	mg/L	10		1.0	8/2/2022
DH-1 @ 1000 feet	22060833-018	Ground Water	EPA 200.7	6/24/2022	18:00	6/27/2022	Lithium	79	mg/L	10		1.0	8/2/2022
DH-1 @ 1050 feet	22060833-019	Ground Water	EPA 200.2	6/24/2022	18:15	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 1050 feet	22060833-019	Ground Water	EPA 200.7	6/24/2022	18:15	6/27/2022	Boron	26	mg/L	10		1.0	8/2/2022
DH-1 @ 1050 feet	22060833-019	Ground Water	EPA 200.7	6/24/2022	18:15	6/27/2022	Lithium	64	mg/L	10		1.0	8/2/2022
DH-1 @ 1100 feet	22060833-020	Ground Water	EPA 200.2	6/24/2022	18:30	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 1100 feet	22060833-020	Ground Water	EPA 200.7	6/24/2022	18:30	6/27/2022	Boron	31	mg/L	10		1.0	8/2/2022
DH-1 @ 1100 feet	22060833-020	Ground Water	EPA 200.7	6/24/2022	18:30	6/27/2022	Lithium	78	mg/L	10		1.0	8/2/2022
DH-1 @ 1150 feet	22060833-021	Ground Water	EPA 200.2	6/24/2022	18:45	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 1150 feet	22060833-021	Ground Water	EPA 200.7	6/24/2022	18:45	6/27/2022	Boron	30	mg/L	10		1.0	8/2/2022
DH-1 @ 1150 feet	22060833-021	Ground Water	EPA 200.7	6/24/2022	18:45	6/27/2022	Lithium	95	mg/L	10		1.0	8/2/2022
DH-1 @ 1200 feet	22060833-022	Ground Water	EPA 200.2	6/25/2022	09:00	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 1200 feet	22060833-022	Ground Water	EPA 200.7	6/25/2022	09:00	6/27/2022	Boron	32	mg/L	10		1.0	8/2/2022
DH-1 @ 1200 feet	22060833-022	Ground Water	EPA 200.7	6/25/2022	09:00	6/27/2022	Lithium	110	mg/L	10		1.0	8/2/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.2	6/25/2022	10:00	6/27/2022	Trace Metals Digestion	W220720-1A		1			7/22/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Aluminum	<0.50	mg/L	10	U,D	0.50	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Barium	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Beryllium	<0.010	mg/L	10	J,D	0.010	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Boron	32	mg/L	10		1.0	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Cadmium	<0.010	mg/L	10	U,D	0.010	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Calcium	500	mg/L	10		5.0	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Chromium	<0.050	mg/L	10	U,D	0.050	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Copper	<0.40	mg/L	10	J,D	0.40	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Iron	<1.0	mg/L	10	J,D	1.0	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Lithium	110	mg/L	10		1.0	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Magnesium	340	mg/L	10		5.0	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Manganese	1.7	mg/L	10		0.10	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Nickel	<0.30	mg/L	10	U,D	0.30	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Potassium	2000	mg/L	10		10	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Silver	<0.050	mg/L	10	J,D	0.050	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Sodium	21000	mg/L	50		75	7/27/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.7	6/25/2022	10:00	6/27/2022	Zinc	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.8	6/25/2022	10:00	6/27/2022	Antimony	<0.050	mg/L	20	J,D	0.050	8/1/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.8	6/25/2022	10:00	6/27/2022	Arsenic	<0.10	mg/L	20	J,D	0.10	8/1/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.8	6/25/2022	10:00	6/27/2022	Lead	<0.050	mg/L	20	J,D	0.050	8/1/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.8	6/25/2022	10:00	6/27/2022	Selenium	<0.10	mg/L	20	U,D	0.10	8/1/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.8	6/25/2022	10:00	6/27/2022	Thallium	<0.020	mg/L	20	J,D	0.020	8/1/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 200.8	6/25/2022	10:00	6/27/2022	Uranium	<0.10	mg/L	20	J,D	0.10	8/1/2022
DH-1 @ 1250 feet	22060833-023	Ground Water	EPA 245.1	6/25/2022	10:00	6/27/2022	Mercury	<0.00045	mg/L	1	U	0.00045	7/6/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 1300 feet	22060833-024	Ground Water	EPA 200.2	6/25/2022	11:00	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 1300 feet	22060833-024	Ground Water	EPA 200.7	6/25/2022	11:00	6/27/2022	Boron	34	mg/L	10		1.0	8/2/2022
DH-1 @ 1300 feet	22060833-024	Ground Water	EPA 200.7	6/25/2022	11:00	6/27/2022	Lithium	120	mg/L	10		1.0	8/2/2022
DH-1 @ 1350 feet	22060833-025	Ground Water	EPA 200.2	6/25/2022	12:00	6/27/2022	Trace Metals Digestion	W220720-2A		1			7/22/2022
DH-1 @ 1350 feet	22060833-025	Ground Water	EPA 200.7	6/25/2022	12:00	6/27/2022	Boron	35	mg/L	10		1.0	8/2/2022
DH-1 @ 1350 feet	22060833-025	Ground Water	EPA 200.7	6/25/2022	12:00	6/27/2022	Lithium	130	mg/L	10		1.0	8/2/2022

DH-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Param	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1 @ 1400 feet	22060833-026	Ground Water	Gravimetric	6/25/2022	13:00	6/27/2022	Density	1.04	g/cubic cm	1		0.00400	6/29/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 4500-H+ B	6/25/2022	13:00	6/27/2022	pH	7.22	pH Units	1	HT		6/27/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 2550B	6/25/2022	13:00	6/27/2022	Temperature at pH	26	°C	1			6/27/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.2	6/25/2022	13:00	6/27/2022	Trace Metals Digestion	W220720-2B		1			7/22/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.2	6/25/2022	13:00	6/27/2022	Trace Metals Digestion, Dissolved	W220720-1A		1			7/22/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 2320B	6/25/2022	13:00	6/27/2022	Total Alkalinity	420	mg/L as CaCO3	1		1.0	6/27/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 2320B	6/25/2022	13:00	6/27/2022	Bicarbonate (HCO3)	420	mg/L as CaCO3	1		1.0	6/27/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 2320B	6/25/2022	13:00	6/27/2022	Carbonate (CO3)	<1.0	mg/L as CaCO3	1	U	1.0	6/27/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 2320B	6/25/2022	13:00	6/27/2022	Hydroxide (OH)	<1.0	mg/L as CaCO3	1	U	1.0	6/27/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 300.0	6/25/2022	13:00	6/27/2022	Chloride	36000	mg/L	200		200	6/28/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 300.0	6/25/2022	13:00	6/27/2022	Fluoride	<20	mg/L	200	J,U,D	20	6/28/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 300.0	6/25/2022	13:00	6/27/2022	Sulfate	1900	mg/L	200		300	6/28/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 2540C	6/25/2022	13:00	6/27/2022	Total Dissolved Solids (TDS)	62000	mg/L	1		25	6/30/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	SM 2510B	6/25/2022	13:00	6/27/2022	Electrical Conductivity	220000	µmhos/cm	50		50	7/6/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Aluminum, Dissolved	<0.20	mg/L	10	U,D	0.20	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Barium, Dissolved	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Beryllium, Dissolved	<0.0050	mg/L	10	J,U,D	0.0050	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Boron	39	mg/L	50	SC	5.0	8/2/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Cadmium, Dissolved	<0.0050	mg/L	10	U,D	0.0050	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Calcium, Dissolved	510	mg/L	10		5.0	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Chromium, Dissolved	<0.010	mg/L	10	U,D	0.010	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Copper, Dissolved	<0.40	mg/L	10	J,D	0.40	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Iron, Dissolved	<0.50	mg/L	10	J,U,D	0.50	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Lithium	130	mg/L	50	SC	5.0	8/2/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Magnesium, Dissolved	360	mg/L	10		5.0	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Manganese, Dissolved	1.4	mg/L	10		0.10	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Nickel, Dissolved	<0.10	mg/L	10	U,D	0.10	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Potassium, Dissolved	2100	mg/L	10		10	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Silver, Dissolved	<0.050	mg/L	10	J,D	0.050	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Sodium, Dissolved	22000	mg/L	50		75	7/27/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.7	6/25/2022	13:00	6/27/2022	Zinc, Dissolved	<0.20	mg/L	10	J,D	0.20	7/25/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.8	6/25/2022	13:00	6/27/2022	Antimony, Dissolved	<0.025	mg/L	50	J,U,D	0.025	8/1/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.8	6/25/2022	13:00	6/27/2022	Arsenic, Dissolved	<0.075	mg/L	50	J,U,D	0.075	8/1/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.8	6/25/2022	13:00	6/27/2022	Lead, Dissolved	<0.050	mg/L	50	J,U,D	0.050	8/1/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.8	6/25/2022	13:00	6/27/2022	Selenium, Dissolved	<0.10	mg/L	50	J,U,D	0.10	8/1/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.8	6/25/2022	13:00	6/27/2022	Thallium, Dissolved	0.021	mg/L	50	J	0.010	8/1/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 200.8	6/25/2022	13:00	6/27/2022	Uranium, Dissolved	<0.050	mg/L	50	U,D	0.050	8/1/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	EPA 245.1	6/25/2022	13:00	6/27/2022	Mercury, Dissolved	<0.00045	mg/L	1	U	0.00045	7/6/2022
DH-1 @ 1400 feet	22060833-026	Ground Water	N/A	6/25/2022	13:00	6/27/2022	Split_Filter_HNO3	Complete		1			6/29/2022

DH-1A Multi Element

Sample ID	Sample Number	Matrix	Method	DateCollected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	RepLimit	AnalysisDate
DH-1A 1880-1840	23030584-001	Ground Water	SM 2520B	3/19/2023	18:00:00	3/24/2023	Salinity (as Electrical Conductivity)	86000	µmhos/cm	1		1.0	3/27/2023
DH-1A 1880-1840	23030584-001	Ground Water	Gravimetric	3/19/2023	18:00:00	3/24/2023	Density	1.12	g/cubic cm	1		0.00400	4/6/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 4500-H+ B	3/19/2023	18:00:00	3/24/2023	pH	7.43	pH Units	1	HT		3/31/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 2550B	3/19/2023	18:00:00	3/24/2023	Temperature at pH	22	°C	1			3/31/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.2	3/19/2023	18:00:00	3/24/2023	Trace Metals Digestion	W230329-1A		1			3/29/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.2	3/19/2023	18:00:00	3/24/2023	Trace Metals Digestion, Dissolved	W230329-1A		1			3/29/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 2320B	3/19/2023	18:00:00	3/24/2023	Total Alkalinity	130	mg/L as CaCO3	1		1.0	3/31/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 2320B	3/19/2023	18:00:00	3/24/2023	Bicarbonate (HCO3)	130	mg/L as CaCO3	1		1.0	3/31/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 2320B	3/19/2023	18:00:00	3/24/2023	Carbonate (CO3)	<1.0	mg/L as CaCO3	1		1.0	3/31/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 2320B	3/19/2023	18:00:00	3/24/2023	Hydroxide (OH)	<1.0	mg/L as CaCO3	1		1.0	3/31/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 300.0	3/19/2023	18:00:00	3/24/2023	Chloride	35000	mg/L	500		500	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 300.0	3/19/2023	18:00:00	3/24/2023	Fluoride	<50	mg/L	500	U,D	50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 300.0	3/19/2023	18:00:00	3/24/2023	Sulfate	820	mg/L	500		750	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 353.2	3/19/2023	18:00:00	3/24/2023	Nitrate + Nitrite Nitrogen	<0.10	mg/L	5	J	0.10	4/11/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 351.2	3/19/2023	18:00:00	3/24/2023	Total Kjeldahl Nitrogen	4.3	mg/L	1		0.40	4/3/2023
DH-1A 1880-1840	23030584-001	Ground Water	Calc.	3/19/2023	18:00:00	3/24/2023	Total Nitrogen	4.4	mg/L	1		0.50	4/11/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 2540C	3/19/2023	18:00:00	3/24/2023	Total Dissolved Solids (TDS)	77000	mg/L	1	HT	25	4/21/2023
DH-1A 1880-1840	23030584-001	Ground Water	SM 2510B	3/19/2023	18:00:00	3/24/2023	Electrical Conductivity	86000	µmhos/cm	1		4.0	3/27/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Aluminum	2.4	mg/L	50	J	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Aluminum, Dissolved	<1.0	mg/L	50	J,U,D	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Barium	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Barium, Dissolved	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Beryllium	<0.020	mg/L	50	J,U,D	0.020	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Beryllium, Dissolved	<0.020	mg/L	50	J,U,D	0.020	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Bismuth	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Bismuth, Dissolved	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Boron	16	mg/L	50		5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Boron, Dissolved	15	mg/L	50		5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Cadmium	<0.020	mg/L	50	J,U,D	0.020	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Cadmium, Dissolved	<0.020	mg/L	50	J,U,D	0.020	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Calcium	1600	mg/L	50		25	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Calcium, Dissolved	1500	mg/L	50		25	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Chromium	<0.050	mg/L	50	U,D	0.050	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Chromium, Dissolved	<0.050	mg/L	50	U,D	0.050	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Cobalt	<0.50	mg/L	50	J,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Cobalt, Dissolved	<0.50	mg/L	50	J,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Copper	<0.50	mg/L	50	J,U,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Copper, Dissolved	<0.50	mg/L	50	J,U,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Gallium	<5.0	mg/L	50	U,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Gallium, Dissolved	<5.0	mg/L	50	U,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Iron	17	mg/L	50		5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Iron, Dissolved	7.7	mg/L	50		5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Lithium	77	mg/L	50		5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Lithium, Dissolved	72	mg/L	50		5.0	3/30/2023

DH-1A Multi Element

DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Magnesium	700	mg/L	50		25	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Magnesium, Dissolved	670	mg/L	50		25	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Manganese	2.5	mg/L	50		0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Manganese, Dissolved	2.4	mg/L	50		0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Molybdenum	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Molybdenum, Dissolved	<1.0	mg/L	50	U,D	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Nickel	<0.50	mg/L	50	J,U,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Nickel, Dissolved	<0.50	mg/L	50	J,U,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Phosphorus	<25	mg/L	50	J,D	25	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Phosphorus, Dissolved	<25	mg/L	50	J,D	25	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Potassium	350	mg/L	50		50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Potassium, Dissolved	340	mg/L	50		50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Scandium	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Scandium, Dissolved	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Silver	<0.10	mg/L	50	J,U,D	0.10	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Silver, Dissolved	<0.10	mg/L	50	J,U,D	0.10	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Sodium	20000	mg/L	50		75	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Sodium, Dissolved	19000	mg/L	50		75	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Strontium	73	mg/L	50		5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Strontium, Dissolved	70	mg/L	50		5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Tin	<5.0	mg/L	50	U,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Tin, Dissolved	<5.0	mg/L	50	U,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Titanium	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Titanium, Dissolved	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Vanadium	<0.50	mg/L	50	J,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Vanadium, Dissolved	<0.50	mg/L	50	U,D	0.50	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Zinc	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.7	3/19/2023	18:00:00	3/24/2023	Zinc, Dissolved	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Antimony	<0.025	mg/L	50	J,U,D	0.025	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Antimony, Dissolved	<0.025	mg/L	50	U,D	0.025	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Arsenic	<0.10	mg/L	50	J,U,D	0.10	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Arsenic, Dissolved	0.10	mg/L	50	J	0.10	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Lead	<0.050	mg/L	50	J,U,D	0.050	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Lead, Dissolved	<0.050	mg/L	50	J,U,D	0.050	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Selenium	<0.10	mg/L	50	U,D	0.10	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Selenium, Dissolved	<0.10	mg/L	50	U,D	0.10	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Thallium	<0.010	mg/L	50	J,U,D	0.010	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 200.8	3/19/2023	18:00:00	3/24/2023	Thallium, Dissolved	<0.010	mg/L	50	J,U,D	0.010	4/5/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 245.1	3/19/2023	18:00:00	3/24/2023	Mercury	<0.00045	mg/L	1	U	0.00045	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	EPA 245.1	3/19/2023	18:00:00	3/24/2023	Mercury, Dissolved	<0.00045	mg/L	1	U	0.00045	3/30/2023
DH-1A 1880-1840	23030584-001	Ground Water	Calculation	3/19/2023	18:00:00	3/24/2023	Anions	1010	meq/L	1		0.100	
DH-1A 1880-1840	23030584-001	Ground Water	Calculation	3/19/2023	18:00:00	3/24/2023	Cations	966	meq/L	1		0.100	
DH-1A 1880-1840	23030584-001	Ground Water	Calculation	3/19/2023	18:00:00	3/24/2023	Error	2.10	%	1		1.00	

DH-1A Multi Element

DH-1A @ 1195	23030584-002	Ground Water	SM 2520B	3/23/2023	16:00:00	3/24/2023	Salinity (as Electrical Conductivity)	64000	µmhos/cm	1		1.0	3/27/2023
DH-1A @ 1195	23030584-002	Ground Water	Gravimetric	3/23/2023	16:00:00	3/24/2023	Density	0.951	g/cubic cm	1		0.00400	4/6/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 4500-H+ B	3/23/2023	16:00:00	3/24/2023	pH	7.78	pH Units	1	HT		4/4/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 2550B	3/23/2023	16:00:00	3/24/2023	Temperature at pH	21	°C	1			4/4/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.2	3/23/2023	16:00:00	3/24/2023	Trace Metals Digestion	W230329-1A		1			3/29/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.2	3/23/2023	16:00:00	3/24/2023	Trace Metals Digestion, Dissolved	W230329-1A		1			3/29/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 2320B	3/23/2023	16:00:00	3/24/2023	Total Alkalinity	610	mg/L as CaCO3	1		1.0	4/4/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 2320B	3/23/2023	16:00:00	3/24/2023	Bicarbonate (HCO3)	610	mg/L as CaCO3	1		1.0	4/4/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 2320B	3/23/2023	16:00:00	3/24/2023	Carbonate (CO3)	<1.0	mg/L as CaCO3	1		1.0	4/4/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 2320B	3/23/2023	16:00:00	3/24/2023	Hydroxide (OH)	<1.0	mg/L as CaCO3	1		1.0	4/4/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 300.0	3/23/2023	16:00:00	3/24/2023	Chloride	24000	mg/L	200		200	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 300.0	3/23/2023	16:00:00	3/24/2023	Fluoride	<20	mg/L	200	U,D	20	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 300.0	3/23/2023	16:00:00	3/24/2023	Sulfate	660	mg/L	200		300	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 353.2	3/23/2023	16:00:00	3/24/2023	Nitrate + Nitrite Nitrogen	0.31	mg/L	5		0.10	4/11/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 351.2	3/23/2023	16:00:00	3/24/2023	Total Kjeldahl Nitrogen	<0.40	mg/L	1	U,M	0.40	4/4/2023
DH-1A @ 1195	23030584-002	Ground Water	Calc.	3/23/2023	16:00:00	3/24/2023	Total Nitrogen	<0.50	mg/L	1		0.50	4/11/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 2540C	3/23/2023	16:00:00	3/24/2023	Total Dissolved Solids (TDS)	35000	mg/L	1		25	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	SM 2510B	3/23/2023	16:00:00	3/24/2023	Electrical Conductivity	64000	µmhos/cm	1		4.0	3/27/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Aluminum	<1.0	mg/L	50	J,U,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Aluminum, Dissolved	<1.0	mg/L	50	J,U,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Barium	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Barium, Dissolved	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Beryllium	<0.020	mg/L	50	U,D	0.020	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Beryllium, Dissolved	<0.020	mg/L	50	J,U,D	0.020	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Bismuth	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Bismuth, Dissolved	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Boron	26	mg/L	50		5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Boron, Dissolved	26	mg/L	50		5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Cadmium	<0.020	mg/L	50	J,U,D	0.020	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Cadmium, Dissolved	<0.020	mg/L	50	J,U,D	0.020	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Calcium	310	mg/L	50		25	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Calcium, Dissolved	300	mg/L	50		25	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Chromium	<0.050	mg/L	50	J,U,D	0.050	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Chromium, Dissolved	<0.050	mg/L	50	U,D	0.050	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Cobalt	<0.50	mg/L	50	J,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Cobalt, Dissolved	<0.50	mg/L	50	J,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Copper	<0.50	mg/L	50	J,U,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Copper, Dissolved	<0.50	mg/L	50	J,U,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Gallium	<5.0	mg/L	50	U,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Gallium, Dissolved	<5.0	mg/L	50	U,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Iron	4.9	mg/L	50	J	2.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Iron, Dissolved	2.9	mg/L	50	J	2.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Lithium	64	mg/L	50		5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Lithium, Dissolved	62	mg/L	50		5.0	3/30/2023

DH-1A Multi Element

DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Magnesium	150	mg/L	50		25	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Magnesium, Dissolved	150	mg/L	50		25	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Manganese	1.0	mg/L	50		0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Manganese, Dissolved	0.96	mg/L	50		0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Molybdenum	<1.0	mg/L	50	U,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Molybdenum, Dissolved	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Nickel	<0.50	mg/L	50	U,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Nickel, Dissolved	<0.50	mg/L	50	U,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Phosphorus	<25	mg/L	50	J,D	25	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Phosphorus, Dissolved	<25	mg/L	50	J,D	25	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Potassium	1400	mg/L	50		50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Potassium, Dissolved	1400	mg/L	50		50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Scandium	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Scandium, Dissolved	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Silver	<0.10	mg/L	50	J,U,D	0.10	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Silver, Dissolved	<0.10	mg/L	50	J,U,D	0.10	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Sodium	14000	mg/L	50		75	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Sodium, Dissolved	14000	mg/L	50		75	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Strontium	16	mg/L	50		5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Strontium, Dissolved	16	mg/L	50		5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Tin	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Tin, Dissolved	<5.0	mg/L	50	U,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Titanium	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Titanium, Dissolved	<5.0	mg/L	50	J,D	5.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Vanadium	<0.50	mg/L	50	J,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Vanadium, Dissolved	<0.50	mg/L	50	U,D	0.50	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Zinc	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.7	3/23/2023	16:00:00	3/24/2023	Zinc, Dissolved	<1.0	mg/L	50	J,D	1.0	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Antimony	<0.025	mg/L	50	U,D	0.025	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Antimony, Dissolved	<0.025	mg/L	50	U,D	0.025	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Arsenic	0.14	mg/L	50	J	0.10	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Arsenic, Dissolved	<0.10	mg/L	50	J,U,D	0.10	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Lead	<0.050	mg/L	50	J,U,D	0.050	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Lead, Dissolved	<0.050	mg/L	50	J,U,D	0.050	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Selenium	<0.10	mg/L	50	U,D	0.10	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Selenium, Dissolved	<0.10	mg/L	50	U,D	0.10	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Thallium	<0.010	mg/L	50	J,U,D	0.010	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 200.8	3/23/2023	16:00:00	3/24/2023	Thallium, Dissolved	<0.010	mg/L	50	J,U,D	0.010	4/5/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 245.1	3/23/2023	16:00:00	3/24/2023	Mercury	<0.00045	mg/L	1	U	0.00045	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	EPA 245.1	3/23/2023	16:00:00	3/24/2023	Mercury, Dissolved	<0.00045	mg/L	1	U	0.00045	3/30/2023
DH-1A @ 1195	23030584-002	Ground Water	Calculation	3/23/2023	16:00:00	3/24/2023	Anions	703	meq/L	1		0.100	
DH-1A @ 1195	23030584-002	Ground Water	Calculation	3/23/2023	16:00:00	3/24/2023	Cations	672	meq/L	1		0.100	
DH-1A @ 1195	23030584-002	Ground Water	Calculation	3/23/2023	16:00:00	3/24/2023	Error	2.24	%	1		1.00	

TW-1 Multi Element

OrderID	Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	Rep Limit	AnalysisDate
23070884	TW-1-1	23070884-001	Ground Water	SM 2520B	7/29/2023	12:00:00	7/31/2023	Salinity (as Electrical Conductivity)	88000	µmhos/cm	1		1.0	8/4/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.2	7/29/2023	12:00:00	7/31/2023	Trace Metals Digestion (Sulfur)	W230802-2A		1			8/2/2023
23070884	TW-1-1	23070884-001	Ground Water	Gravimetric	7/29/2023	12:00:00	7/31/2023	Density	1.04	g/cubic cm	1		0.00400	8/1/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 4500-H+ B	7/29/2023	12:00:00	7/31/2023	pH	7.62	pH Units	1	HT		8/1/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 2550B	7/29/2023	12:00:00	7/31/2023	Temperature at pH	25	°C	1			8/1/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.2	7/29/2023	12:00:00	7/31/2023	Trace Metals Digestion	W230802-3A		1			8/2/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.2	7/29/2023	12:00:00	7/31/2023	Trace Metals Digestion, Dissolved	W230803-3A		1			8/3/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 2320B	7/29/2023	12:00:00	7/31/2023	Total Alkalinity	370	mg/L as CaCO3	1		1.0	8/1/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 2320B	7/29/2023	12:00:00	7/31/2023	Bicarbonate (HCO3)	370	mg/L as CaCO3	1		1.0	8/1/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 2320B	7/29/2023	12:00:00	7/31/2023	Carbonate (CO3)	<1.0	mg/L as CaCO3	1		1.0	8/1/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 2320B	7/29/2023	12:00:00	7/31/2023	Hydroxide (OH)	<1.0	mg/L as CaCO3	1		1.0	8/1/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 300.0	7/29/2023	12:00:00	7/31/2023	Chloride	37000	mg/L	1000		1000	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 300.0	7/29/2023	12:00:00	7/31/2023	Fluoride	<100	mg/L	1000	U,D	100	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 300.0	7/29/2023	12:00:00	7/31/2023	Sulfate	2200	mg/L	1000		1500	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 353.2	7/29/2023	12:00:00	7/31/2023	Nitrate + Nitrite Nitrogen	<0.10	mg/L	5		0.10	8/18/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 351.2	7/29/2023	12:00:00	7/31/2023	Total Kjeldahl Nitrogen	0.80	mg/L	1		0.40	8/4/2023
23070884	TW-1-1	23070884-001	Ground Water	Calc.	7/29/2023	12:00:00	7/31/2023	Total Nitrogen	0.80	mg/L	1		0.50	8/18/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 2540C	7/29/2023	12:00:00	7/31/2023	Total Dissolved Solids (TDS)	61000	mg/L	1		25	8/4/2023
23070884	TW-1-1	23070884-001	Ground Water	SM 2510B	7/29/2023	12:00:00	7/31/2023	Electrical Conductivity	88000	µmhos/cm	1		4.0	8/4/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Sulfur	630	mg/L	20	B,M	20	8/15/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Aluminum	<1.0	mg/L	50	U,D	1.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Aluminum, Dissolved	0.55	mg/L	20	J	0.50	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Barium	<1.0	mg/L	50	D	1.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Barium, Dissolved	<0.40	mg/L	20	D	0.40	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Beryllium	0.027	mg/L	50	J	0.015	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Beryllium, Dissolved	0.020	mg/L	20	J	0.010	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Boron	33	mg/L	50		5.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Cadmium	<0.020	mg/L	50	U,D	0.020	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Cadmium, Dissolved	<0.010	mg/L	20	U,D	0.010	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Calcium	680	mg/L	50		25	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Calcium, Dissolved	650	mg/L	20	M	10	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Chromium	<0.050	mg/L	50	U,D	0.050	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Chromium, Dissolved	<0.020	mg/L	20	U,D	0.020	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Copper	<0.30	mg/L	50	U,D	0.30	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Copper, Dissolved	<0.15	mg/L	20	U,D	0.15	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Iron	<2.0	mg/L	50	U,D	2.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Iron, Dissolved	<1.0	mg/L	20	U,D	1.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Lithium	100	mg/L	50		5.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Lithium, Dissolved	100	mg/L	20	M	2.0	8/8/2023

TW-1 Multi Element

OrderID	Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	Rep Limit	AnalysisDate
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Magnesium	450	mg/L	50		25	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Magnesium, Dissolved	420	mg/L	20	M	10	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Manganese	1.9	mg/L	50		0.50	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Manganese, Dissolved	1.9	mg/L	20		0.20	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Nickel	<0.50	mg/L	50	U,D	0.50	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Nickel, Dissolved	<0.20	mg/L	20	U,D	0.20	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Potassium	1900	mg/L	50		50	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Potassium, Dissolved	1900	mg/L	20	M	20	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Silica	36.7	mg/L	50		16.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Silver	<0.10	mg/L	50	U,D	0.10	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Silver, Dissolved	<0.050	mg/L	20	U,D	0.050	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Sodium	22000	mg/L	50		75	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Sodium, Dissolved	23000	mg/L	500	M	750	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Zinc	1.5	mg/L	50		1.0	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.7	7/29/2023	12:00:00	7/31/2023	Zinc, Dissolved	1.5	mg/L	20		0.40	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Antimony	<0.025	mg/L	50	U,D	0.025	9/19/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Antimony, Dissolved	<0.025	mg/L	50	M,U,D	0.025	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Arsenic	0.11	mg/L	50	J	0.075	9/19/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Arsenic, Dissolved	<0.075	mg/L	50	M,U,D	0.075	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Lead	<0.050	mg/L	50	U,D	0.050	9/19/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Lead, Dissolved	<0.050	mg/L	50	M,U,D	0.050	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Selenium	<0.10	mg/L	50	U,D	0.10	9/19/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Selenium, Dissolved	<0.10	mg/L	50	M,U,D	0.10	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Thallium	<0.010	mg/L	50	U,D	0.010	9/19/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Thallium, Dissolved	0.021	mg/L	50	M,J	0.010	8/14/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 200.8	7/29/2023	12:00:00	7/31/2023	Uranium	<0.050	mg/L	50	U,D	0.050	9/19/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 245.1	7/29/2023	12:00:00	7/31/2023	Mercury	<0.00045	mg/L	1		0.00045	8/7/2023
23070884	TW-1-1	23070884-001	Ground Water	EPA 245.1	7/29/2023	12:00:00	7/31/2023	Mercury, Dissolved	<0.00045	mg/L	1		0.00045	8/8/2023
23070884	TW-1-1	23070884-001	Ground Water	Calculation	7/29/2023	12:00:00	7/31/2023	Anions	1100	meq/L	1		0.100	
23070884	TW-1-1	23070884-001	Ground Water	Calculation	7/29/2023	12:00:00	7/31/2023	Cations	1120	meq/L	1		0.100	
23070884	TW-1-1	23070884-001	Ground Water	Calculation	7/29/2023	12:00:00	7/31/2023	Error	<1.00	%	1		1.00	
23070884	TW-1-1	23070884-001	Ground Water	N/A	7/29/2023	12:00:00	7/31/2023	Filter_Preserve HNO3	1.0		1			8/1/2023

TW-1 Multi Element

OrderID	Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	Rep Limit	AnalysisDate
23070884	TW-1-2	23070884-002	Ground Water	EPA 200.2	7/30/2023	12:00:00	7/31/2023	Trace Metals Digestion	W230802-3A		1			8/2/2023
23070884	TW-1-2	23070884-002	Ground Water	EPA 200.2	7/30/2023	12:00:00	7/31/2023	Trace Metals Digestion, Dissolved	W230803-3A		1			8/3/2023
23070884	TW-1-2	23070884-002	Ground Water	EPA 200.7	7/30/2023	12:00:00	7/31/2023	Boron	32	mg/L	50	M	5.0	8/8/2023
23070884	TW-1-2	23070884-002	Ground Water	EPA 200.7	7/30/2023	12:00:00	7/31/2023	Lithium	100	mg/L	50	M	5.0	8/8/2023
23070884	TW-1-2	23070884-002	Ground Water	EPA 200.7	7/30/2023	12:00:00	7/31/2023	Lithium, Dissolved	100	mg/L	20		2.0	8/8/2023
23070884	TW-1-2	23070884-002	Ground Water	N/A	7/30/2023	12:00:00	7/31/2023	Filter_Preserve HNO3	1.0		1			8/1/2023

TW-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Paramater	Result On Report	Units	Dilution	Qualifier	Rep Limit	Analysis Date
TW-1-3	23080142-001	Ground Water	EPA 200.2	7/31/2023	12:00:00	8/3/2023	Trace Metals Digestion	W230808-4B		1			8/8/2023
TW-1-3	23080142-001	Ground Water	EPA 200.2	7/31/2023	12:00:00	8/3/2023	Trace Metals Digestion, Dissolved	W230809-3A		1			8/9/2023
TW-1-3	23080142-001	Ground Water	EPA 200.7	7/31/2023	12:00:00	8/3/2023	Boron	30	mg/L	20		2.0	8/15/2023
TW-1-3	23080142-001	Ground Water	EPA 200.7	7/31/2023	12:00:00	8/3/2023	Lithium	88	mg/L	20		2.0	8/15/2023
TW-1-3	23080142-001	Ground Water	EPA 200.7	7/31/2023	12:00:00	8/3/2023	Lithium, Dissolved	92	mg/L	20		2.0	8/15/2023
TW-1-3	23080142-001	Ground Water	N/A	7/31/2023	12:00:00	8/3/2023	Filter_Preserve HNO3	1.0		1			8/3/2023
TW-1-4	23080142-002	Ground Water	EPA 200.2	8/1/2023	12:00:00	8/3/2023	Trace Metals Digestion	W230808-4B		1			8/8/2023
TW-1-4	23080142-002	Ground Water	EPA 200.2	8/1/2023	12:00:00	8/3/2023	Trace Metals Digestion, Dissolved	W230809-3A		1			8/9/2023
TW-1-4	23080142-002	Ground Water	EPA 200.7	8/1/2023	12:00:00	8/3/2023	Boron	31	mg/L	20		2.0	8/15/2023
TW-1-4	23080142-002	Ground Water	EPA 200.7	8/1/2023	12:00:00	8/3/2023	Lithium	87	mg/L	20		2.0	8/15/2023
TW-1-4	23080142-002	Ground Water	EPA 200.7	8/1/2023	12:00:00	8/3/2023	Lithium, Dissolved	89	mg/L	20		2.0	8/15/2023
TW-1-4	23080142-002	Ground Water	N/A	8/1/2023	12:00:00	8/3/2023	Filter_Preserve HNO3	1.0		1			8/3/2023
TW-1-5	23080142-003	Ground Water	EPA 200.2	8/2/2023	12:00:00	8/3/2023	Trace Metals Digestion	W230808-6A		1			8/8/2023
TW-1-5	23080142-003	Ground Water	EPA 200.2	8/2/2023	12:00:00	8/3/2023	Trace Metals Digestion, Dissolved	W230809-3A		1			8/9/2023
TW-1-5	23080142-003	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Boron	29	mg/L	1		0.10	8/11/2023
TW-1-5	23080142-003	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Lithium	88	mg/L	1		0.10	8/11/2023
TW-1-5	23080142-003	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Lithium, Dissolved	83	mg/L	20		2.0	8/15/2023
TW-1-5	23080142-003	Ground Water	N/A	8/2/2023	12:00:00	8/3/2023	Filter_Preserve HNO3	1.0		1			8/3/2023

TW-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Paramater	Result On Report	Units	Dilution	Qualifier	Rep Limit	Analysis Date
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2520B	8/2/2023	12:00:00	8/3/2023	Salinity (as Electrical Conductivity)	88000	µmhos/cm	1		4.0	8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.2	8/2/2023	12:00:00	8/3/2023	Trace Metals Digestion (Sulfur)	W230808-1A		1			8/8/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	Gravimetric	8/2/2023	12:00:00	8/3/2023	Density	1.05	g/cubic cm	1		0.00400	8/14/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 4500-H+ B	8/2/2023	12:00:00	8/3/2023	pH	7.69	pH Units	1	HT		8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2550B	8/2/2023	12:00:00	8/3/2023	Temperature at pH	25	°C	1			8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.2	8/2/2023	12:00:00	8/3/2023	Trace Metals Digestion	W230808-6A		1			8/8/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.2	8/2/2023	12:00:00	8/3/2023	Trace Metals Digestion, Dissolved	W230809-3A		1			8/9/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2320B	8/2/2023	12:00:00	8/3/2023	Total Alkalinity	380	mg/L as CaCO3	1		1.0	8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2320B	8/2/2023	12:00:00	8/3/2023	Bicarbonate (HCO3)	380	mg/L as CaCO3	1		1.0	8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2320B	8/2/2023	12:00:00	8/3/2023	Carbonate (CO3)	<1.0	mg/L as CaCO3	1		1.0	8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2320B	8/2/2023	12:00:00	8/3/2023	Hydroxide (OH)	<1.0	mg/L as CaCO3	1		1.0	8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 300.0	8/2/2023	12:00:00	8/3/2023	Chloride	34000	mg/L	1000		1000	8/15/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 300.0	8/2/2023	12:00:00	8/3/2023	Fluoride	<10	mg/L	100	U,D	10	8/15/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 300.0	8/2/2023	12:00:00	8/3/2023	Sulfate	1700	mg/L	1000		1500	8/15/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 353.2	8/2/2023	12:00:00	8/3/2023	Nitrate + Nitrite Nitrogen	<0.10	mg/L	5		0.10	8/18/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 351.2	8/2/2023	12:00:00	8/3/2023	Total Kjeldahl Nitrogen	<0.40	mg/L	1		0.40	8/9/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	Calc.	8/2/2023	12:00:00	8/3/2023	Total Nitrogen	<0.50	mg/L	1		0.50	8/18/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2540C	8/2/2023	12:00:00	8/3/2023	Total Dissolved Solids (TDS)	58000	mg/L	1		25	8/9/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	SM 2510B	8/2/2023	12:00:00	8/3/2023	Electrical Conductivity	88000	µmhos/cm	1		4.0	8/4/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Sulfur	660	mg/L	25	M	25	8/15/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Aluminum	<0.10	mg/L	2	D	0.10	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Aluminum, Dissolved	<0.10	mg/L	2	D	0.10	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Barium	0.074	mg/L	2		0.040	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Barium, Dissolved	0.082	mg/L	2		0.040	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Beryllium	<0.0020	mg/L	2	D	0.0020	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Beryllium, Dissolved	<0.0020	mg/L	2	D	0.0020	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Boron	30	mg/L	50		5.0	9/6/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Cadmium	<0.0020	mg/L	2	D	0.0020	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Cadmium, Dissolved	<0.0020	mg/L	2	D	0.0020	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Calcium	590	mg/L	25		12	8/30/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Calcium, Dissolved	640	mg/L	100		50	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Chromium	<0.010	mg/L	2	D	0.010	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Chromium, Dissolved	<0.010	mg/L	2	D	0.010	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Copper	<0.080	mg/L	2	D	0.080	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Copper, Dissolved	<0.080	mg/L	2	D	0.080	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Iron	0.45	mg/L	2		0.20	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Iron, Dissolved	<0.20	mg/L	2	D	0.20	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Lithium	88	mg/L	50		5.0	9/6/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Lithium, Dissolved	110	mg/L	2		0.20	10/3/2023

TW-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Paramater	Result On Report	Units	Dilution	Qualifier	Rep Limit	Analysis Date
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Magnesium	290	mg/L	2		1.0	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Magnesium, Dissolved	370	mg/L	2		1.0	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Manganese	1.4	mg/L	2		0.020	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Manganese, Dissolved	1.6	mg/L	2		0.020	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Nickel	<0.050	mg/L	2	U,D	0.050	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Nickel, Dissolved	<0.050	mg/L	2	U,D	0.050	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Potassium	1600	mg/L	50		50	9/6/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Potassium, Dissolved	1800	mg/L	2		2.0	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Silica	31.9	mg/L	25		8.00	8/30/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Silver	<0.010	mg/L	2	D	0.010	8/31/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Silver, Dissolved	<0.010	mg/L	2	D	0.010	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Sodium	20000	mg/L	500		750	8/30/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Sodium, Dissolved	20000	mg/L	100		150	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Zinc	1.1	mg/L	25		0.50	8/30/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.7	8/2/2023	12:00:00	8/3/2023	Zinc, Dissolved	1.0	mg/L	2		0.040	10/3/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Antimony	<0.025	mg/L	50	U,D	0.025	9/25/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Antimony, Dissolved	<0.025	mg/L	50	U,D	0.025	9/21/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Arsenic	0.16	mg/L	50	J	0.075	9/25/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Arsenic, Dissolved	<0.075	mg/L	50	U,D	0.075	9/21/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Lead	<0.050	mg/L	50	U,D	0.050	9/25/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Lead, Dissolved	<0.050	mg/L	50	U,D	0.050	9/21/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Selenium	<0.10	mg/L	50	U,D	0.10	9/25/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Selenium, Dissolved	<0.10	mg/L	50	U,D	0.10	9/21/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Thallium	<0.010	mg/L	50	U,D	0.010	9/25/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Thallium, Dissolved	<0.010	mg/L	50	U,D	0.010	9/21/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Uranium	<0.050	mg/L	50	U,D	0.050	9/25/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 200.8	8/2/2023	12:00:00	8/3/2023	Uranium, Dissolved	<0.050	mg/L	50	U,D	0.050	9/21/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 245.1	8/2/2023	12:00:00	8/3/2023	Mercury	<0.00045	mg/L	1		0.00045	8/9/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	EPA 245.1	8/2/2023	12:00:00	8/3/2023	Mercury, Dissolved	<0.00045	mg/L	1		0.00045	8/9/2023
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	Calculation	8/2/2023	12:00:00	8/3/2023	Anions	1000	meq/L	1		0.100	
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	Calculation	8/2/2023	12:00:00	8/3/2023	Cations	1010	meq/L	1		0.100	
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	Calculation	8/2/2023	12:00:00	8/3/2023	Error	<1.00	%	1		1.00	
TW-1 8/2/22 @ 12:00	23080142-004	Ground Water	N/A	8/2/2023	12:00:00	8/3/2023	Filter_Preserve HNO3	2.0		1			8/3/2023

TW-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	Rep Limit	AnalysisDate
TW-1-6	23080275-001	Ground Water	EPA 200.2	8/3/2023	12:00:00	8/9/2023	Trace Metals Digestion	W230815-3A		1			8/15/2023
TW-1-6	23080275-001	Ground Water	EPA 200.2	8/3/2023	12:00:00	8/9/2023	Trace Metals Digestion, Dissolved	W230815-3A		1			8/15/2023
TW-1-6	23080275-001	Ground Water	EPA 200.7	8/3/2023	12:00:00	8/9/2023	Boron	30	mg/L	50		5.0	8/23/2023
TW-1-6	23080275-001	Ground Water	EPA 200.7	8/3/2023	12:00:00	8/9/2023	Lithium	97	mg/L	50		5.0	8/23/2023
TW-1-6	23080275-001	Ground Water	EPA 200.7	8/3/2023	12:00:00	8/9/2023	Lithium, Dissolved	97	mg/L	50		5.0	8/23/2023
TW-1-6	23080275-001	Ground Water	N/A	8/3/2023	12:00:00	8/9/2023	Filter_Preserve HNO3	1.0		1			8/11/2023
TW-1-7	23080275-002	Ground Water	EPA 200.2	8/4/2023	12:00:00	8/9/2023	Trace Metals Digestion	W230815-3A		1			8/15/2023
TW-1-7	23080275-002	Ground Water	EPA 200.2	8/4/2023	12:00:00	8/9/2023	Trace Metals Digestion, Dissolved	W230815-3A		1			8/15/2023
TW-1-7	23080275-002	Ground Water	EPA 200.7	8/4/2023	12:00:00	8/9/2023	Boron	30	mg/L	50		5.0	8/23/2023
TW-1-7	23080275-002	Ground Water	EPA 200.7	8/4/2023	12:00:00	8/9/2023	Lithium	100	mg/L	50		5.0	8/23/2023
TW-1-7	23080275-002	Ground Water	EPA 200.7	8/4/2023	12:00:00	8/9/2023	Lithium, Dissolved	97	mg/L	50		5.0	8/23/2023
TW-1-7	23080275-002	Ground Water	N/A	8/4/2023	12:00:00	8/9/2023	Filter_Preserve HNO3	1.0		1			8/11/2023
TW-1-8	23080275-003	Ground Water	EPA 200.2	8/5/2023	12:00:00	8/9/2023	Trace Metals Digestion	W230815-3A		1			8/15/2023
TW-1-8	23080275-003	Ground Water	EPA 200.2	8/5/2023	12:00:00	8/9/2023	Trace Metals Digestion, Dissolved	W230815-3A		1			8/15/2023
TW-1-8	23080275-003	Ground Water	EPA 200.7	8/5/2023	12:00:00	8/9/2023	Boron	31	mg/L	50		5.0	8/23/2023
TW-1-8	23080275-003	Ground Water	EPA 200.7	8/5/2023	12:00:00	8/9/2023	Lithium	100	mg/L	50		5.0	8/23/2023
TW-1-8	23080275-003	Ground Water	EPA 200.7	8/5/2023	12:00:00	8/9/2023	Lithium, Dissolved	98	mg/L	50		5.0	8/23/2023
TW-1-8	23080275-003	Ground Water	N/A	8/5/2023	12:00:00	8/9/2023	Filter_Preserve HNO3	1.0		1			8/11/2023
TW-1-9	23080275-004	Ground Water	EPA 200.2	8/6/2023	12:00:00	8/9/2023	Trace Metals Digestion	W230815-3B		1			8/15/2023
TW-1-9	23080275-004	Ground Water	EPA 200.2	8/6/2023	12:00:00	8/9/2023	Trace Metals Digestion, Dissolved	W230815-3B		1			8/15/2023
TW-1-9	23080275-004	Ground Water	EPA 200.7	8/6/2023	12:00:00	8/9/2023	Boron	31	mg/L	50	M	5.0	8/23/2023
TW-1-9	23080275-004	Ground Water	EPA 200.7	8/6/2023	12:00:00	8/9/2023	Lithium	100	mg/L	50	M	5.0	8/23/2023
TW-1-9	23080275-004	Ground Water	EPA 200.7	8/6/2023	12:00:00	8/9/2023	Lithium, Dissolved	99	mg/L	50		5.0	8/23/2023
TW-1-9	23080275-004	Ground Water	N/A	8/6/2023	12:00:00	8/9/2023	Filter_Preserve HNO3	1.0		1			8/11/2023

TW-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	Rep Limit	AnalysisDate
TW-1-10	23080275-005	Ground Water	EPA 200.2	8/7/2023	11:00:00	8/9/2023	Trace Metals Digestion (Sulfur)	W230815-1A		1			8/15/2023
TW-1-10	23080275-005	Ground Water	Gravimetric	8/7/2023	11:00:00	8/9/2023	Density	1.03	g/cubic cm	1		0.00400	8/14/2023
TW-1-10	23080275-005	Ground Water	SM 4500-H+ B	8/7/2023	11:00:00	8/9/2023	pH	7.24	pH Units	1	HT		8/11/2023
TW-1-10	23080275-005	Ground Water	SM 2550B	8/7/2023	11:00:00	8/9/2023	Temperature at pH	25	°C	1			8/11/2023
TW-1-10	23080275-005	Ground Water	SM 4500CN I, E	8/7/2023	11:00:00	8/9/2023	WAD Cyanide	<0.010	mg/L	1		0.010	8/11/2023
TW-1-10	23080275-005	Ground Water	EPA 200.2	8/7/2023	11:00:00	8/9/2023	Trace Metals Digestion	W230815-3A		1			8/15/2023
TW-1-10	23080275-005	Ground Water	EPA 200.2	8/7/2023	11:00:00	8/9/2023	Trace Metals Digestion, Dissolved	W230815-3A		1			8/15/2023
TW-1-10	23080275-005	Ground Water	SM 2320B	8/7/2023	11:00:00	8/9/2023	Total Alkalinity	370	mg/L as CaCO3	1		1.0	8/11/2023
TW-1-10	23080275-005	Ground Water	SM 2320B	8/7/2023	11:00:00	8/9/2023	Bicarbonate (HCO3)	370	mg/L as CaCO3	1		1.0	8/11/2023
TW-1-10	23080275-005	Ground Water	SM 2320B	8/7/2023	11:00:00	8/9/2023	Carbonate (CO3)	<1.0	mg/L as CaCO3	1		1.0	8/11/2023
TW-1-10	23080275-005	Ground Water	SM 2320B	8/7/2023	11:00:00	8/9/2023	Hydroxide (OH)	<1.0	mg/L as CaCO3	1		1.0	8/11/2023
TW-1-10	23080275-005	Ground Water	EPA 300.0	8/7/2023	11:00:00	8/9/2023	Chloride	30000	mg/L	1000		1000	8/15/2023
TW-1-10	23080275-005	Ground Water	EPA 300.0	8/7/2023	11:00:00	8/9/2023	Fluoride	<50	mg/L	500	U,D	50	8/15/2023
TW-1-10	23080275-005	Ground Water	EPA 300.0	8/7/2023	11:00:00	8/9/2023	Sulfate	9700	mg/L	500		750	8/15/2023
TW-1-10	23080275-005	Ground Water	EPA 353.2	8/7/2023	11:00:00	8/9/2023	Nitrate + Nitrite Nitrogen	<0.10	mg/L	5		0.10	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 351.2	8/7/2023	11:00:00	8/9/2023	Total Kjeldahl Nitrogen	1.0	mg/L	1		0.40	8/17/2023
TW-1-10	23080275-005	Ground Water	Calc.	8/7/2023	11:00:00	8/9/2023	Total Nitrogen	1.0	mg/L	1		0.50	8/23/2023
TW-1-10	23080275-005	Ground Water	SM 2540C	8/7/2023	11:00:00	8/9/2023	Total Dissolved Solids (TDS)	58000	mg/L	1		25	8/11/2023
TW-1-10	23080275-005	Ground Water	SM 2510B	8/7/2023	11:00:00	8/9/2023	Electrical Conductivity	88000	µmhos/cm	1		4.0	8/11/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Sulfur	620	mg/L	10	M	10	8/22/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Aluminum	<1.0	mg/L	50	U,D	1.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Aluminum, Dissolved	<1.0	mg/L	50	U,D	1.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Barium	<1.0	mg/L	50	D	1.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Barium, Dissolved	<1.0	mg/L	50	D	1.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Beryllium	0.018	mg/L	50	J	0.015	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Beryllium, Dissolved	0.022	mg/L	50	J	0.015	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Boron	30	mg/L	50		5.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Cadmium	<0.020	mg/L	50	U,D	0.020	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Cadmium, Dissolved	<0.020	mg/L	50	U,D	0.020	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Calcium	580	mg/L	50		25	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Calcium, Dissolved	570	mg/L	50		25	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Chromium	<0.050	mg/L	50	U,D	0.050	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Chromium, Dissolved	<0.050	mg/L	50	U,D	0.050	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Copper	<0.50	mg/L	50	U,D	0.50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Copper, Dissolved	<0.50	mg/L	50	U,D	0.50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Iron	<2.0	mg/L	50	U,D	2.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Iron, Dissolved	<2.0	mg/L	50	U,D	2.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Lithium	91	mg/L	50		5.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Lithium, Dissolved	94	mg/L	50		5.0	8/23/2023

TW-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	Rep Limit	AnalysisDate
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Magnesium	380	mg/L	50		25	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Magnesium, Dissolved	380	mg/L	50		25	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Manganese	1.7	mg/L	50		0.50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Manganese, Dissolved	1.6	mg/L	50		0.50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Nickel	<0.50	mg/L	50	U,D	0.50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Nickel, Dissolved	<0.50	mg/L	50	U,D	0.50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Potassium	1700	mg/L	50		50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Potassium, Dissolved	1700	mg/L	50		50	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Selenium	<0.10	mg/L	50	U,D	0.10	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Selenium, Dissolved	<0.10	mg/L	50	U,D	0.10	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Silica	33.6	mg/L	50		16.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Silver	<0.10	mg/L	50	U,D	0.10	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Silver, Dissolved	<0.10	mg/L	50	U,D	0.10	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Sodium	20000	mg/L	50		75	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Sodium, Dissolved	19000	mg/L	50		75	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Zinc	1.6	mg/L	50		1.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Zinc, Dissolved	1.6	mg/L	50		1.0	8/23/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Antimony	<0.050	mg/L	100	U,D	0.050	8/21/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Antimony, Dissolved	<0.050	mg/L	100	U,D	0.050	8/21/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Arsenic	<0.15	mg/L	100	U,D	0.15	8/21/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Arsenic, Dissolved	<0.15	mg/L	100	U,D	0.15	8/21/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Lead	<0.050	mg/L	50	U,D	0.050	8/18/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Lead, Dissolved	<0.050	mg/L	50	U,D	0.050	8/18/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Thallium	0.036	mg/L	50	J	0.010	8/18/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Thallium, Dissolved	0.037	mg/L	50	J	0.010	8/18/2023
TW-1-10	23080275-005	Ground Water	EPA 200.8	8/7/2023	11:00:00	8/9/2023	Uranium	0.12	mg/L	50	J	0.050	8/18/2023
TW-1-10	23080275-005	Ground Water	EPA 245.1	8/7/2023	11:00:00	8/9/2023	Mercury	<0.00045	mg/L	1		0.00045	8/16/2023
TW-1-10	23080275-005	Ground Water	EPA 245.1	8/7/2023	11:00:00	8/9/2023	Mercury, Dissolved	<0.00045	mg/L	1		0.00045	8/17/2023
TW-1-10	23080275-005	Ground Water	Calculation	8/7/2023	11:00:00	8/9/2023	Anions	1060	meq/L	1		0.100	
TW-1-10	23080275-005	Ground Water	Calculation	8/7/2023	11:00:00	8/9/2023	Cations	930	meq/L	1		0.100	
TW-1-10	23080275-005	Ground Water	Calculation	8/7/2023	11:00:00	8/9/2023	Error	6.34	%	1		1.00	
TW-1-10	23080275-005	Ground Water	N/A	8/7/2023	11:00:00	8/9/2023	Filter_Preserve HNO3	1.0		1			8/11/2023

TW-1 Multi Element

Sample ID	Sample Number	Matrix	Method	Date Collected	Time Collected	Date Received	Parameter	Result On Report	Units	Dilution	Qualifier	Rep Limit	AnalysisDate
TW-1-10A	23080275-006	Ground Water	EPA 200.2	8/7/2023	11:00:00	8/9/2023	Trace Metals Digestion	W230815-3B		1			8/15/2023
TW-1-10A	23080275-006	Ground Water	EPA 200.2	8/7/2023	11:00:00	8/9/2023	Trace Metals Digestion, Dissolved	W230815-3B		1			8/15/2023
TW-1-10A	23080275-006	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Boron	30	mg/L	50		5.0	8/23/2023
TW-1-10A	23080275-006	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Lithium	95	mg/L	50		5.0	8/23/2023
TW-1-10A	23080275-006	Ground Water	EPA 200.7	8/7/2023	11:00:00	8/9/2023	Lithium, Dissolved	99	mg/L	50		5.0	8/23/2023
TW-1-10A	23080275-006	Ground Water	N/A	8/7/2023	11:00:00	8/9/2023	Filter_Preserve HNO3	1.0		1			8/11/2023

Appendix J

Laboratory Analytical Reports

8/8/2022

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *22060833*

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 6/27/2022. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
Assistant QA Manager

Mckenna Oh
Project Manager
MckennaO@wetlaboratory.com
(775) 200-9876

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EPA LAB ID: NV00926

LAS VEGAS
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fax (702) 622-2868
EPA LAB ID: NV00932

Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 22060833

Specific Report Comments

Due to the sample matrix, it was necessary to analyze the following at a dilution. The reporting limits have been adjusted accordingly and may not meet NDEP-BMRR requirements. Lower reporting limits may not be possible for samples of this nature:

22060833-001, 026 - Most Parameters (due to sample matrix and high TDS)

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike/matrix spike duplicate (MS/MSD) values for the analysis of this parameter were outside acceptance criteria due to probable matrix interference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated due to matrix interference
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
SC	--	Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.

General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

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Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME*

Date Printed: 8/8/2022
OrderID: *22060833*

Customer Sample ID: DH-1 Airlift
WETLAB Sample ID: 22060833-001

Collect Date/Time: 6/23/2022 18:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Density	Gravimetric	1.04		g/cubic cm	1	0.00400	6/29/2022	NV00925
pH	SM 4500-H+ B	7.98	HT	pH Units	1		6/28/2022	NV00925
Temperature at pH	SM 2550B	23		°C	1		6/28/2022	NV00925
Total Alkalinity	SM 2320B	590		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Bicarbonate (HCO3)	SM 2320B	590		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Total Nitrogen	Calc.	1.0		mg/L	1	0.50	7/11/2022	NV00925
Total Dissolved Solids (TDS)	SM 2540C	43000		mg/L	1	25	6/30/2022	NV00925
Electrical Conductivity	SM 2510B	100000		µmhos/cm	20	20	7/6/2022	NV00925
Anions by Ion Chromatography								
Chloride	EPA 300.0	25000		mg/L	200	200	6/28/2022	NV00925
Fluoride	EPA 300.0	<20	U,D	mg/L	200	20	6/28/2022	NV00925
Sulfate	EPA 300.0	1000		mg/L	200	300	6/28/2022	NV00925
Flow Injection Analyses								
Nitrate + Nitrite Nitrogen	EPA 353.2	<0.10		mg/L	5	0.10	7/5/2022	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	0.99		mg/L	1	0.40	7/11/2022	NV00925
Trace Metals by ICP-OES								
Aluminum, Dissolved	EPA 200.7	<0.40	U,D	mg/L	25	0.40	7/25/2022	NV00925
Barium, Dissolved	EPA 200.7	<0.50	D	mg/L	25	0.50	7/25/2022	NV00925
Beryllium, Dissolved	EPA 200.7	<0.010	U,D	mg/L	25	0.010	7/25/2022	NV00925
Boron	EPA 200.7	30		mg/L	25	2.5	7/25/2022	NV00925
Cadmium, Dissolved	EPA 200.7	<0.010	U,D	mg/L	25	0.010	7/25/2022	NV00925
Calcium, Dissolved	EPA 200.7	350		mg/L	25	12	7/25/2022	NV00925
Chromium, Dissolved	EPA 200.7	<0.025	U,D	mg/L	25	0.025	7/25/2022	NV00925
Copper, Dissolved	EPA 200.7	<0.15	U,D	mg/L	25	0.15	7/25/2022	NV00925
Iron, Dissolved	EPA 200.7	<1.0	U,D	mg/L	25	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	71		mg/L	25	2.5	7/25/2022	NV00925
Magnesium, Dissolved	EPA 200.7	190		mg/L	25	12	7/25/2022	NV00925
Manganese, Dissolved	EPA 200.7	1.1		mg/L	25	0.25	7/25/2022	NV00925
Nickel, Dissolved	EPA 200.7	<0.25	U,D	mg/L	25	0.25	7/25/2022	NV00925
Potassium, Dissolved	EPA 200.7	1500		mg/L	25	25	7/25/2022	NV00925
Silver, Dissolved	EPA 200.7	<0.040	U,D	mg/L	25	0.040	7/25/2022	NV00925
Sodium, Dissolved	EPA 200.7	16000		mg/L	50	75	7/27/2022	NV00925
Zinc, Dissolved	EPA 200.7	<0.50	D	mg/L	25	0.50	7/25/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: DH-1 Airlift
WETLAB Sample ID: 22060833-001
Collect Date/Time: 6/23/2022 18:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-MS								
Antimony, Dissolved	EPA 200.8	<0.015	U,D	mg/L	25	0.015	8/1/2022	NV00925
Arsenic, Dissolved	EPA 200.8	<0.050	U,D	mg/L	25	0.050	8/1/2022	NV00925
Lead, Dissolved	EPA 200.8	<0.025	U,D	mg/L	25	0.025	8/1/2022	NV00925
Selenium, Dissolved	EPA 200.8	<0.050	U,D	mg/L	25	0.050	8/1/2022	NV00925
Thallium, Dissolved	EPA 200.8	0.011	J	mg/L	25	0.0050	8/1/2022	NV00925
Uranium, Dissolved	EPA 200.8	<0.025	U,D	mg/L	25	0.025	8/1/2022	NV00925
Mercury by CVAA								
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	7/6/2022	NV00925
Ion Balance								
Anions	Calculation	738		meq/L	1	0.100		NV00925
Cations	Calculation	768		meq/L	1	0.100		NV00925
Error	Calculation	1.97		%	1	1.00		NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-1A			1		7/20/2022	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W220720-1A			1		7/22/2022	NV00925
Split_Filter_HNO3	N/A	Complete			1		6/29/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 220 feet
WETLAB Sample ID: 22060833-002
Collect Date/Time: 6/24/2022 11:30
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Density	Gravimetric	1.02		g/cubic cm	1	0.00400	6/29/2022	NV00925
Total Alkalinity	SM 2320B	430		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Bicarbonate (HCO3)	SM 2320B	430		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Total Dissolved Solids (TDS)	SM 2540C	18000		mg/L	1	25	6/29/2022	NV00925
Electrical Conductivity	SM 2510B	63000		µmhos/cm	20	20	7/6/2022	NV00925
Trace Metals by ICP-OES								
Aluminum, Dissolved	EPA 200.7	0.51		mg/L	10	0.50	7/25/2022	NV00925
Barium, Dissolved	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Beryllium, Dissolved	EPA 200.7	<0.010	D	mg/L	10	0.010	7/25/2022	NV00925
Boron	EPA 200.7	16		mg/L	10	1.0	7/25/2022	NV00925
Cadmium, Dissolved	EPA 200.7	<0.010	D	mg/L	10	0.010	7/25/2022	NV00925
Calcium, Dissolved	EPA 200.7	210		mg/L	10	5.0	7/25/2022	NV00925
Chromium, Dissolved	EPA 200.7	<0.050	D	mg/L	10	0.050	7/25/2022	NV00925
Copper, Dissolved	EPA 200.7	<0.40	D	mg/L	10	0.40	7/25/2022	NV00925
Iron, Dissolved	EPA 200.7	2.1		mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	38		mg/L	10	1.0	7/25/2022	NV00925
Magnesium, Dissolved	EPA 200.7	110		mg/L	10	5.0	7/25/2022	NV00925
Manganese, Dissolved	EPA 200.7	0.51		mg/L	10	0.10	7/25/2022	NV00925
Nickel, Dissolved	EPA 200.7	<0.30	D	mg/L	10	0.30	7/25/2022	NV00925
Potassium, Dissolved	EPA 200.7	700		mg/L	10	10	7/25/2022	NV00925
Silver, Dissolved	EPA 200.7	<0.050	D	mg/L	10	0.050	7/25/2022	NV00925
Sodium, Dissolved	EPA 200.7	8300		mg/L	50	75	7/27/2022	NV00925
Zinc, Dissolved	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Trace Metals by ICP-MS								
Antimony, Dissolved	EPA 200.8	<0.025	D	mg/L	10	0.025	8/1/2022	NV00925
Arsenic, Dissolved	EPA 200.8	<0.050	D	mg/L	10	0.050	8/1/2022	NV00925
Lead, Dissolved	EPA 200.8	<0.025	D	mg/L	10	0.025	8/1/2022	NV00925
Selenium, Dissolved	EPA 200.8	<0.050	D	mg/L	10	0.050	8/1/2022	NV00925
Thallium, Dissolved	EPA 200.8	<0.010	D	mg/L	10	0.010	8/1/2022	NV00925
Uranium, Dissolved	EPA 200.8	<0.050	D	mg/L	10	0.050	8/1/2022	NV00925
Mercury by CVAA								
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	7/6/2022	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-1A			1		7/22/2022	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W220720-1A			1		7/22/2022	NV00925
Split_Filter_HNO3	N/A	Complete			1		6/29/2022	NV00925

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Customer Sample ID: DH-1 @ 260 feet
WETLAB Sample ID: 22060833-003
Collect Date/Time: 6/24/2022 12:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	17	mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	42	mg/L	10	1.0	7/25/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1A		1		7/22/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 300 feet
WETLAB Sample ID: 22060833-004

Collect Date/Time: 6/24/2022 12:15
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Boron	EPA 200.7	17	SC	mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	42	SC	mg/L	10	1.0	7/25/2022	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-1B			1		7/22/2022	NV00925

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Customer Sample ID: DH-1 @ 425 feet
WETLAB Sample ID: 22060833-005
Collect Date/Time: 6/24/2022 12:30
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	16	mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	38	mg/L	10	1.0	7/25/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

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Customer Sample ID:	DH-1 @ 460 feet	**Collect Date/Time:**	6/24/2022 12:45
WETLAB Sample ID:	22060833-006	**Receive Date:**	6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	19	mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	47	mg/L	10	1.0	7/25/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

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Customer Sample ID: DH-1 @ 500 feet
WETLAB Sample ID: 22060833-007
Collect Date/Time: 6/24/2022 13:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	18	mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	45	mg/L	10	1.0	7/25/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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EPA LAB ID: NV00932

Customer Sample ID:	DH-1 @ 550 feet	**Collect Date/Time:**	6/24/2022 14:00
WETLAB Sample ID:	22060833-008	**Receive Date:**	6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	17	mg/L	2	0.20	7/25/2022	NV00925
Lithium	EPA 200.7	43	mg/L	2	0.20	7/25/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: DH-1 @ 600 feet
WETLAB Sample ID: 22060833-009
Collect Date/Time: 6/24/2022 14:15
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	16	mg/L	2	0.20	7/25/2022	NV00925
Lithium	EPA 200.7	42	mg/L	2	0.20	7/25/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: DH-1 @ 650 feet
WETLAB Sample ID: 22060833-010
Collect Date/Time: 6/24/2022 14:30
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	18	mg/L	2	0.20	7/25/2022	NV00925
Lithium	EPA 200.7	45	mg/L	2	0.20	7/25/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 700 feet
WETLAB Sample ID: 22060833-011
Collect Date/Time: 6/24/2022 14:45
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	18	mg/L	2	0.20	7/26/2022	NV00925
Lithium	EPA 200.7	46	mg/L	2	0.20	7/26/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 750 feet
WETLAB Sample ID: 22060833-012
Collect Date/Time: 6/24/2022 15:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	20	mg/L	5	0.50	7/29/2022	NV00925
Lithium	EPA 200.7	63	mg/L	5	0.50	7/27/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

Customer Sample ID: DH-1 @ 775 feet
WETLAB Sample ID: 22060833-013
Collect Date/Time: 6/24/2022 16:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	25	mg/L	5	0.50	7/29/2022	NV00925
Lithium	EPA 200.7	74	mg/L	5	0.50	7/27/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-1B		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: DH-1 @ 825 feet
WETLAB Sample ID: 22060833-014

Collect Date/Time: 6/24/2022 16:15
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Boron	EPA 200.7	25	SC	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	64	SC	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-2A			1		7/22/2022	NV00925

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Customer Sample ID: DH-1 @ 850 feet
WETLAB Sample ID: 22060833-015
Collect Date/Time: 6/24/2022 16:30
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Density	Gravimetric	1.02		g/cubic cm	1	0.00400	6/29/2022	NV00925
Total Alkalinity	SM 2320B	460		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Bicarbonate (HCO3)	SM 2320B	460		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/28/2022	NV00925
Total Dissolved Solids (TDS)	SM 2540C	24000		mg/L	1	25	6/29/2022	NV00925
Electrical Conductivity	SM 2510B	72000		µmhos/cm	20	20	7/6/2022	NV00925
Trace Metals by ICP-OES								
Aluminum, Dissolved	EPA 200.7	<1.2	D	mg/L	25	1.2	7/25/2022	NV00925
Barium, Dissolved	EPA 200.7	<0.50	D	mg/L	25	0.50	7/25/2022	NV00925
Beryllium, Dissolved	EPA 200.7	<0.025	D	mg/L	25	0.025	7/25/2022	NV00925
Boron	EPA 200.7	25		mg/L	25	2.5	8/2/2022	NV00925
Cadmium, Dissolved	EPA 200.7	<0.025	D	mg/L	25	0.025	7/25/2022	NV00925
Calcium, Dissolved	EPA 200.7	270		mg/L	25	12	7/25/2022	NV00925
Chromium, Dissolved	EPA 200.7	<0.12	D	mg/L	25	0.12	7/25/2022	NV00925
Copper, Dissolved	EPA 200.7	<1.0	D	mg/L	25	1.0	7/25/2022	NV00925
Iron, Dissolved	EPA 200.7	<2.5	D	mg/L	25	2.5	7/25/2022	NV00925
Lithium	EPA 200.7	62		mg/L	25	2.5	8/2/2022	NV00925
Magnesium, Dissolved	EPA 200.7	140		mg/L	25	12	7/25/2022	NV00925
Manganese, Dissolved	EPA 200.7	0.78		mg/L	25	0.25	7/25/2022	NV00925
Nickel, Dissolved	EPA 200.7	<0.75	D	mg/L	25	0.75	7/25/2022	NV00925
Potassium, Dissolved	EPA 200.7	820		mg/L	25	25	7/25/2022	NV00925
Silver, Dissolved	EPA 200.7	<0.12	D	mg/L	25	0.12	7/25/2022	NV00925
Sodium, Dissolved	EPA 200.7	8400		mg/L	25	38	7/25/2022	NV00925
Zinc, Dissolved	EPA 200.7	<0.50	D	mg/L	25	0.50	7/25/2022	NV00925
Trace Metals by ICP-MS								
Antimony, Dissolved	EPA 200.8	<0.062	D	mg/L	25	0.062	8/1/2022	NV00925
Arsenic, Dissolved	EPA 200.8	<0.12	D	mg/L	25	0.12	8/1/2022	NV00925
Lead, Dissolved	EPA 200.8	<0.062	D	mg/L	25	0.062	8/1/2022	NV00925
Selenium, Dissolved	EPA 200.8	<0.12	D	mg/L	25	0.12	8/1/2022	NV00925
Thallium, Dissolved	EPA 200.8	<0.025	D	mg/L	25	0.025	8/1/2022	NV00925
Uranium, Dissolved	EPA 200.8	<0.12	D	mg/L	25	0.12	8/1/2022	NV00925
Mercury by CVAA								
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	7/6/2022	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-2A			1		7/22/2022	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W220720-1A			1		7/22/2022	NV00925
Split_Filter_HNO3	N/A	Complete			1		6/29/2022	NV00925

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Customer Sample ID: DH-1 @ 900 feet
WETLAB Sample ID: 22060833-016
Collect Date/Time: 6/24/2022 16:45
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Aluminum	EPA 200.7	0.54	M	mg/L	10	0.50	7/25/2022	NV00925
Barium	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Beryllium	EPA 200.7	<0.010	D	mg/L	10	0.010	7/25/2022	NV00925
Boron	EPA 200.7	25	SC	mg/L	10	1.0	7/25/2022	NV00925
Cadmium	EPA 200.7	<0.010	D	mg/L	10	0.010	7/25/2022	NV00925
Calcium	EPA 200.7	330		mg/L	10	5.0	7/25/2022	NV00925
Chromium	EPA 200.7	<0.050	D	mg/L	10	0.050	7/25/2022	NV00925
Copper	EPA 200.7	<0.40	D	mg/L	10	0.40	7/25/2022	NV00925
Iron	EPA 200.7	2.8		mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	61		mg/L	10	1.0	7/25/2022	NV00925
Magnesium	EPA 200.7	170		mg/L	10	5.0	7/25/2022	NV00925
Manganese	EPA 200.7	1.2		mg/L	10	0.10	7/25/2022	NV00925
Nickel	EPA 200.7	<0.30	D	mg/L	10	0.30	7/25/2022	NV00925
Potassium	EPA 200.7	1400		mg/L	10	10	7/25/2022	NV00925
Silver	EPA 200.7	<0.050	D	mg/L	10	0.050	7/25/2022	NV00925
Sodium	EPA 200.7	17000	SC	mg/L	50	75	7/26/2022	NV00925
Zinc	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Trace Metals by ICP-MS								
Antimony	EPA 200.8	<0.025	D	mg/L	10	0.025	8/1/2022	NV00925
Arsenic	EPA 200.8	<0.050	D	mg/L	10	0.050	8/1/2022	NV00925
Lead	EPA 200.8	<0.025	D	mg/L	10	0.025	8/1/2022	NV00925
Selenium	EPA 200.8	<0.050	D	mg/L	10	0.050	8/1/2022	NV00925
Thallium	EPA 200.8	<0.010	D	mg/L	10	0.010	8/1/2022	NV00925
Uranium	EPA 200.8	<0.050	D	mg/L	10	0.050	8/1/2022	NV00925
Mercury by CVAA								
Mercury	EPA 245.1	<0.00045		mg/L	1	0.00045	7/6/2022	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-1A			1		7/22/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 950 feet
WETLAB Sample ID: 22060833-017

Collect Date/Time: 6/24/2022 17:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	28	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	77	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 1000 feet
WETLAB Sample ID: 22060833-018
Collect Date/Time: 6/24/2022 18:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	31	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	79	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 1050 feet
WETLAB Sample ID: 22060833-019
Collect Date/Time: 6/24/2022 18:15
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	26	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	64	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 1100 feet
WETLAB Sample ID: 22060833-020
Collect Date/Time: 6/24/2022 18:30
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	31	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	78	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

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Customer Sample ID: DH-1 @ 1150 feet
WETLAB Sample ID: 22060833-021
Collect Date/Time: 6/24/2022 18:45
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	30	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	95	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 1200 feet
WETLAB Sample ID: 22060833-022

Collect Date/Time: 6/25/2022 09:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	32	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	110	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 1250 feet
WETLAB Sample ID: 22060833-023

Collect Date/Time: 6/25/2022 10:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Aluminum	EPA 200.7	<0.50	D	mg/L	10	0.50	7/25/2022	NV00925
Barium	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Beryllium	EPA 200.7	<0.010	D	mg/L	10	0.010	7/25/2022	NV00925
Boron	EPA 200.7	32		mg/L	10	1.0	7/25/2022	NV00925
Cadmium	EPA 200.7	<0.010	D	mg/L	10	0.010	7/25/2022	NV00925
Calcium	EPA 200.7	500		mg/L	10	5.0	7/25/2022	NV00925
Chromium	EPA 200.7	<0.050	D	mg/L	10	0.050	7/25/2022	NV00925
Copper	EPA 200.7	<0.40	D	mg/L	10	0.40	7/25/2022	NV00925
Iron	EPA 200.7	<1.0	D	mg/L	10	1.0	7/25/2022	NV00925
Lithium	EPA 200.7	110		mg/L	10	1.0	7/25/2022	NV00925
Magnesium	EPA 200.7	340		mg/L	10	5.0	7/25/2022	NV00925
Manganese	EPA 200.7	1.7		mg/L	10	0.10	7/25/2022	NV00925
Nickel	EPA 200.7	<0.30	D	mg/L	10	0.30	7/25/2022	NV00925
Potassium	EPA 200.7	2000		mg/L	10	10	7/25/2022	NV00925
Silver	EPA 200.7	<0.050	D	mg/L	10	0.050	7/25/2022	NV00925
Sodium	EPA 200.7	21000		mg/L	50	75	7/27/2022	NV00925
Zinc	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Trace Metals by ICP-MS								
Antimony	EPA 200.8	<0.050	D	mg/L	20	0.050	8/1/2022	NV00925
Arsenic	EPA 200.8	<0.10	D	mg/L	20	0.10	8/1/2022	NV00925
Lead	EPA 200.8	<0.050	D	mg/L	20	0.050	8/1/2022	NV00925
Selenium	EPA 200.8	<0.10	D	mg/L	20	0.10	8/1/2022	NV00925
Thallium	EPA 200.8	<0.020	D	mg/L	20	0.020	8/1/2022	NV00925
Uranium	EPA 200.8	<0.10	D	mg/L	20	0.10	8/1/2022	NV00925
Mercury by CVAA								
Mercury	EPA 245.1	<0.00045		mg/L	1	0.00045	7/6/2022	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-1A			1		7/22/2022	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: DH-1 @ 1300 feet
WETLAB Sample ID: 22060833-024
Collect Date/Time: 6/25/2022 11:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	34	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	120	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

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Customer Sample ID: DH-1 @ 1350 feet
WETLAB Sample ID: 22060833-025
Collect Date/Time: 6/25/2022 12:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	35	mg/L	10	1.0	8/2/2022	NV00925
Lithium	EPA 200.7	130	mg/L	10	1.0	8/2/2022	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W220720-2A		1		7/22/2022	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: DH-1 @ 1400 feet
WETLAB Sample ID: 22060833-026
Collect Date/Time: 6/25/2022 13:00
Receive Date: 6/27/2022 13:35

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Density	Gravimetric	1.04		g/cubic cm	1	0.00400	6/29/2022	NV00925
pH	SM 4500-H+ B	7.22	HT	pH Units	1		6/27/2022	NV00925
Temperature at pH	SM 2550B	26		°C	1		6/27/2022	NV00925
Total Alkalinity	SM 2320B	420		mg/L as CaCO3	1	1.0	6/27/2022	NV00925
Bicarbonate (HCO3)	SM 2320B	420		mg/L as CaCO3	1	1.0	6/27/2022	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/27/2022	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	6/27/2022	NV00925
Total Dissolved Solids (TDS)	SM 2540C	62000		mg/L	1	25	6/30/2022	NV00925
Electrical Conductivity	SM 2510B	220000		µmhos/cm	50	50	7/6/2022	NV00925
Anions by Ion Chromatography								
Chloride	EPA 300.0	36000		mg/L	200	200	6/28/2022	NV00925
Fluoride	EPA 300.0	<20	U,D	mg/L	200	20	6/28/2022	NV00925
Sulfate	EPA 300.0	1900		mg/L	200	300	6/28/2022	NV00925
Trace Metals by ICP-OES								
Aluminum, Dissolved	EPA 200.7	<0.20	U,D	mg/L	10	0.20	7/25/2022	NV00925
Barium, Dissolved	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Beryllium, Dissolved	EPA 200.7	<0.0050	U,D	mg/L	10	0.0050	7/25/2022	NV00925
Boron	EPA 200.7	39	SC	mg/L	50	5.0	8/2/2022	NV00925
Cadmium, Dissolved	EPA 200.7	<0.0050	U,D	mg/L	10	0.0050	7/25/2022	NV00925
Calcium, Dissolved	EPA 200.7	510		mg/L	10	5.0	7/25/2022	NV00925
Chromium, Dissolved	EPA 200.7	<0.010	U,D	mg/L	10	0.010	7/25/2022	NV00925
Copper, Dissolved	EPA 200.7	<0.40	D	mg/L	10	0.40	7/25/2022	NV00925
Iron, Dissolved	EPA 200.7	<0.50	U,D	mg/L	10	0.50	7/25/2022	NV00925
Lithium	EPA 200.7	130	SC	mg/L	50	5.0	8/2/2022	NV00925
Magnesium, Dissolved	EPA 200.7	360		mg/L	10	5.0	7/25/2022	NV00925
Manganese, Dissolved	EPA 200.7	1.4		mg/L	10	0.10	7/25/2022	NV00925
Nickel, Dissolved	EPA 200.7	<0.10	U,D	mg/L	10	0.10	7/25/2022	NV00925
Potassium, Dissolved	EPA 200.7	2100		mg/L	10	10	7/25/2022	NV00925
Silver, Dissolved	EPA 200.7	<0.050	D	mg/L	10	0.050	7/25/2022	NV00925
Sodium, Dissolved	EPA 200.7	22000		mg/L	50	75	7/27/2022	NV00925
Zinc, Dissolved	EPA 200.7	<0.20	D	mg/L	10	0.20	7/25/2022	NV00925
Trace Metals by ICP-MS								
Antimony, Dissolved	EPA 200.8	<0.025	U,D	mg/L	50	0.025	8/1/2022	NV00925
Arsenic, Dissolved	EPA 200.8	<0.075	U,D	mg/L	50	0.075	8/1/2022	NV00925
Lead, Dissolved	EPA 200.8	<0.050	U,D	mg/L	50	0.050	8/1/2022	NV00925
Selenium, Dissolved	EPA 200.8	<0.10	U,D	mg/L	50	0.10	8/1/2022	NV00925
Thallium, Dissolved	EPA 200.8	0.021	J	mg/L	50	0.010	8/1/2022	NV00925
Uranium, Dissolved	EPA 200.8	<0.050	U,D	mg/L	50	0.050	8/1/2022	NV00925
Mercury by CVAA								
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	7/6/2022	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W220720-2B			1		7/22/2022	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W220720-1A			1		7/22/2022	NV00925
Split_Filter_HNO3	N/A	Complete			1		6/29/2022	NV00925

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Western Environmental Testing Laboratory
QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC22061317	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC22061374	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC22061439	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC22070126	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC22070175	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L
QC22070176	Blank 1	Mercury	EPA 245.1	ND			mg/L
QC22070184	Blank 1	Electrical Conductivity	SM 2510B	ND			µmhos/cm
QC22070625	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC22071309	Blank 1	Aluminum	EPA 200.7	ND			mg/L
		Barium	EPA 200.7	ND			mg/L
		Beryllium	EPA 200.7	ND			mg/L
		Boron	EPA 200.7	ND			mg/L
		Cadmium	EPA 200.7	ND			mg/L
		Calcium	EPA 200.7	ND			mg/L
		Chromium	EPA 200.7	ND			mg/L
		Copper	EPA 200.7	ND			mg/L
		Iron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
		Magnesium	EPA 200.7	ND			mg/L
		Manganese	EPA 200.7	ND			mg/L
		Nickel	EPA 200.7	ND			mg/L
		Potassium	EPA 200.7	ND			mg/L
		Silver	EPA 200.7	ND			mg/L
		Sodium	EPA 200.7	ND			mg/L
		Zinc	EPA 200.7	ND			mg/L
QC22071310	Blank 1	Boron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
QC22071559	Blank 1	Boron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
QC22071560	Blank 1	Boron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
QC22080075	Blank 1	Antimony	EPA 200.8	ND			mg/L
		Arsenic	EPA 200.8	ND			mg/L
		Lead	EPA 200.8	ND			mg/L
		Selenium	EPA 200.8	ND			mg/L
		Thallium	EPA 200.8	ND			mg/L
		Uranium	EPA 200.8	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC22061247	LCS 1	pH	SM 4500-H+ B	7.00	7.00	100	pH Units
QC22061247	LCS 2	pH	SM 4500-H+ B	7.02	7.00	100	pH Units
QC22061247	LCS 3	pH	SM 4500-H+ B	7.01	7.00	100	pH Units
QC22061315	LCS 1	Total Alkalinity	SM 2320B	103	100	103	mg/L
QC22061315	LCS 2	Total Alkalinity	SM 2320B	104	100	104	mg/L
QC22061315	LCS 3	Total Alkalinity	SM 2320B	106	100	106	mg/L
QC22061315	LCS 4	Total Alkalinity	SM 2320B	105	100	105	mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC22061317	LCS 1	Chloride	EPA 300.0	10.2	10.0	102	mg/L
		Fluoride	EPA 300.0	1.98	2.00	99	mg/L
		Sulfate	EPA 300.0	25.7	25.0	103	mg/L
QC22061374	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	144	150	96	mg/L
QC22061374	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	136	150	91	mg/L
QC22061439	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	159	150	106	mg/L
QC22061439	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	156	150	104	mg/L
QC22070126	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	0.980	1.00	98	mg/L
QC22070175	LCS 1	Mercury, Dissolved	EPA 245.1	0.005180	0.005	104	mg/L
QC22070176	LCS 1	Mercury	EPA 245.1	0.005320	0.005	106	mg/L
QC22070184	LCS 1	Electrical Conductivity	SM 2510B	1516	1412	107	µmhos/cm
QC22070625	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	0.914	1.00	91	mg/L
QC22071309	LCS 1	Aluminum	EPA 200.7	0.989	1.00	99	mg/L
		Barium	EPA 200.7	1.01	1.00	101	mg/L
		Beryllium	EPA 200.7	1.00	1.00	100	mg/L
		Boron	EPA 200.7	0.964	1.00	96	mg/L
		Cadmium	EPA 200.7	0.999	1.00	100	mg/L
		Calcium	EPA 200.7	10.2	10.0	102	mg/L
		Chromium	EPA 200.7	0.999	1.00	100	mg/L
		Copper	EPA 200.7	5.09	5.00	102	mg/L
		Iron	EPA 200.7	1.05	1.00	105	mg/L
		Lithium	EPA 200.7	1.01	1.00	101	mg/L
		Magnesium	EPA 200.7	10.2	10.0	102	mg/L
		Manganese	EPA 200.7	1.00	1.00	100	mg/L
		Nickel	EPA 200.7	5.01	5.00	100	mg/L
		Potassium	EPA 200.7	9.86	10.0	99	mg/L
		Silver	EPA 200.7	0.090	0.090	100	mg/L
		Sodium	EPA 200.7	9.49	10.0	95	mg/L
		Zinc	EPA 200.7	1.01	1.00	101	mg/L
QC22071310	LCS 1	Boron	EPA 200.7	0.964	1.00	96	mg/L
		Lithium	EPA 200.7	1.01	1.00	101	mg/L
QC22071559	LCS 1	Boron	EPA 200.7	0.969	1.00	97	mg/L
		Lithium	EPA 200.7	1.04	1.00	104	mg/L
QC22071560	LCS 1	Boron	EPA 200.7	0.969	1.00	97	mg/L
		Lithium	EPA 200.7	1.04	1.00	104	mg/L
QC22080075	LCS 1	Antimony	EPA 200.8	0.0098	0.010	98	mg/L
		Arsenic	EPA 200.8	0.0464	0.050	93	mg/L
		Lead	EPA 200.8	0.0096	0.010	96	mg/L
		Selenium	EPA 200.8	0.0468	0.050	94	mg/L
		Thallium	EPA 200.8	0.0096	0.010	96	mg/L
		Uranium	EPA 200.8	0.0097	0.010	97	mg/L

QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result		Units	RPD
QC22061247	Duplicate 1	pH	SM 4500-H+ B	22060766-002	7.44	7.44	HT	pH Units	<1%
QC22061247	Duplicate 2	pH	SM 4500-H+ B	22060767-009	7.59	7.74	HT,QD	pH Units	2 %
QC22061247	Duplicate 3	pH	SM 4500-H+ B	22060833-026	7.22	7.23	HT	pH Units	<1%
QC22061247	Duplicate 4	pH	SM 4500-H+ B	22060771-019	8.97	9.17	HT,QD	pH Units	2 %
QC22061247	Duplicate 5	pH	SM 4500-H+ B	22060780-001	7.96	7.98	HT	pH Units	<1%
QC22061315	Duplicate 1	Total Alkalinity	SM 2320B	22060766-002	74.6	74.5		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	22060766-002	74.6	74.5		mg/L as CaCO3	<1%

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QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result		Units	RPD
		Carbonate (CO3)	SM 2320B	22060766-002	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	22060766-002	<1.000	<1.000		mg/L as CaCO3	<1%
QC22061315	Duplicate 2	Total Alkalinity	SM 2320B	22060769-009	36.0	52.3	QD	mg/L as CaCO3	37 %
		Bicarbonate (HCO3)	SM 2320B	22060769-009	27.0	52.3	QD	mg/L as CaCO3	64 %
		Carbonate (CO3)	SM 2320B	22060769-009	9.00	<1.000	QD	mg/L as CaCO3	200 %
		Hydroxide (OH)	SM 2320B	22060769-009	<1.000	<1.000		mg/L as CaCO3	<1%
QC22061315	Duplicate 3	Total Alkalinity	SM 2320B	22060833-026	419	420		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	22060833-026	419	420		mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	22060833-026	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	22060833-026	<1.000	<1.000		mg/L as CaCO3	<1%
QC22061315	Duplicate 4	Total Alkalinity	SM 2320B	22060771-019	195	183		mg/L as CaCO3	6 %
		Bicarbonate (HCO3)	SM 2320B	22060771-019	167	144		mg/L as CaCO3	14 %
		Carbonate (CO3)	SM 2320B	22060771-019	27.8	38.6	QD	mg/L as CaCO3	33 %
		Hydroxide (OH)	SM 2320B	22060771-019	<1.000	<1.000		mg/L as CaCO3	<1%
QC22061315	Duplicate 5	Total Alkalinity	SM 2320B	22060780-001	150	151		mg/L as CaCO3	1 %
		Bicarbonate (HCO3)	SM 2320B	22060780-001	150	151		mg/L as CaCO3	1 %
		Carbonate (CO3)	SM 2320B	22060780-001	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	22060780-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC22061374	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	22060771-019	219	253	QD	mg/L	14 %
QC22061374	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	22060780-001	355	387		mg/L	9 %
QC22061439	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	22060843-001	270	279		mg/L	3 %
QC22061439	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	22060843-002	424	463		mg/L	9 %
QC22070184	Duplicate 1	Electrical Conductivity	SM 2510B	22060875-001	58.3	57.7		µmhos/cm	1 %
QC22070184	Duplicate 2	Electrical Conductivity	SM 2510B	22060900-001	569	561		µmhos/cm	1 %

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC22061317	MS 1	Chloride	EPA 300.0	22060780-001	102		123	125	5	mg/L	85	92	2
		Fluoride	EPA 300.0	22060780-001	<1.500	D	9.14	10.1	2	mg/L	85	94	10
		Sulfate	EPA 300.0	22060780-001	64.8		118	118	10	mg/L	106	107	<1
QC22070126	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	22060867-001	0.328		5.49	4.96	1	mg/L	103	93	10
QC22070126	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	22060898-001	0.106		5.04	4.97	1	mg/L	99	97	1
QC22070175	MS 1	Mercury, Dissolved	EPA 245.1	22060867-001	<0.000450		0.005390	0.005400	0.005	mg/L	108	108	<1
QC22070176	MS 1	Mercury	EPA 245.1	22060833-016	<0.000450		0.004810	0.004870	0.005	mg/L	96	97	1
QC22070625	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	22060999-001	1.59	M	1.93	2.05	1	mg/L	NC	NC	NC
QC22070625	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	22060826-004	0.986		1.82	2.01	1	mg/L	83	103	10
QC22071309	MS 1	Aluminum	EPA 200.7	22060833-016	0.536	M	1.94	1.97	1	mg/L	NC	NC	NC
		Barium	EPA 200.7	22060833-016	<0.200	D	1.18	1.17	1	mg/L	101	99	<1
		Beryllium	EPA 200.7	22060833-016	<0.010	D	1.16	1.14	1	mg/L	116	114	2
		Boron	EPA 200.7	22060833-016	25.0	SC	25.6	25.3	1	mg/L	NC	NC	NC
		Cadmium	EPA 200.7	22060833-016	<0.010	D	1.03	1.02	1	mg/L	103	102	1
		Calcium	EPA 200.7	22060833-016	333		342	338	10	mg/L	90	47	1
		Chromium	EPA 200.7	22060833-016	<0.050	D	1.01	1.00	1	mg/L	101	100	1
		Copper	EPA 200.7	22060833-016	<0.400	D	5.51	5.41	5	mg/L	109	107	2
		Iron	EPA 200.7	22060833-016	2.77		4.04	3.86	1	mg/L	128	110	5
		Lithium	EPA 200.7	22060833-016	60.5		61.5	58.7	1	mg/L	100	0	5

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QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
		Magnesium	EPA 200.7	22060833-016	166		175	174	10	mg/L	93	78	<1
		Manganese	EPA 200.7	22060833-016	1.22		2.28	2.26	1	mg/L	106	104	<1
		Nickel	EPA 200.7	22060833-016	<0.300	D	5.06	5.02	5	mg/L	101	100	<1
		Potassium	EPA 200.7	22060833-016	1351		1359	1300	10	mg/L	83	0	4
		Silver	EPA 200.7	22060833-016	<0.050	D	0.105	0.104	0.09	mg/L	115	114	1
		Sodium	EPA 200.7	22060833-016	16528	SC	13475	14273	10	mg/L	NC	NC	NC
		Zinc	EPA 200.7	22060833-016	<0.200	D	1.18	1.17	1	mg/L	109	108	<1
QC22071310	MS 1	Boron	EPA 200.7	22060833-004	17.2	SC	19.3	19.0	1	mg/L	NC	NC	NC
		Lithium	EPA 200.7	22060833-004	42.0	SC	44.3	44.3	1	mg/L	NC	NC	NC
QC22071559	MS 1	Boron	EPA 200.7	22060833-014	24.8	SC	24.6	29.7	1	mg/L	NC	NC	NC
		Lithium	EPA 200.7	22060833-014	64.1	SC	59.3	77.1	1	mg/L	NC	NC	NC
QC22071560	MS 1	Boron	EPA 200.7	22060833-026	38.7	SC	38.0	38.9	1	mg/L	NC	NC	NC
		Lithium	EPA 200.7	22060833-026	131	SC	126	133	1	mg/L	NC	NC	NC
QC22080075	MS 1	Antimony	EPA 200.8	22060833-016	<0.0250	D	0.01434	0.01468	0.01	mg/L	96	99	2
		Arsenic	EPA 200.8	22060833-016	<0.0500	D	0.0583	0.0607	0.05	mg/L	97	102	4
		Lead	EPA 200.8	22060833-016	<0.0250	D	0.01266	0.01295	0.01	mg/L	91	94	2
		Selenium	EPA 200.8	22060833-016	<0.0500	D	0.04046	0.04391	0.05	mg/L	76	83	8
		Thallium	EPA 200.8	22060833-016	<0.0100	D	0.0140	0.0143	0.01	mg/L	92	95	2
		Uranium	EPA 200.8	22060833-016	<0.0500	D	0.02719	0.02746	0.01	mg/L	103	105	1

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

SPARKS
475 E. Greg Street, Suite 119
Sparks, Nevada 89431
tel (775) 355-0202
fax (775) 355-0817
EPA LAB ID: NV00925 - ELAP No: 2523

ELKO
1084 Lamoille Hwy
Elko, Nevada 89801
tel (775) 777-9933
fax (775) 777-9933
EPA LAB ID: NV00926

LAS VEGAS
3230 Polaris Ave. Suite 4
Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

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1084 Lamoille Highway | Elko, Nevada 89801
tel (775) 777-9933 | fax (775) 777-9933
3230 Polaris Ave., Suite 4 | Las Vegas, Nevada 89102
tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. 2206083?
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page 1 of 3

Client: Confluence Water Resources, LLC
Address: 14175 Saddlebow Dr.
City, State & Zip: Reno, NV 89511
Contact: Matt Banta
Phone: 775-843-1908 — Collector's Name: Matt Banta
Fax — PWS/Project Name: ACME
P.O. Number — PWS/Project Number: ACME
Email: ashex@telus.net

Turnaround Time Requirements
Standard [✔]
5 Day* (25%) [ ] 72 Hour* (50%) [ ]
48 Hour* (100%) [ ] 24 Hour* (200%) [ ]
*Surcharges Will Apply

Samples Collected From Which State? NV [✔] CA [ ] Other [ ]
Compliance Monitoring? Yes [ ] No [✔]
Report to Regulatory Agency? Yes [ ] No [✔]
Report Results Via PDF [ ] EDD [ ] Other: email
Standard QC Required? Yes [✔] No [ ]

Billing Address (If different than Client Address)
Company: GeoXplor Corp
Address: 8-650 Clyde Ave
City, State & Zip: West Vancouver, BC, Canada
Contact: Clive Ashworth
Phone: 1-604-908-9201 Fax:
Email: ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE*	SAMPLE TYPE**	NO. OF CONTAINERS	Total Lithium	Total Boron	Profile 1 w/o WAD	Profile 1 Metals	TDS	Density	Total Alkalinity	EC				Spl. No.
DH-1 Airlift	6/23/22	18:00	1,3,5	GW	3	✔	✔	✔	✔	✔	✔	✔	✔				1
DH-1 @ 220'	6/24/22	11:30	5	GW	~~1~~ 2	✔	✔		✔	✔	✔	✔	✔				2
DH-1 @ 260'	6/24/22	12:00	5	GW	1	✔	✔										3
DH-1 @ 300'	6/24/22	12:15	5	GW	1	✔	✔										4
DH-1 @ 425'	6/24/22	12:30	5	GW	1	✔	✔										5
DH-1 @ 460'	6/24/22	12:45	5	GW	1	✔	✔										6
DH-1 @ 500'	6/24/22	13:00	5	GW	1	✔	✔										7
DH-1 @ 550'	6/24/22	14:00	5	GW	1	✔	✔										8
DH-1 @ 600'	6/24/22	14:15	5	GW	1	✔	✔										9

2206 0833 26

Instructions/Comments/Special Requirements:

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

*SAMPLE PRESERVATIVES: 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
18.6 °C	Y N None	11	6/27/22	1:30pm	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB ______ initial
To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB ______ initial
WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB ______ initial

301.2E

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3230 Polaris Ave., Suite 4 | Las Vegas, Nevada 89102
tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID 22060833
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page 2 of 3

Client Confluence Water Resources, LLC
Address 14175 Saddlebow Dr.
City, State & Zip Reno, NV 89511
Contact Matt Banta
Phone 775-843-1908 — Collector's Name Matt Banta
Fax — PWS/Project Name ACME
P.O. Number — PWS/Project Number ACME
Email ashex@telus.net

Turnaround Time Requirements
Standard ☑
5 Day* (25%) ☐ 72 Hour* (50%) ☐
48 Hour* (100%) ☐ 24 Hour* (200%) ☐
*Surcharges Will Apply

Samples Collected From Which State? NV ☑ CA ☐ Other ☐
Compliance Monitoring? Yes ☐ No ☑
Report to Regulatory Agency? Yes ☐ No ☑
Report Results Via PDF ☐ EDD ☐ Other email
Standard QC Required? Yes ☑ No ☐

Billing Address (If different than Client Address)
Company GeoXplor Corp
Address 8-650 Clyde Ave
City, State & Zip West Vancouver, BC, Canada
Contact Clive Ashworth
Phone 1-604-908-9201 Fax
Email ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE*	SAMPLE TYPE**	NO. OF CONTAINERS	Total Lithium	Total Boron	Profile 1 w/o WAD	Profile 1 Metals	TDS	Density	Total Alkalinity	EC			Spl. No.
DH-1 @ 650'	6/24/22	14:30	5	GW	1	✔	✔									10
DH-1 @ 700'	6/24/22	14:45	5	GW	1	✔	✔									11
DH-1 @ 750'	6/24/22	15:00	5	GW	1	✔	✔									12
DH-1 @ 775'	6/24/22	16:00	5	GW	1	✔	✔									13
DH-1 @ 825'	6/24/22	16:15	5	GW	1	✔	✔									14
DH-1 @ 850'	6/24/22	16:30	1,5	GW	2	✔	✔		✔	✔	✔	✔	✔			15
DH-1 @ 900'	6/24/22	16:45	5	GW	1	✔	✔		✔							16
DH-1 @ 950'	6/24/22	17:00	5	GW	1	✔	✔									17
DH-1 @ 1000'	6/24/22	18:00	5	GW	1	✔	✔									18

Instructions/Comments/Special Requirements:

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Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
18.6 °C	Y N None	10	6/27/22	1:35pm	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

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301.2E

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WETLAB Order ID. 22060833
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page 3 of 3

Client Confluence Water Resources, LLC
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Phone 775-843-1908 | Collector's Name Matt Banta
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P.O. Number | PWS/Project Number ACME
Email ashex@telus.net

Turnaround Time Requirements
Standard [✔]
5 Day* (25%) [ ] 72 Hour* (50%) [ ]
48 Hour* (100%) [ ] 24 Hour* (200%) [ ]
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Samples Collected From Which State? NV [✔] CA [ ] Other [ ]
Compliance Monitoring? Yes [ ] No [✔]
Report to Regulatory Agency? Yes [ ] No [✔]
Report Results Via PDF [ ] EDD [ ] Other email
Standard QC Required? Yes [✔] No [ ]

Billing Address (If different than Client Address)
Company GeoXplor Corp
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City, State & Zip West Vancouver, BC, Canada
Contact Clive Ashworth
Phone 1-604-908-9201 Fax
Email ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE*	SAMPLE TYPE**	NO. OF CONTAINERS	Total Lithium	Total Boron	Profile 1 w/o WAD	Profile 1 Metals	TDS	Density	Total Alkalinity	Profile 1 w/o total N	EC		Spl. No.
DH-1 @ 1050'	6/24/22	18:15	5	GW	1	✔	✔									19
DH-1 @ 1100'	6/24/22	18:30	5	GW	1	✔	✔									20
DH-1 @ 1150'	6/24/22	18:45	5	GW	1	✔	✔									21
DH-1 @ 1200'	6/25/22	9:00	5	GW	1	✔	✔									22
DH-1 @ 1250'	6/25/22	10:00	5	GW	1	✔	✔		✔							23
DH-1 @ 1300'	6/25/22	11:00	5	GW	1	✔	✔									24
DH-1 @ 1350'	6/25/22	12:00	5	GW	1	✔	✔									25
DH-1 @ 1400'	6/25/22	13:00	5	GW	2	✔	✔	✔	✔	✔	✔	✔	✔	✔		26

Instructions/Comments/Special Requirements: For DH-1 @ 1400' Run Profile 1 Without WAD or Total N.
Add Total Lithium and Boron to Profile 1.

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

*SAMPLE PRESERVATIVES: 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
18.6°C	Y N None	9	6/27/22	1:35pm	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

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301.2E

Wednesday, July 06, 2022

Bill Feyerabend
GeoXplor Inc.
4218 N. Kachina
Prescott Valley, AZ 86314

Re: ALS Workorder: 2206641
Project Name: ACME DH-1
Project Number:

Dear Mr. Feyerabend:

Seven water samples were received from GeoXplor Inc., on 6/28/2022. The samples were scheduled for the following analysis:

Metals

The results for these analyses are contained in the enclosed reports.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental.

Thank you for your confidence in ALS Environmental. Should you have any questions, please call.

Sincerely,

For

ALS Environmental
Tyler J. Monroe
Project Manager

Accreditations: ALS Environmental – Fort Collins is accredited by the following accreditation bodies for various testing scopes in accordance with requirements of each accreditation body. All testing is performed under the laboratory management system, which is maintained to meet these requirement and regulations. Please contact the laboratory or accreditation body for the current scope testing parameters.

ALS Environmental – Fort Collins	
Accreditation Body	License or Certification Number
Arizona	AZ0828
California (CA)	2926
Colorado (CO)	CO01099
Florida (FL)	E87914
Idaho (ID)	CO01099
Kansas (KS)	E-10381
Kentucky (KY)	90137
Oklahoma	1301
Louisiana	197538
Maryland (MD)	285
PJLA (DoD ELAP/ISO 170250)	95377
PJLA (DOE-AP/ISO 17025)	95377
Nebraska(NE)	NE-OS-24-13
Nevada (NV)	CO010992018-1
New York (NY)	12036
North Dakota (ND)	R-057
Oklahoma (OK)	1301
Pennsylvania (PA)	68-03116
Tennessee (TN)	TN02976
Texas (TX)	T104704241
Utah (UT)	CO01099
Washington (WA)	C1280
Virginia	460305

40 CFR Part 136: All analyses for Clean Water Act samples are analyzed using the 40 CFR Part 136 specified method and include all the QC requirements.

2206641

Metals:

The samples were analyzed following SW-846, 3rd Edition procedures. Analysis by Trace ICP followed method 6010D and the current revision of SOP 834.

Matrix spike recoveries could not be evaluated for the following analytes:

Analyte	Sample ID
Boron	2206641-7MS/MSD
	2206641-6MS/MSD
Lithium	2206641-7MS/MSD
	2206641-6MS/MSD

The concentrations of these analytes in the native sample were greater than four times the concentration of matrix spike added during the digestion. When sample concentration is that much greater than the spike added, spike recoveries may not be accurate. The laboratory control sample indicates that the digestion and analysis were in control.

All remaining acceptance criteria were met.

ALS -- Fort Collins

Sample Number(s) Cross-Reference Table

OrderNum: 2206641
Client Name: GeoXplor Inc.
Client Project Name: ACME DH-1
Client Project Number:
Client PO Number:

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
DH-1@ 425	2206641-1		WATER	24-Jun-22	12:30
DH-1@ 650	2206641-2		WATER	24-Jun-22	14:30
DH-1@ 775	2206641-3		WATER	24-Jun-22	16:00
DH-1@ 900	2206641-4		WATER	24-Jun-22	16:45
DH-1@ 1050	2206641-5		WATER	24-Jun-22	18:15
DH-1@ 1200	2206641-6		WATER	25-Jun-22	9:00
DH-1@ 1400	2206641-7		WATER	25-Jun-22	13:00

ALS Environmental

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202r8

WORKORDER #	2206641
PAGE	of
DISPOSAL	By Lab or Return to Client

PROJECT NAME	ACME DH-1	SAMPLER	MAtt Banta
PROJECT No.		SITE ID	CLAYTON VALLEY
		EDD FORMAT	
		PURCHASE ORDER	
COMPANY NAME	GEOXplor CORP	BILL TO COMPANY	GEOXplor CORP
SEND REPORT TO	Clive Ashworth	INVOICE ATTN TO	Clive Ashworth
ADDRESS	8-650 CLYD AVE	ADDRESS	8-650 CLYD AVE
CITY / STATE / ZIP	West Vancouver CANADA	CITY / STATE / ZIP	West Vancouver CANADA
PHONE	1-604-908-9201	PHONE	~~775~~ 1-604-908-9201
FAX		FAX	
E-MAIL	ashex@telus.net	E-MAIL	ashex@telus.net

DATE:
TURNAROUND:

Lab ID	Field ID	Matrix	Sample Date	Sample Time	# Bottles	Pres.	QC	Total Lithium	Total Boron
1	DH-1 @ 425'	W	6/24/22	12:30	1	2		X	X
2	DH-1 @ 650'	W	6/24/22	14:30	1	2		X	X
3	DH-1 @ 775'	W	6/24/22	16:00	1	2		X	X
4	DH-1 @ 900'	W	6/24/22	16:45	1	2		X	X
5	DH-1 @ 1050'	W	6/24/22	18:15	1	2		X	X
6	DH-1 @ 1200'	W	6/25/22	9:00	1	2	X	X	X
7	DH-1 @ 1400'	W	6/25/22	13:00	1	2	X	X	X

*Time Zone (Circle): EST CST MST (PST) Matrix: O = oil S = soil NS = non-soil solid W = water L = liquid E = extract F = filter

For metals or anions, please detail analytes below.

Comments: Total Lithium & Boron

QC PACKAGE (check below)	
X	LEVEL II (Standard QC)
	LEVEL III (Std QC + forms)
	LEVEL IV (Std QC + forms - raw data)

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

	SIGNATURE	PRINTED NAME	DATE	TIME
RELINQUISHED BY	[signature]	Matt Banta	6/27/22	15:00
RECEIVED BY	[signature]	Claire Thennes	6/28/22	11:50
RELINQUISHED BY				
RECEIVED BY				
RELINQUISHED BY				
RECEIVED BY				

ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: GEOXPLOR   Workorder No: 2206641

Project Manager: ____   Initials: CXT   Date: 6-28-2022

#	Question	N/A	YES	NO
1.	Are airbills / shipping documents present and/or removable? Tracking number: 1Z E3Y 025 13 7518 5282		X	
2.	Are custody seals on shipping containers intact?		X	
3.	Are custody seals on sample containers intact?		X	
4.	Is there a COC (chain-of-custody) present?		X	
5.	Is the COC in agreement with samples received? (IDs, dates, times, # of samples, # of containers, matrix, requested analyses, etc.)		X	
6.	Are short-hold samples present?			X
7.	Are all samples within holding times for the requested analyses?		X	
8.	Were all sample containers received intact? (not broken or leaking)		X	
9.	Is there sufficient sample for the requested analyses?		X	
10.	Are samples in proper containers for requested analyses? (form 250, *Sample Handling Guidelines*)		X	
11.	Are all aqueous samples preserved correctly, if required? (excluding volatiles)		X	
12.	Are all samples requiring no headspace (VOC, GRO, RSK/MEE, radon) free of bubbles > 6 mm (1/4 inch) diameter? (i.e. size of green pea)	X		
13.	Were the samples shipped on ice?		X	
14.	Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #6	RAD ONLY		X

Cooler #:	1						
Temperature (°C):	14.3						
# of custody seals on cooler:	3						
External µR/hr reading:	12						
Background µR/hr reading:	11						

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES (If no, see Form 008.)

* Please provide details here for NO responses to boxes above - for 2 thru 5 & 7 thru 12, notify PM & continue w/ login.

Were unpreserved bottles pH checked? NA   All client bottle ID's vs ALS lab ID's double-checked by: CT

If applicable, was the client contacted? YES / NO / NA Contact: ____ Date/Time: ____

Project Manager Signature / Date: [signature] 7/01/22

Form 201r29.xls
(10/15/2019)

*IR Gun #3, VWR SN 170647571
*IR Gun #5, VWR SN 192272629

2206641

MATT BANTA
(775) 843-1908
14175 SADDLEBOW DR
RENO NV 89511

28 LBS 1 OF 1
SHP WT: 28 LBS
DWT: 27,15,17
DATE: 27 JUN 2022
AH

SHIP TO: ALS ENVIRONMENTAL
225 COMMERCE DR

12-3 14,3

FORT COLLINS CO 80524-2762

CO 805 0-01

UPS NEXT DAY AIR SAVER 1P

TRACKING #: 1Z E3Y 025 13 7518 5282

BILLING: P/P

REF #1: 062722KL

ISH 13.00F ZZP 450 23.5U 05/2022

Client:	GeoXplor Inc.		**Date:**	*06-Jul-22*
Project:	ACME DH-1		**Work Order:**	2206641
Sample ID:	DH-1@ 425		**Lab ID:**	2206641-1
Legal Location:			**Matrix:**	WATER
Collection Date:	6/24/2022 12:30		**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
TOTAL RECOVERABLE ICP METALS			**SW6010**		Prep Date: **7/1/2022**		PrepBy:**ETC**
BORON	**14**		**10**	**MG/L**	100	0.94	7/5/2022 14:10
LITHIUM	**33**		**1.5**	**MG/L**	100	0.95	7/5/2022 14:10

SAMPLE SUMMARY REPORT

Client: GeoXplor Inc.
Project: ACME DH-1
Sample ID: DH-1@ 650
Legal Location:
Collection Date: 6/24/2022 14:30

Date: *06-Jul-22*
Work Order: 2206641
Lab ID: 2206641-2
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
TOTAL RECOVERABLE ICP METALS			**SW6010**		Prep Date: **7/1/2022**		PrepBy:**ETC**
BORON	**15**		**10**	**MG/L**	100	0.94	7/5/2022 14:11
LITHIUM	**36**		**1.5**	**MG/L**	100	0.95	7/5/2022 14:11

SAMPLE SUMMARY REPORT

Client:	GeoXplor Inc.	**Date:**	*06-Jul-22*
Project:	ACME DH-1	**Work Order:**	2206641
Sample ID:	DH-1@ 775	**Lab ID:**	2206641-3
Legal Location:		**Matrix:**	WATER
Collection Date:	6/24/2022 16:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
TOTAL RECOVERABLE ICP METALS			**SW6010**		Prep Date: **7/1/2022**		PrepBy:**ETC**
BORON	**17**		**10**	**MG/L**	100	0.94	7/5/2022 14:12
LITHIUM	**38**		**1.5**	**MG/L**	100	0.95	7/5/2022 14:12

Client: GeoXplor Inc.
Project: ACME DH-1
Sample ID: DH-1@ 900
Legal Location:
Collection Date: 6/24/2022 16:45

Date: *06-Jul-22*
Work Order: 2206641
Lab ID: 2206641-4
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
TOTAL RECOVERABLE ICP METALS			**SW6010**		Prep Date: **7/1/2022**		PrepBy:**ETC**
BORON	**23**		**10**	**MG/L**	100	0.94	7/5/2022 14:13
LITHIUM	**50**		**1.5**	**MG/L**	100	0.95	7/5/2022 14:13

SAMPLE SUMMARY REPORT

Client: GeoXplor Inc.
Project: ACME DH-1
Sample ID: DH-1@ 1050
Legal Location:
Collection Date: 6/24/2022 18:15

Date: *06-Jul-22*
Work Order: 2206641
Lab ID: 2206641-5
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
TOTAL RECOVERABLE ICP METALS			**SW6010**		Prep Date: **7/1/2022**		PrepBy:**ETC**
BORON	**17**		**10**	**MG/L**	100	0.94	7/5/2022 14:14
LITHIUM	**36**		**1.5**	**MG/L**	100	0.95	7/5/2022 14:14

SAMPLE SUMMARY REPORT

Client: GeoXplor Inc.
Project: ACME DH-1
Sample ID: DH-1@ 1200
Legal Location:
Collection Date: 6/25/2022 09:00

Date: *06-Jul-22*
Work Order: 2206641
Lab ID: 2206641-6
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
TOTAL RECOVERABLE ICP METALS			**SW6010**		Prep Date: **7/1/2022**		PrepBy:**ETC**
BORON	**23**		**10**	**MG/L**	100	0.94	7/5/2022 14:15
LITHIUM	**62**		**1.5**	**MG/L**	100	0.95	7/5/2022 14:15

Client: GeoXplor Inc.
Project: ACME DH-1
Sample ID: DH-1@ 1400
Legal Location:
Collection Date: 6/25/2022 13:00

Date: *06-Jul-22*
Work Order: 2206641
Lab ID: 2206641-7
Matrix: WATER
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed
TOTAL RECOVERABLE ICP METALS			**SW6010**		Prep Date: **7/1/2022**		PrepBy:**ETC**
BORON	**26**		**10**	**MG/L**	100	0.94	7/5/2022 14:19
LITHIUM	**77**		**1.5**	**MG/L**	100	0.95	7/5/2022 14:19

Client:	GeoXplor Inc.	**Date:**	*06-Jul-22*
Project:	ACME DH-1	**Work Order:**	2206641
Sample ID:	DH-1@ 1400	**Lab ID:**	2206641-7
Legal Location:		**Matrix:**	WATER
Collection Date:	6/25/2022 13:00	**Percent Moisture:**	

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	MDL	Date Analyzed

Explanation of Qualifiers

Radiochemistry:

- "Report Limit" is the MDC

U or ND - Result is less than the sample specific MDC.

Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed.

Y2 - Chemical Yield outside default limits.

W - DER is greater than Warning Limit of 1.42

* - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'.

- Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'.

G - Sample density differs by more than 15% of LCS density.

D - DER is greater than Control Limit

M - Requested MDC not met.

M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC.

L - LCS Recovery below lower control limit.

H - LCS Recovery above upper control limit.

P - LCS, Matrix Spike Recovery within control limits.

N - Matrix Spike Recovery outside control limits

NC - Not Calculated for duplicate results less than 5 times MDC

B - Analyte concentration greater than MDC.

B3 - Analyte concentration greater than MDC but less than Requested MDC.

Inorganics:

B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).

U or ND - Indicates that the compound was analyzed for but not detected.

E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.

M - Duplicate injection precision was not met.

N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.

Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.

* - Duplicate analysis (relative percent difference) not within control limits.

S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

U or ND - Indicates that the compound was analyzed for but not detected.

B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.

E - Analyte concentration exceeds the upper level of the calibration range.

J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).

A - A tentatively identified compound is a suspected aldol-condensation product.

X - The analyte was diluted below an accurate quantitation level.

* - The spike recovery is equal to or outside the control criteria used.

+ - The relative percent difference (RPD) equals or exceeds the control criteria.

G - A pattern resembling gasoline was detected in this sample.

D - A pattern resembling diesel was detected in this sample.

M - A pattern resembling motor oil was detected in this sample.

C - A pattern resembling crude oil was detected in this sample.

4 - A pattern resembling JP-4 was detected in this sample.

5 - A pattern resembling JP-5 was detected in this sample.

H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.

L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.

Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
- gasoline
- JP-8
- diesel
- mineral spirits
- motor oil
- Stoddard solvent
- bunker C

Client: GeoXplor Inc.
Work Order: 2206641
Project: ACME DH-1

QC BATCH REPORT

Batch ID: **IP220701-1-2** Instrument ID: **ICP5900** Method: **SW6010**

LCS Sample ID: **IP220701-1** Units: **MG/L** Analysis Date: **7/5/2022 13:03**
Client ID: Run ID: **IT220705-1A3** Prep Date: **7/1/2022** DF: **1**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BORON	1.07	0.1	1		107	80-120				20	
LITHIUM	0.509	0.015	0.5		102	80-120				20	

MB Sample ID: **IP220701-1** Units: **MG/L** Analysis Date: **7/5/2022 13:02**
Client ID: Run ID: **IT220705-1A3** Prep Date: **7/1/2022** DF: **1**

Analyte	Result	ReportLimit	MDL	Qual
BORON	-0.015	0.1	0.0094	J
LITHIUM	ND	0.015	0.0095	

MS Sample ID: **2206641-7** Units: **MG/L** Analysis Date: **7/5/2022 14:23**
Client ID: **DH-1@ 1400** Run ID: **IT220705-1A3** Prep Date: **7/1/2022** DF: **100**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BORON	29.1	10	1	26	277	80-120				20	
LITHIUM	82.1	1.5	0.5	77	937	80-120				20	

MSD Sample ID: **2206641-7** Units: **MG/L** Analysis Date: **7/5/2022 14:23**
Client ID: **DH-1@ 1400** Run ID: **IT220705-1A3** Prep Date: **7/1/2022** DF: **100**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BORON	27.7	10	1	26	137	80-120		29.1	5	20	
LITHIUM	78.7	1.5	0.5	77	249	80-120		82.1	4	20	

The following samples were analyzed in this batch:

2206641-1	2206641-2	2206641-3
2206641-7		

Client: GeoXplor Inc.
Work Order: 2206641
Project: ACME DH-1

QC BATCH REPORT

Batch ID: **IP220701-1-3** Instrument ID: **ICP5900** Method: **SW6010**

MS Sample ID: **2206641-6** Units: **MG/L** Analysis Date: **7/5/2022 14:17**

Client ID: **DH-1@ 1200** Run ID: **IT220705-1A3** Prep Date: **7/1/2022** DF: **100**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BORON	25.1	10	1	23	169	80-120				20	
LITHIUM	63.9	1.5	0.5	62	368	80-120				20	

MSD Sample ID: **2206641-6** Units: **MG/L** Analysis Date: **7/5/2022 14:18**

Client ID: **DH-1@ 1200** Run ID: **IT220705-1A3** Prep Date: **7/1/2022** DF: **100**

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	Decision Level	RPD Ref Value	RPD	RPD Limit	Qual
BORON	25.1	10	1	23	174	80-120		25.1	0	20	
LITHIUM	64.4	1.5	0.5	62	462	80-120		63.9	1	20	

The following samples were analyzed in this batch: 2206641-4 2206641-5 2206641-6

ALS USA Inc.

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To: GEOXPLOR CORP.
8-650 CLYDE AVE.
WEST VANCOUVER BC V7W 2N8
CANADA

Finalized Date: 5-MAY-2023
Account: GEOEPL

CERTIFICATE RE23081962

This report is for 12 samples of Sediment submitted to our lab in Reno, NV, USA on 29-MAR-2023.

The following have access to data associated with this certificate:

E.CLIVE ASHWORTH	MATT BANTA	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
SND-ALS	Send samples to internal laboratory
LOG-22	Sample login - Rcd w/o BarCode
RST-21	Roasting
PUL-31	Pulverize up to 250g 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Li-OG63	Ore grade Li - 4ACID	
ME-OG62o	Ore Grade open beaker -ICPAES	ICP-AES
ME-ICP41	35 Element Aqua Regia ICP-AES	ICP-AES

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519

This is the Final Report and supersedes any preliminary report with this certificate number.Results apply to samples as submitted.All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Saa Traxler, Director, North Vancouver Operations

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CANADA

Finalized Date: 5-MAY-2023
Account: GEOEPL

CERTIFICATE OF ANALYSIS RE23081962

Sample Description / Method	WEI-21	Li-OG63	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
Analyte	Recvd Wt.	Li	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe
Units	kg	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
LOD	0.02	0.005	0.2	0.01	2	10	10	0.5	2	0.01	0.5	1	1	1	0.01
DH-1 (71.6 to 72)	0.37	0.033	<0.2	2.21	16	90	80	1.0	<2	3.39	<0.5	10	21	20	2.45
DH-1 (189.6 to 190)	0.28	0.011	<0.2	0.23	2	10	10	<0.5	<2	0.89	<0.5	1	1	3	0.27
DH-1 (256 to 256.3)	0.26	0.015	<0.2	1.60	9	50	120	0.7	<2	3.22	<0.5	7	13	12	1.68
DH-1 (339.1 to 339.3)	0.17	0.033	<0.2	4.01	6	180	110	2.0	<2	4.26	<0.5	10	22	23	2.88
DH-1 (546 to 546.3)	0.28	0.008	<0.2	1.47	13	20	370	0.8	<2	1.92	<0.5	7	14	9	1.84
DH-1 (595.7 to 595.9)	0.20	0.005	<0.2	0.20	<2	10	<10	<0.5	<2	0.07	<0.5	1	1	2	0.20
DH-1 (768 to 768.3)	0.21	0.007	<0.2	1.12	7	20	210	<0.5	<2	2.08	<0.5	5	9	8	1.41
DH-1 (979 to 979.2)	0.24	0.005	<0.2	0.95	12	10	40	<0.5	<2	7.2	<0.5	5	8	8	1.54
DH-1 (1088.8 to 1089)	0.30	0.006	<0.2	1.19	17	10	80	0.5	<2	7.6	<0.5	6	11	9	1.87
DH-1 (1192.8 to 1193)	0.18	0.008	<0.2	0.32	<2	10	40	<0.5	<2	0.14	<0.5	1	3	3	0.39
DH-1 (1245 to 1245.3)	0.28	0.010	<0.2	0.97	2	20	210	0.9	<2	0.06	<0.5	1	1	1	0.27
DH-1 (1357 to 1357.3)	0.35	0.006	<0.2	1.30	18	30	1080	0.8	<2	8.9	<0.5	7	16	29	2.41

***** See Appendix Page for comments regarding this certificate *****

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CANADA

Finalized Date: 5-MAY-2023
Account: GEOEPL

CERTIFICATE OF ANALYSIS RE23081962

Sample Description	Method / Analyte / Units / LOD	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Li ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1
DH-1 (71.6 to 72)		10	<1	1.19	20	260	1.39	414	1	0.40	26	690	12	0.01	<2	4
DH-1 (189.6 to 190)		<10	<1	0.13	<10	30	0.22	75	<1	0.09	1	50	2	<0.01	<2	<1
DH-1 (256 to 256.3)		<10	<1	0.68	20	90	0.58	374	1	0.30	14	480	8	0.01	<2	3
DH-1 (339.1 to 339.3)		10	<1	3.21	20	300	1.22	369	<1	1.24	24	510	12	0.03	<2	6
DH-1 (546 to 546.3)		<10	<1	0.69	20	40	0.79	298	1	0.31	14	480	10	0.01	<2	3
DH-1 (595.7 to 595.9)		<10	<1	0.15	<10	10	0.05	44	<1	0.14	<1	30	2	<0.01	<2	<1
DH-1 (768 to 768.3)		<10	<1	0.40	10	30	0.34	228	1	0.20	12	380	7	<0.01	<2	1
DH-1 (979 to 979.2)		<10	<1	0.39	20	30	0.34	269	1	0.16	10	460	9	<0.01	<2	2
DH-1 (1088.8 to 1089)		<10	<1	0.37	20	40	0.75	505	1	0.19	14	590	9	<0.01	3	2
DH-1 (1192.8 to 1193)		<10	<1	0.23	<10	40	0.11	64	<1	0.41	2	70	2	0.01	<2	1
DH-1 (1245 to 1245.3)		<10	<1	1.87	20	40	0.08	77	<1	1.13	1	70	4	0.02	<2	1
DH-1 (1357 to 1357.3)		<10	<1	0.58	20	30	0.72	610	2	0.25	22	1210	9	0.03	<2	4

***** See Appendix Page for comments regarding this certificate *****

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CANADA

Finalized Date: 5-MAY-2023
Account: GEOEPL

CERTIFICATE OF ANALYSIS RE23081962

Sample Description	Method	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41	ME-ICP41
	Analyte	Sr	Th	Ti	Tl	U	V	W	Zn
	Units	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOD	1	20	0.01	10	10	1	10	2
DH-1 (71.6 to 72)		187	<20	0.05	<10	<10	42	<10	70
DH-1 (189.6 to 190)		48	<20	0.02	<10	<10	3	<10	9
DH-1 (256 to 256.3)		212	<20	0.05	<10	<10	32	<10	43
DH-1 (339.1 to 339.3)		208	<20	0.08	<10	<10	73	<10	90
DH-1 (546 to 546.3)		85	<20	0.03	<10	<10	32	<10	42
DH-1 (595.7 to 595.9)		9	<20	<0.01	<10	<10	7	<10	7
DH-1 (768 to 768.3)		73	<20	0.03	<10	<10	21	<10	40
DH-1 (979 to 979.2)		116	<20	0.02	<10	<10	18	<10	34
DH-1 (1088.8 to 1089)		108	<20	0.02	<10	<10	19	<10	41
DH-1 (1192.8 to 1193)		22	<20	0.01	<10	<10	6	<10	12
DH-1 (1245 to 1245.3)		61	<20	0.02	<10	<10	4	<10	7
DH-1 (1357 to 1357.3)		142	<20	0.03	<10	<10	52	<10	61

***** See Appendix Page for comments regarding this certificate *****

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CANADA

Finalized Date: 5-MAY-2023
Account: GEOEPL

CERTIFICATE OF ANALYSIS RE23081962

CERTIFICATE COMMENTS

LABORATORY ADDRESSES

Processed at ALS Reno located at 4977 Energy Way, Reno, NV, USA.

Applies to Method:	LOG-22	SND-ALS	WEI-21	

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.

Applies to Method:	Li-OG63	ME-ICP41	ME-OG62o	PUL-31
	RST-21			

3/31/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23030586*

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 3/24/2023. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh
Project Manager

MckennaO@wetlaboratory.com
(775) 200-9876

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LAS VEGAS
3230 Polaris Ave. Suite 4
Las Vegas, Nevada 89102
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fax (702) 622-2868
EPA LAB ID: NV00932

Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 23030586

Specific Report Comments

None

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

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LAS VEGAS
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EPA LAB ID: NV00932

General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Per NDEP-BMRR requirements, the analyses conducted on an extract from a Humidity Cell Testing (HCT), or Meteoric Water Mobility Procedure (MWMP) are analyzed on a coarse filtered aliquot with the exception of Trace Metals, which are filtered through a 0.45 micron filte

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EPA LAB ID: NV00932

Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME/ACME*

Date Printed: 3/31/2023
OrderID: *23030586*

Customer Sample ID: DH-1A 1880-1840 **Collect Date/Time:** 3/19/2023 18:00
WETLAB Sample ID: 23030586-001 **Receive Date:** 3/24/2023 14:05

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Lithium	EPA 200.7	71	M	mg/L	25	2.5	3/29/2023	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W230328-6A			1		3/28/2023	NV00925

Customer Sample ID: DH-1A 1390-1430 **Collect Date/Time:** 3/23/2023 16:00
WETLAB Sample ID: 23030586-002 **Receive Date:** 3/24/2023 14:05

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Lithium	EPA 200.7	61		mg/L	25	2.5	3/29/2023	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W230328-6A			1		3/28/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Western Environmental Testing Laboratory
QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23031341	Blank 1	Lithium	EPA 200.7	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23031341	LCS 1	Lithium	EPA 200.7	1.04	1.00	104	mg/L

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC23031341	MS 1	Lithium	EPA 200.7	23030586-001	71.4	M	70.0	72.9	1	mg/L	NC	NC	NC

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

23030586

WETLAB WESTERN ENVIRONMENTAL TESTING LABORATORY *Specializing in Soil, Hazardous Waste and Water Analysis.*

475 E. Greg Street #119 | Sparks, Nevada 89431 | www.WETLaboratory.com
tel (775) 355-0202 | fax (775) 355-0817
1084 Lamoille Highway | Elko, Nevada 89801
tel (775) 777-9933 | fax (775) 777-9933
3230 Polaris Ave., Suite 4 | Las Vegas, Nevada 89102
tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. 23030584
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page ___ of ___

Client Confluence Water Resources, LLC
Address 14175 Saddlebow Dr.
City, State & Zip Reno, NV 89511
Contact Matt Banta
Phone 775-843-1908 | Collector's Name Matt Banta
Fax | PWS/Project Name ACME
P.O. Number | PWS/Project Number ACME
Email ashex@telus.net

Turnaround Time Requirements
Standard ☐
5 Day* (25%) ☑ | 72 Hour* (50%) ☐
48 Hour* (100%) ☐ | 24 Hour* (200%) ☐
*Surcharges Will Apply

Samples Collected From Which State? NV ☑ CA ☐ Other ☐
Compliance Monitoring? Yes ☐ No ☑
Report to Regulatory Agency? Yes ☐ No ☑
Report Results Via PDF ☐ EDD ☐ Other email
Standard QC Required? Yes ☑ No ☐

Billing Address (if different than Client Address)
Company GeoXplor Corp
Address 8-650 Clyde Ave
City, State & Zip West Vancouver, BC. Canada
Contact Clive Ashworth
Phone 1-604-908-9201 Fax
Email ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE*	SAMPLE TYPE**	NO. OF CONTAINERS	Total Lithium	~~Total Boron~~	Profile 2 w/o WAD	~~Dissolved Lithium~~	~~Specific Conductance~~	Density	Salinity	~~Profile 2 Metals-total~~	8-24-2023 MM		Spl. No.
DH-1A 1880-1840	3/19/23	1800	1,3,5	GW		✔	✔	✔	✔	✔	✔	✔	✔			
DH-1A 1390-1430	3/23/23	1600	1,3,5	GW		✔	✔	✔	✔	✔	✔	✔	✔			

2303 5
0586 2

Instructions/Comments/Special Requirements: Rush Turnaround Time Required for Lithium Only
Lithium split onto new order for Rush

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

***SAMPLE PRESERVATIVES:** 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
5.6°C	Y (N) None		3/24/23	2:05pm	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB initial

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB initial

WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB initial

301.2E

4/26/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23030584*

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 3/24/2023. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh — McKennaO@wetlaboratory.com
Project Manager — (775) 200-9876

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Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 23030584

Specific Report Comments

Due to a laboratory reanalysis requirement the analysis for Total Dissolved Solids (TDS) on sample 23030584-001 was performed past the EPA recommended holding time. We apologize for any inconvenience this may have caused.

Due to the sample matrix, it was necessary to analyze the following at a dilution. The reporting limits have been adjusted accordingly and may not meet NDEP-BMRR requirements. Lower reporting limits may not be possible for samples of this nature:

23030584-001, 002 - Most Parameters (due to sample matrix and high TDS)

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

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Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME/ACME*

Date Printed: 4/26/2023
OrderID: *23030584*

Customer Sample ID: DH-1A 1880-1840
WETLAB Sample ID: 23030584-001
Collect Date/Time: 3/19/2023 18:00
Receive Date: 3/24/2023 14:05

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Salinity (as Electrical Conductivity)	SM 2520B	86000		µmhos/cm	1	1.0	3/27/2023	NV00925
Density	Gravimetric	1.12		g/cubic cm	1	0.00400	4/6/2023	NV00925
Temperature at pH	SM 2550B	22		°C	1		3/31/2023	NV00925
pH	SM 4500-H+ B	7.43	HT	pH Units	1		3/31/2023	NV00925
Total Alkalinity	SM 2320B	130		mg/L as CaCO3	1	1.0	3/31/2023	NV00925
Bicarbonate (HCO3)	SM 2320B	130		mg/L as CaCO3	1	1.0	3/31/2023	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	3/31/2023	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	3/31/2023	NV00925
Total Nitrogen	Calc.	4.4		mg/L	1	0.50	4/11/2023	NV00925
Total Dissolved Solids (TDS)	SM 2540C	77000	HT	mg/L	1	25	4/21/2023	NV00925
Electrical Conductivity	SM 2510B	86000		µmhos/cm	1	4.0	3/27/2023	NV00925
Anions by Ion Chromatography								
Chloride	EPA 300.0	35000		mg/L	500	500	3/30/2023	NV00925
Fluoride	EPA 300.0	<50	U,D	mg/L	500	50	3/30/2023	NV00925
Sulfate	EPA 300.0	820		mg/L	500	750	3/30/2023	NV00925
Flow Injection Analyses								
Nitrate + Nitrite Nitrogen	EPA 353.2	<0.10		mg/L	5	0.10	4/11/2023	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	4.3		mg/L	1	0.40	4/3/2023	NV00925
Trace Metals by ICP-OES								
Aluminum	EPA 200.7	2.4	J	mg/L	50	1.0	3/30/2023	NV00925
Aluminum, Dissolved	EPA 200.7	<1.0	U,D	mg/L	50	1.0	3/30/2023	NV00925
Barium	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Barium, Dissolved	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Beryllium	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Beryllium, Dissolved	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Bismuth	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Bismuth, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Boron	EPA 200.7	16		mg/L	50	5.0	3/30/2023	NV00925
Boron, Dissolved	EPA 200.7	15		mg/L	50	5.0	3/30/2023	NV00925
Cadmium	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Cadmium, Dissolved	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Calcium	EPA 200.7	1600		mg/L	50	25	3/30/2023	NV00925
Calcium, Dissolved	EPA 200.7	1500		mg/L	50	25	3/30/2023	NV00925
Chromium	EPA 200.7	<0.050	U,D	mg/L	50	0.050	3/30/2023	NV00925
Chromium, Dissolved	EPA 200.7	<0.050	U,D	mg/L	50	0.050	3/30/2023	NV00925
Cobalt	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925
Cobalt, Dissolved	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: DH-1A 1880-1840 **Collect Date/Time:** 3/19/2023 18:00
WETLAB Sample ID: 23030584-001 **Receive Date:** 3/24/2023 14:05

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Copper	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Copper, Dissolved	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Gallium	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Gallium, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Iron	EPA 200.7	17		mg/L	50	5.0	3/30/2023	NV00925
Iron, Dissolved	EPA 200.7	7.7		mg/L	50	5.0	3/30/2023	NV00925
Lithium	EPA 200.7	77		mg/L	50	5.0	3/30/2023	NV00925
Lithium, Dissolved	EPA 200.7	72		mg/L	50	5.0	3/30/2023	NV00925
Magnesium	EPA 200.7	700		mg/L	50	25	3/30/2023	NV00925
Magnesium, Dissolved	EPA 200.7	670		mg/L	50	25	3/30/2023	NV00925
Manganese	EPA 200.7	2.5		mg/L	50	0.50	3/30/2023	NV00925
Manganese, Dissolved	EPA 200.7	2.4		mg/L	50	0.50	3/30/2023	NV00925
Molybdenum	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Molybdenum, Dissolved	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Nickel	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Nickel, Dissolved	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Phosphorus	EPA 200.7	<25	D	mg/L	50	25	3/30/2023	NV00925
Phosphorus, Dissolved	EPA 200.7	<25	D	mg/L	50	25	3/30/2023	NV00925
Potassium	EPA 200.7	350		mg/L	50	50	3/30/2023	NV00925
Potassium, Dissolved	EPA 200.7	340		mg/L	50	50	3/30/2023	NV00925
Scandium	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Scandium, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Silver	EPA 200.7	<0.10	U,D	mg/L	50	0.10	3/30/2023	NV00925
Silver, Dissolved	EPA 200.7	<0.10	U,D	mg/L	50	0.10	3/30/2023	NV00925
Sodium	EPA 200.7	20000		mg/L	50	75	3/30/2023	NV00925
Sodium, Dissolved	EPA 200.7	19000		mg/L	50	75	3/30/2023	NV00925
Strontium	EPA 200.7	73		mg/L	50	5.0	3/30/2023	NV00925
Strontium, Dissolved	EPA 200.7	70		mg/L	50	5.0	3/30/2023	NV00925
Tin	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Tin, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Titanium	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Titanium, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Vanadium	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925
Vanadium, Dissolved	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925
Zinc	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Zinc, Dissolved	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Trace Metals by ICP-MS								
Antimony	EPA 200.8	<0.025	U,D	mg/L	50	0.025	4/5/2023	NV00925
Antimony, Dissolved	EPA 200.8	<0.025	U,D	mg/L	50	0.025	4/5/2023	NV00925
Arsenic	EPA 200.8	<0.10	U,D	mg/L	50	0.10	4/5/2023	NV00925
Arsenic, Dissolved	EPA 200.8	0.10	J	mg/L	50	0.10	4/5/2023	NV00925
Lead	EPA 200.8	<0.050	U,D	mg/L	50	0.050	4/5/2023	NV00925
Lead, Dissolved	EPA 200.8	<0.050	U,D	mg/L	50	0.050	4/5/2023	NV00925
Selenium	EPA 200.8	<0.10	U,D	mg/L	50	0.10	4/5/2023	NV00925
Selenium, Dissolved	EPA 200.8	<0.10	U,D	mg/L	50	0.10	4/5/2023	NV00925
Thallium	EPA 200.8	<0.010	U,D	mg/L	50	0.010	4/5/2023	NV00925
Thallium, Dissolved	EPA 200.8	<0.010	U,D	mg/L	50	0.010	4/5/2023	NV00925
Mercury by CVAA								
Mercury	EPA 245.1	<0.00045		mg/L	1	0.00045	3/30/2023	NV00925
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	3/30/2023	NV00925

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Customer Sample ID: DH-1A 1880-1840
WETLAB Sample ID: 23030584-001
Collect Date/Time: 3/19/2023 18:00
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Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Ion Balance							
Anions	Calculation	1010	meq/L	1	0.100		NV00925
Cations	Calculation	966	meq/L	1	0.100		NV00925
Error	Calculation	2.10	%	1	1.00		NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230329-1A		1		3/29/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230329-1A		1		3/29/2023	NV00925

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Customer Sample ID: DH-1A 1390-1430 **Collect Date/Time:** 3/23/2023 16:00
WETLAB Sample ID: 23030584-002 **Receive Date:** 3/24/2023 14:05

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Salinity (as Electrical Conductivity)	SM 2520B	64000		µmhos/cm	1	1.0	3/27/2023	NV00925
Density	Gravimetric	0.951		g/cubic cm	1	0.00400	4/6/2023	NV00925
Temperature at pH	SM 2550B	21		°C	1		4/4/2023	NV00925
pH	SM 4500-H+ B	7.78	HT	pH Units	1		4/4/2023	NV00925
Total Alkalinity	SM 2320B	610		mg/L as CaCO3	1	1.0	4/4/2023	NV00925
Bicarbonate (HCO3)	SM 2320B	610		mg/L as CaCO3	1	1.0	4/4/2023	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	4/4/2023	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	4/4/2023	NV00925
Total Nitrogen	Calc.	<0.50		mg/L	1	0.50	4/11/2023	NV00925
Total Dissolved Solids (TDS)	SM 2540C	35000		mg/L	1	25	3/30/2023	NV00925
Electrical Conductivity	SM 2510B	64000		µmhos/cm	1	4.0	3/27/2023	NV00925
Anions by Ion Chromatography								
Chloride	EPA 300.0	24000		mg/L	200	200	3/30/2023	NV00925
Fluoride	EPA 300.0	<20	U,D	mg/L	200	20	3/30/2023	NV00925
Sulfate	EPA 300.0	660		mg/L	200	300	3/30/2023	NV00925
Flow Injection Analyses								
Nitrate + Nitrite Nitrogen	EPA 353.2	0.31		mg/L	5	0.10	4/11/2023	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	<0.40	M	mg/L	1	0.40	4/4/2023	NV00925
Trace Metals by ICP-OES								
Aluminum	EPA 200.7	<1.0	U,D	mg/L	50	1.0	3/30/2023	NV00925
Aluminum, Dissolved	EPA 200.7	<1.0	U,D	mg/L	50	1.0	3/30/2023	NV00925
Barium	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Barium, Dissolved	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Beryllium	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Beryllium, Dissolved	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Bismuth	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Bismuth, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Boron	EPA 200.7	26		mg/L	50	5.0	3/30/2023	NV00925
Boron, Dissolved	EPA 200.7	26		mg/L	50	5.0	3/30/2023	NV00925
Cadmium	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Cadmium, Dissolved	EPA 200.7	<0.020	U,D	mg/L	50	0.020	3/30/2023	NV00925
Calcium	EPA 200.7	310		mg/L	50	25	3/30/2023	NV00925
Calcium, Dissolved	EPA 200.7	300		mg/L	50	25	3/30/2023	NV00925
Chromium	EPA 200.7	<0.050	U,D	mg/L	50	0.050	3/30/2023	NV00925
Chromium, Dissolved	EPA 200.7	<0.050	U,D	mg/L	50	0.050	3/30/2023	NV00925
Cobalt	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925
Cobalt, Dissolved	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925
Copper	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Copper, Dissolved	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Gallium	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Gallium, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Iron	EPA 200.7	4.9	J	mg/L	50	2.0	3/30/2023	NV00925
Iron, Dissolved	EPA 200.7	2.9	J	mg/L	50	2.0	3/30/2023	NV00925
Lithium	EPA 200.7	64		mg/L	50	5.0	3/30/2023	NV00925
Lithium, Dissolved	EPA 200.7	62		mg/L	50	5.0	3/30/2023	NV00925
Magnesium	EPA 200.7	150		mg/L	50	25	3/30/2023	NV00925
Magnesium, Dissolved	EPA 200.7	150		mg/L	50	25	3/30/2023	NV00925
Manganese	EPA 200.7	1.0		mg/L	50	0.50	3/30/2023	NV00925

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Customer Sample ID: DH-1A 1390-1430 **Collect Date/Time:** 3/23/2023 16:00
WETLAB Sample ID: 23030584-002 **Receive Date:** 3/24/2023 14:05

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Manganese, Dissolved	EPA 200.7	0.96		mg/L	50	0.50	3/30/2023	NV00925
Molybdenum	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Molybdenum, Dissolved	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Nickel	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Nickel, Dissolved	EPA 200.7	<0.50	U,D	mg/L	50	0.50	3/30/2023	NV00925
Phosphorus	EPA 200.7	<25	D	mg/L	50	25	3/30/2023	NV00925
Phosphorus, Dissolved	EPA 200.7	<25	D	mg/L	50	25	3/30/2023	NV00925
Potassium	EPA 200.7	1400		mg/L	50	50	3/30/2023	NV00925
Potassium, Dissolved	EPA 200.7	1400		mg/L	50	50	3/30/2023	NV00925
Scandium	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Scandium, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Silver	EPA 200.7	<0.10	U,D	mg/L	50	0.10	3/30/2023	NV00925
Silver, Dissolved	EPA 200.7	<0.10	U,D	mg/L	50	0.10	3/30/2023	NV00925
Sodium	EPA 200.7	14000		mg/L	50	75	3/30/2023	NV00925
Sodium, Dissolved	EPA 200.7	14000		mg/L	50	75	3/30/2023	NV00925
Strontium	EPA 200.7	16		mg/L	50	5.0	3/30/2023	NV00925
Strontium, Dissolved	EPA 200.7	16		mg/L	50	5.0	3/30/2023	NV00925
Tin	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Tin, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Titanium	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Titanium, Dissolved	EPA 200.7	<5.0	D	mg/L	50	5.0	3/30/2023	NV00925
Vanadium	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925
Vanadium, Dissolved	EPA 200.7	<0.50	D	mg/L	50	0.50	3/30/2023	NV00925
Zinc	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Zinc, Dissolved	EPA 200.7	<1.0	D	mg/L	50	1.0	3/30/2023	NV00925
Trace Metals by ICP-MS								
Antimony	EPA 200.8	<0.025	U,D	mg/L	50	0.025	4/5/2023	NV00925
Antimony, Dissolved	EPA 200.8	<0.025	U,D	mg/L	50	0.025	4/5/2023	NV00925
Arsenic	EPA 200.8	0.14	J	mg/L	50	0.10	4/5/2023	NV00925
Arsenic, Dissolved	EPA 200.8	<0.10	U,D	mg/L	50	0.10	4/5/2023	NV00925
Lead	EPA 200.8	<0.050	U,D	mg/L	50	0.050	4/5/2023	NV00925
Lead, Dissolved	EPA 200.8	<0.050	U,D	mg/L	50	0.050	4/5/2023	NV00925
Selenium	EPA 200.8	<0.10	U,D	mg/L	50	0.10	4/5/2023	NV00925
Selenium, Dissolved	EPA 200.8	<0.10	U,D	mg/L	50	0.10	4/5/2023	NV00925
Thallium	EPA 200.8	<0.010	U,D	mg/L	50	0.010	4/5/2023	NV00925
Thallium, Dissolved	EPA 200.8	<0.010	U,D	mg/L	50	0.010	4/5/2023	NV00925
Mercury by CVAA								
Mercury	EPA 245.1	<0.00045		mg/L	1	0.00045	3/30/2023	NV00925
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	3/30/2023	NV00925
Ion Balance								
Anions	Calculation	703		meq/L	1	0.100		NV00925
Cations	Calculation	672		meq/L	1	0.100		NV00925
Error	Calculation	2.24		%	1	1.00		NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W230329-1A			1		3/29/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230329-1A			1		3/29/2023	NV00925

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Western Environmental Testing Laboratory
QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23031132	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC23031183	Blank 1	Electrical Conductivity	SM 2510B	ND			µmhos/cm
QC23031307	Blank 1	Mercury	EPA 245.1	ND			mg/L
QC23031340	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC23031374	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC23031377	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Bismuth, Dissolved	EPA 200.7	ND			mg/L
		Boron, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Calcium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Cobalt, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Gallium, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L
		Lithium, Dissolved	EPA 200.7	ND			mg/L
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L
		Molybdenum, Dissolved	EPA 200.7	ND			mg/L
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Phosphorus, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Scandium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
		Sodium, Dissolved	EPA 200.7	ND			mg/L
		Strontium, Dissolved	EPA 200.7	ND			mg/L
		Tin, Dissolved	EPA 200.7	ND			mg/L
		Titanium, Dissolved	EPA 200.7	ND			mg/L
		Vanadium, Dissolved	EPA 200.7	ND			mg/L
		Zinc, Dissolved	EPA 200.7	ND			mg/L
QC23040032	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC23040075	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC23040167	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L
QC23040358	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23031132	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	153	150	102	mg/L
QC23031132	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	144	150	96	mg/L
QC23031183	LCS 1	Electrical Conductivity	SM 2510B	1485	1412	105	µmhos/cm
QC23031307	LCS 1	Mercury	EPA 245.1	0.004440	0.005	89	mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23031340	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	139	150	93	mg/L
QC23031340	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	135	150	90	mg/L
QC23031374	LCS 1	Chloride	EPA 300.0	10.6	10.0	106	mg/L
		Fluoride	EPA 300.0	1.97	2.00	98	mg/L
		Sulfate	EPA 300.0	23.0	25.0	92	mg/L
QC23031377	LCS 1	Aluminum, Dissolved	EPA 200.7	0.947	1.00	95	mg/L
		Barium, Dissolved	EPA 200.7	0.942	1.00	94	mg/L
		Beryllium, Dissolved	EPA 200.7	0.921	1.00	92	mg/L
		Bismuth, Dissolved	EPA 200.7	0.860	1.00	86	mg/L
		Boron, Dissolved	EPA 200.7	0.914	1.00	91	mg/L
		Cadmium, Dissolved	EPA 200.7	0.960	1.00	96	mg/L
		Calcium, Dissolved	EPA 200.7	9.59	10.0	96	mg/L
		Chromium, Dissolved	EPA 200.7	0.962	1.00	96	mg/L
		Cobalt, Dissolved	EPA 200.7	0.963	1.00	96	mg/L
		Copper, Dissolved	EPA 200.7	4.80	5.00	96	mg/L
		Gallium, Dissolved	EPA 200.7	0.932	1.00	93	mg/L
		Iron, Dissolved	EPA 200.7	0.982	1.00	98	mg/L
		Lithium, Dissolved	EPA 200.7	0.996	1.00	100	mg/L
		Magnesium, Dissolved	EPA 200.7	9.47	10.0	95	mg/L
		Manganese, Dissolved	EPA 200.7	0.929	1.00	93	mg/L
		Molybdenum, Dissolved	EPA 200.7	0.969	1.00	97	mg/L
		Nickel, Dissolved	EPA 200.7	4.83	5.00	96	mg/L
		Phosphorus, Dissolved	EPA 200.7	4.88	5.00	98	mg/L
		Potassium, Dissolved	EPA 200.7	9.56	10.0	96	mg/L
		Scandium, Dissolved	EPA 200.7	0.951	1.00	95	mg/L
		Silver, Dissolved	EPA 200.7	0.084	0.090	93	mg/L
		Sodium, Dissolved	EPA 200.7	9.81	10.0	98	mg/L
		Strontium, Dissolved	EPA 200.7	0.962	1.00	96	mg/L
		Tin, Dissolved	EPA 200.7	0.975	1.00	98	mg/L
		Titanium, Dissolved	EPA 200.7	0.981	1.00	98	mg/L
		Vanadium, Dissolved	EPA 200.7	0.963	1.00	96	mg/L
		Zinc, Dissolved	EPA 200.7	0.971	1.00	97	mg/L
QC23031384	LCS 1	pH	SM 4500-H+ B	7.00	7.00	100	pH Units
QC23031385	LCS 1	Total Alkalinity	SM 2320B	104	100	104	mg/L
QC23040032	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	1.03	1.00	103	mg/L
QC23040075	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	0.944	1.00	94	mg/L
QC23040097	LCS 1	pH	SM 4500-H+ B	7.01	7.00	100	pH Units
QC23040097	LCS 2	pH	SM 4500-H+ B	7.03	7.00	100	pH Units
QC23040098	LCS 1	Total Alkalinity	SM 2320B	109	100	109	mg/L
QC23040098	LCS 2	Total Alkalinity	SM 2320B	108	100	108	mg/L
QC23040167	LCS 1	Antimony, Dissolved	EPA 200.8	0.0098	0.010	98	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0489	0.050	98	mg/L
		Lead, Dissolved	EPA 200.8	0.0103	0.010	103	mg/L
		Selenium, Dissolved	EPA 200.8	0.0464	0.050	93	mg/L
		Thallium, Dissolved	EPA 200.8	0.0090	0.010	90	mg/L
QC23040358	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	1.02	1.00	102	mg/L

QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result		Units	RPD
QC23031132	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	23030584-001	77100	26500	HT	mg/L	10 %
QC23031183	Duplicate 1	Electrical Conductivity	SM 2510B	23030546-001	66.0	67.0		µmhos/cm	2 %
QC23031340	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	23030569-011	423	453		mg/L	7 %

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QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result		Units	RPD
QC23031340	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	23030557-002	321	311		mg/L	3 %
QC23031384	Duplicate 1	pH	SM 4500-H+ B	23030575-004	8.18	8.19	HT	pH Units	<1%
QC23031384	Duplicate 2	pH	SM 4500-H+ B	23030569-010	7.7	7.73	HT	pH Units	<1%
QC23031385	Duplicate 1	Total Alkalinity	SM 2320B	23030575-004	114	114		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	23030575-004	114	114		mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	23030575-004	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23030575-004	<1.000	<1.000		mg/L as CaCO3	<1%
QC23031385	Duplicate 2	Total Alkalinity	SM 2320B	23030569-010	105	105		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	23030569-010	105	105		mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	23030569-010	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23030569-010	<1.000	<1.000		mg/L as CaCO3	<1%
QC23040097	Duplicate 1	pH	SM 4500-H+ B	23030696-001	7.72	7.72	HT	pH Units	<1%
QC23040097	Duplicate 2	pH	SM 4500-H+ B	23030710-001	7.68	7.65	HT	pH Units	<1%
QC23040098	Duplicate 1	Total Alkalinity	SM 2320B	23030696-001	153	153		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	23030696-001	153	153		mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	23030696-001	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23030696-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC23040098	Duplicate 2	Total Alkalinity	SM 2320B	23030710-001	90.3	90.8		mg/L as CaCO3	1 %
		Bicarbonate (HCO3)	SM 2320B	23030710-001	90.3	90.8		mg/L as CaCO3	1 %
		Carbonate (CO3)	SM 2320B	23030710-001	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23030710-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC23040098	Duplicate 3	Total Alkalinity	SM 2320B	23030565-008	133	134		mg/L as CaCO3	1 %
		Bicarbonate (HCO3)	SM 2320B	23030565-008	133	134		mg/L as CaCO3	1 %
		Carbonate (CO3)	SM 2320B	23030565-008	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23030565-008	<1.000	<1.000		mg/L as CaCO3	<1%
QC23040215	Duplicate 1	Density	Gravimetric	23030584-001	1.12	1.01		g/cubic cm	10 %

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result	MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC23031307	MS 1	Mercury	EPA 245.1	23030584-001	<0.000450	0.004560	0.004610	0.005	mg/L	91	92	1
QC23031374	MS 1	Chloride	EPA 300.0	23030610-001	<1.000	5.70	5.71	5	mg/L	111	111	<1
		Fluoride	EPA 300.0	23030610-001	<0.300	2.29	2.31	2	mg/L	106	107	<1
		Sulfate	EPA 300.0	23030610-001	29.6	39.2	39.4	10	mg/L	96	98	<1
QC23031377	MS 1	Aluminum, Dissolved	EPA 200.7	23030543-001	<0.050	0.905	0.926	1	mg/L	91	93	2
		Barium, Dissolved	EPA 200.7	23030543-001	0.034	0.963	0.964	1	mg/L	93	93	<1
		Beryllium, Dissolved	EPA 200.7	23030543-001	<0.001	0.921	0.936	1	mg/L	92	94	2
		Bismuth, Dissolved	EPA 200.7	23030543-001	<0.100	0.882	0.898	1	mg/L	91	92	2
		Boron, Dissolved	EPA 200.7	23030543-001	0.264	1.17	1.20	1	mg/L	91	93	2
		Cadmium, Dissolved	EPA 200.7	23030543-001	<0.001	0.940	0.952	1	mg/L	94	95	1
		Calcium, Dissolved	EPA 200.7	23030543-001	63.2	70.5	72.6	10	mg/L	73	94	3
		Chromium, Dissolved	EPA 200.7	23030543-001	<0.005	0.954	0.966	1	mg/L	95	96	1
		Cobalt, Dissolved	EPA 200.7	23030543-001	<0.010	0.937	0.949	1	mg/L	93	94	1
		Copper, Dissolved	EPA 200.7	23030543-001	<0.040	4.71	4.78	5	mg/L	94	96	2
		Gallium, Dissolved	EPA 200.7	23030543-001	<0.100	0.898	0.915	1	mg/L	90	91	2
		Iron, Dissolved	EPA 200.7	23030543-001	<0.100	0.971	0.987	1	mg/L	97	98	2
		Lithium, Dissolved	EPA 200.7	23030543-001	<0.100	1.05	1.06	1	mg/L	102	103	<1

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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EPA LAB ID: NV00932

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
		Magnesium, Dissolved	EPA 200.7	23030543-001	19.8		28.6	29.4	10	mg/L	88	96	3
		Manganese, Dissolved	EPA 200.7	23030543-001	<0.010		0.912	0.920	1	mg/L	91	92	<1
		Molybdenum, Dissolved	EPA 200.7	23030543-001	<0.020		0.984	0.991	1	mg/L	98	99	<1
		Nickel, Dissolved	EPA 200.7	23030543-001	<0.030		4.65	4.71	5	mg/L	93	94	1
		Phosphorus, Dissolved	EPA 200.7	23030543-001	<0.500		4.95	5.01	5	mg/L	99	100	1
		Potassium, Dissolved	EPA 200.7	23030543-001	3.08		12.9	13.1	10	mg/L	98	101	2
		Scandium, Dissolved	EPA 200.7	23030543-001	<0.100		0.950	0.960	1	mg/L	95	96	1
		Silver, Dissolved	EPA 200.7	23030543-001	<0.005		0.082	0.084	0.09	mg/L	91	93	2
		Sodium, Dissolved	EPA 200.7	23030543-001	70.2		78.7	81.0	10	mg/L	85	108	3
		Strontium, Dissolved	EPA 200.7	23030543-001	0.402		1.33	1.35	1	mg/L	92	95	2
		Tin, Dissolved	EPA 200.7	23030543-001	<0.100		0.966	0.976	1	mg/L	97	98	1
		Titanium, Dissolved	EPA 200.7	23030543-001	<0.100		0.993	0.994	1	mg/L	98	99	<1
		Vanadium, Dissolved	EPA 200.7	23030543-001	<0.010		0.976	0.983	1	mg/L	97	98	<1
		Zinc, Dissolved	EPA 200.7	23030543-001	<0.020		0.955	0.967	1	mg/L	96	97	1
QC23040032	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	23030575-001	<0.400	M	0.874	0.808	1	mg/L	NC	NC	NC
QC23040032	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	23030576-003	<0.400		0.961	0.913	1	mg/L	96	91	5
QC23040075	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	23030584-002	<0.400	M	0	0.096	1	mg/L	NC	NC	NC
QC23040075	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	23030642-001	115	M	101	105	1	mg/L	NC	NC	NC
QC23040167	MS 1	Antimony, Dissolved	EPA 200.8	23030543-001	<0.0025		0.0109	0.0112	0.01	mg/L	108	111	3
		Arsenic, Dissolved	EPA 200.8	23030543-001	0.0063		0.0632	0.0628	0.05	mg/L	114	113	<1
		Lead, Dissolved	EPA 200.8	23030543-001	<0.0025		0.0110	0.0109	0.01	mg/L	109	108	<1
		Selenium, Dissolved	EPA 200.8	23030543-001	<0.0050		0.0586	0.0577	0.05	mg/L	112	110	2
		Thallium, Dissolved	EPA 200.8	23030543-001	<0.0010		0.0095	0.0094	0.01	mg/L	94	93	1
QC23040358	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	23030610-001	<0.100		4.99	5.08	1	mg/L	100	102	2
QC23040358	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	23030624-005	3.56		8.47	8.38	1	mg/L	98	96	1

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WETLAB WESTERN ENVIRONMENTAL TESTING LABORATORY *Specializing in Soil, Hazardous Waste and Water Analysis.*

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WETLAB Order ID. 23030584
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page ____ of ____

Client Confluence Water Resources, LLC
Address 14175 Saddlebow Dr.
City, State & Zip Reno, NV 89511
Contact Matt Banta
Phone 775-843-1908 | Collector's Name Matt Banta
Fax | PWS/Project Name ACME
P.O. Number | PWS/Project Number ACME
Email ashex@telus.net

Turnaround Time Requirements
Standard [X]
5 Day* (25%) [✔] 3-24-23 | 72 Hour* (50%) [ ]
48 Hour* (100%) [ ] NOT | 24 Hour* (200%) [ ]
*Surcharges Will Apply

Samples Collected From Which State? NV [✔] CA [ ] Other [ ]
Compliance Monitoring? Yes [ ] No [✔]
Report to Regulatory Agency? Yes [ ] No [✔]
Report Results Via PDF [ ] EDD [ ] Other email
Standard QC Required? Yes [✔] No [ ]

Billing Address (if different than Client Address)
Company GeoXplor Corp
Address 8-650 Clyde Ave
City, State & Zip West Vancouver, BC. Canada
Contact Clive Ashworth
Phone 1-604-908-9201 Fax
Email ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE*	SAMPLE TYPE**	NO. OF CONTAINERS	Total Lithium (NOT)	Total Boron	Profile 2 w/o WAD	Dissolved Lithium	Specific Concuance	Density	Salinity	Profile 2 Metals-total			Spl. No.
DH-1A 1880-1840	3/19/23	1800	1,3,5	GW		✔	✔	✔	✔	✔	✔	✔	✔			
DH-1A 1390-1430	3/23/23	1600	1,3,5	GW		✔	✔	✔	✔	✔	✔	✔	✔			

2303 5
0584 2

Instructions/Comments/Special Requirements: Rush Turnaround Time Required for Lithium Only

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

***SAMPLE PRESERVATIVES:** 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
5.6 °C	Y (N) None		3/24/23	2:05PM	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB initial

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB initial

WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB initial

301.2E

6/21/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23060242*

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 6/8/2023. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh — MckennaO@wetlaboratory.com
Project Manager — (775) 200-9876

Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 23060242

Specific Report Comments

None

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

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General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Per NDEP-BMRR requirements, the analyses conducted on an extract from a Humidity Cell Testing (HCT), or Meteoric Water Mobility Procedure (MWMP) are analyzed on a coarse filtered aliquot with the exception of Trace Metals, which are filtered through a 0.45 micron filte

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Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax

Date Printed: 6/21/2023
OrderID: *23060242*

Customer Sample ID: TW-1
WETLAB Sample ID: 23060242-001
Collect Date/Time: 6/6/2023 17:00
Receive Date: 6/8/2023 12:00

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Lithium	EPA 200.7	110	mg/L	100	10	6/17/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230613-7A		1		6/13/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Western Environmental Testing Laboratory
QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23060897	Blank 1	Lithium	EPA 200.7	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23060897	LCS 1	Lithium	EPA 200.7	0.986	1.00	99	mg/L

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result	MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC23060897	MS 1	Lithium	EPA 200.7	23060088-001	0.437	1.45	1.49	1	mg/L	102	105	3

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. 23060242
Sparks ____
Elko ____
LV ____
Report Due Date ____
Page ____ of ____

Client: Confluence Water Resources
Address: 14175 Saddlebow Dr
City, State & Zip: Reno NV 89511
Contact: Matt Banta
Phone: 775-843-1908 | Collector's Name: M. Banta
Fax: | Project:
P.O. Number: | PWS Number:
Email: mbanta@confluencewaterresources.com

Turnaround Time Requirements
Standard ____ X Rush
5 Day* (25%) ____ 72 Hour* (50%) ____
48 Hour* (100%) ____ 24 Hour* (200%) ____
* Surcharges Will Apply

Sample Collected From Which State? NV X CA ____ OTHER ____
Compliance Monitoring? Yes (No)
Report to Regulatory Agency? Yes (No)
Report Results Via: (PDF) EDD — Email

Billing Address (if different than Client Address)
Company: GeoXplor Corp
Address: 8-650 Clyde Ave
City, State & Zip: West Vancouver BC CANADA
Contact: Clive Ashworth
Phone: 1-604-908-9201 Fax: ____
Email: ashex@telus.net

Analyses Requested: Total Lithium

2306 5
0242 1

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE*	SAMPLE MATRIX**	NO. OF CONTAINERS	Total Lithium	Spl. No.
TW-1	6/6/23	5:00pm	5	GW	1	X	

Instructions/Comments/Specail Requirements. Client was informed 5-day Rush was the fastest - cf 6/8/23

BR=Brine DW = Drinking Water GW = Ground Water HW = Hazardous Waste LE = Leachate LW = Liquid Waste MW = Monitor Well OI = Oil OS = Organic Solvent

Sample Matrix Key ** PL = Pit Lake PS = Process Solution SD = Solid SL = Sludge SO = Soil ST = Storm Water SW = Storm Water WW = Waste Water OT = Other/Unknown

***SAMPLE PRESERVATIVES:** 1=Unpreserved 2=H2S04 3= NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=NH4Cl 9=H3PO4

# of containers	Temp	On Ice	Custody Seal	DATE	TIME	Samples Relinquished By	Samples Received By
1	21.6 °C	Y / (N)	Y / (N)	6/8/23	12:00	[signature]	[signature]
	°C	Y / N	Y / N				
	°C	Y / N	Y / N				
	°C	Y / N	Y / N				

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample (s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB initial
To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB initial
WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details MB **initial**

10/18/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23070884*
Amended

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 7/31/2023. Additional comments are located on page 2 of this report.

This amended report has been generated to include additional analysis for Uranium on sample 23070884-001. If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh
Project Manager

McKennaO@wetlaboratory.com
(775) 200-9876

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Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 23070884   Amended

Specific Report Comments

Due to the sample matrix, it was necessary to analyze the following at a dilution. The reporting limits have been adjusted accordingly and may not meet NDEP-BMRR requirements. Lower reporting limits may not be possible for samples of this nature:
23070884-001 - Most Parameters (due to sample matrix and high TDS)

In general, when dealing with one sample, the result for any dissolved parameter should be lower than or equal to the result for the same parameter when analyzed as a total. However, this report contains data for the following samples/parameters where this is not the case:

23070884-001 - Thallium

WETLAB performed all original preparation, digestion and analysis in combined batches for all samples.

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

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General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Per NDEP-BMRR requirements, the analyses conducted on an extract from a Humidity Cell Testing (HCT), or Meteoric Water Mobility Procedure (MWMP) are analyzed on a coarse filtered aliquot with the exception of Trace Metals, which are filtered through a 0.45 micron filte

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Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME/ACME*

Date Printed: 10/18/2023
OrderID: *23070884*
Amended

Customer Sample ID: TW-1-1
WETLAB Sample ID: 23070884-001
Collect Date/Time: 7/29/2023 12:00
Receive Date: 7/31/2023 14:49

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Salinity (as Electrical Conductivity)	SM 2520B	88000		µmhos/cm	1	1.0	8/4/2023	NV00925
Density	Gravimetric	1.04		g/cubic cm	1	0.00400	8/1/2023	NV00925
pH	SM 4500-H+ B	7.62	HT	pH Units	1		8/1/2023	NV00925
Temperature at pH	SM 2550B	25		°C	1		8/1/2023	NV00925
Total Alkalinity	SM 2320B	370		mg/L as CaCO3	1	1.0	8/1/2023	NV00925
Bicarbonate (HCO3)	SM 2320B	370		mg/L as CaCO3	1	1.0	8/1/2023	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	8/1/2023	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	8/1/2023	NV00925
Total Nitrogen	Calc.	0.80		mg/L	1	0.50	8/18/2023	NV00925
Total Dissolved Solids (TDS)	SM 2540C	61000		mg/L	1	25	8/4/2023	NV00925
Electrical Conductivity	SM 2510B	88000		µmhos/cm	1	4.0	8/4/2023	NV00925
Anions by Ion Chromatography								
Chloride	EPA 300.0	37000		mg/L	1000	1000	8/14/2023	NV00925
Fluoride	EPA 300.0	<100	U,D	mg/L	1000	100	8/14/2023	NV00925
Sulfate	EPA 300.0	2200		mg/L	1000	1500	8/14/2023	NV00925
Flow Injection Analyses								
Nitrate + Nitrite Nitrogen	EPA 353.2	<0.10		mg/L	5	0.10	8/18/2023	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	0.80		mg/L	1	0.40	8/4/2023	NV00925
Trace Metals by ICP-OES								
Sulfur	EPA 200.7	630	B,M	mg/L	20	20	8/15/2023	NV00925
Aluminum	EPA 200.7	<1.0	U,D	mg/L	50	1.0	8/8/2023	NV00925
Aluminum, Dissolved	EPA 200.7	0.55	J	mg/L	20	0.50	8/8/2023	NV00925
Barium	EPA 200.7	<1.0	D	mg/L	50	1.0	8/8/2023	NV00925
Barium, Dissolved	EPA 200.7	<0.40	D	mg/L	20	0.40	8/8/2023	NV00925
Beryllium	EPA 200.7	0.027	J	mg/L	50	0.015	8/8/2023	NV00925
Beryllium, Dissolved	EPA 200.7	0.020	J	mg/L	20	0.010	8/8/2023	NV00925
Boron	EPA 200.7	33		mg/L	50	5.0	8/8/2023	NV00925
Cadmium	EPA 200.7	<0.020	U,D	mg/L	50	0.020	8/8/2023	NV00925
Cadmium, Dissolved	EPA 200.7	<0.010	U,D	mg/L	20	0.010	8/8/2023	NV00925
Calcium	EPA 200.7	680		mg/L	50	25	8/8/2023	NV00925
Calcium, Dissolved	EPA 200.7	650	M	mg/L	20	10	8/8/2023	NV00925
Chromium	EPA 200.7	<0.050	U,D	mg/L	50	0.050	8/8/2023	NV00925
Chromium, Dissolved	EPA 200.7	<0.020	U,D	mg/L	20	0.020	8/8/2023	NV00925
Copper	EPA 200.7	<0.30	U,D	mg/L	50	0.30	8/8/2023	NV00925
Copper, Dissolved	EPA 200.7	<0.15	U,D	mg/L	20	0.15	8/8/2023	NV00925
Iron	EPA 200.7	<2.0	U,D	mg/L	50	2.0	8/8/2023	NV00925
Iron, Dissolved	EPA 200.7	<1.0	U,D	mg/L	20	1.0	8/8/2023	NV00925

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Customer Sample ID: TW-1-1   **Collect Date/Time:** 7/29/2023 12:00
WETLAB Sample ID: 23070884-001   **Receive Date:** 7/31/2023 14:49

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Lithium	EPA 200.7	100		mg/L	50	5.0	8/8/2023	NV00925
Lithium, Dissolved	EPA 200.7	100	M	mg/L	20	2.0	8/8/2023	NV00925
Magnesium	EPA 200.7	450		mg/L	50	25	8/8/2023	NV00925
Magnesium, Dissolved	EPA 200.7	420	M	mg/L	20	10	8/8/2023	NV00925
Manganese	EPA 200.7	1.9		mg/L	50	0.50	8/8/2023	NV00925
Manganese, Dissolved	EPA 200.7	1.9		mg/L	20	0.20	8/8/2023	NV00925
Nickel	EPA 200.7	<0.50	U,D	mg/L	50	0.50	8/8/2023	NV00925
Nickel, Dissolved	EPA 200.7	<0.20	U,D	mg/L	20	0.20	8/8/2023	NV00925
Potassium	EPA 200.7	1900		mg/L	50	50	8/8/2023	NV00925
Potassium, Dissolved	EPA 200.7	1900	M	mg/L	20	20	8/8/2023	NV00925
Silver	EPA 200.7	<0.10	U,D	mg/L	50	0.10	8/8/2023	NV00925
Silica	EPA 200.7	36.7		mg/L	50	16.0	8/8/2023	NV00925
Silver, Dissolved	EPA 200.7	<0.050	U,D	mg/L	20	0.050	8/8/2023	NV00925
Sodium	EPA 200.7	22000		mg/L	50	75	8/8/2023	NV00925
Sodium, Dissolved	EPA 200.7	23000	M	mg/L	500	750	8/8/2023	NV00925
Zinc	EPA 200.7	1.5		mg/L	50	1.0	8/8/2023	NV00925
Zinc, Dissolved	EPA 200.7	1.5		mg/L	20	0.40	8/8/2023	NV00925
Trace Metals by ICP-MS								
Antimony	EPA 200.8	<0.025	U,D	mg/L	50	0.025	9/19/2023	NV00925
Antimony, Dissolved	EPA 200.8	<0.025	M,U,D	mg/L	50	0.025	8/14/2023	NV00925
Arsenic	EPA 200.8	0.11	J	mg/L	50	0.075	9/19/2023	NV00925
Arsenic, Dissolved	EPA 200.8	<0.075	M,U,D	mg/L	50	0.075	8/14/2023	NV00925
Lead	EPA 200.8	<0.050	U,D	mg/L	50	0.050	9/19/2023	NV00925
Lead, Dissolved	EPA 200.8	<0.050	M,U,D	mg/L	50	0.050	8/14/2023	NV00925
Selenium	EPA 200.8	<0.10	U,D	mg/L	50	0.10	9/19/2023	NV00925
Selenium, Dissolved	EPA 200.8	<0.10	M,U,D	mg/L	50	0.10	8/14/2023	NV00925
Thallium	EPA 200.8	<0.010	U,D	mg/L	50	0.010	9/19/2023	NV00925
Thallium, Dissolved	EPA 200.8	0.021	M,J	mg/L	50	0.010	8/14/2023	NV00925
Uranium	EPA 200.8	<0.050	U,D	mg/L	50	0.050	9/19/2023	NV00925
Mercury by CVAA								
Mercury	EPA 245.1	<0.00045		mg/L	1	0.00045	8/7/2023	NV00925
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	8/8/2023	NV00925
Ion Balance								
Anions	Calculation	1100		meq/L	1	0.100		NV00925
Cations	Calculation	1120		meq/L	1	0.100		NV00925
Error	Calculation	<1.00		%	1	1.00		NV00925
Sample Preparation								
Trace Metals Digestion (Sulfur)	EPA 200.2	W230802-2A			1		8/2/2023	NV00925
Trace Metals Digestion	EPA 200.2	W230802-3A			1		8/2/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230803-3A			1		8/3/2023	NV00925
Filter_Preserve HNO3	N/A	Complete			1		8/1/2023	NV00925

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Customer Sample ID: TW-1-2
WETLAB Sample ID: 23070884-002
Collect Date/Time: 7/30/2023 12:00
Receive Date: 7/31/2023 14:49

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Boron	EPA 200.7	32	M	mg/L	50	5.0	8/8/2023	NV00925
Lithium	EPA 200.7	100	M	mg/L	50	5.0	8/8/2023	NV00925
Lithium, Dissolved	EPA 200.7	100		mg/L	20	2.0	8/8/2023	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W230802-3A			1		8/2/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230803-3A			1		8/3/2023	NV00925
Filter_Preserve HNO3	N/A	Complete			1		8/1/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Western Environmental Testing Laboratory
QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080389	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC23080408	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC23080422	Blank 1	Electrical Conductivity	SM 2510B	ND			µmhos/cm
QC23080470	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L
QC23080545	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L
QC23080570	Blank 1	Aluminum	EPA 200.7	ND			mg/L
		Barium	EPA 200.7	ND			mg/L
		Beryllium	EPA 200.7	ND			mg/L
		Boron	EPA 200.7	ND			mg/L
		Cadmium	EPA 200.7	ND			mg/L
		Calcium	EPA 200.7	ND			mg/L
		Chromium	EPA 200.7	ND			mg/L
		Copper	EPA 200.7	ND			mg/L
		Iron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
		Magnesium	EPA 200.7	ND			mg/L
		Manganese	EPA 200.7	ND			mg/L
		Nickel	EPA 200.7	ND			mg/L
		Potassium	EPA 200.7	ND			mg/L
		Silica	EPA 200.7	ND			mg/L
		Silver	EPA 200.7	ND			mg/L
		Sodium	EPA 200.7	ND			mg/L
		Zinc	EPA 200.7	ND			mg/L
QC23080638	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Calcium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L
		Lithium, Dissolved	EPA 200.7	ND			mg/L
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
		Sodium, Dissolved	EPA 200.7	ND			mg/L
		Zinc, Dissolved	EPA 200.7	ND			mg/L
QC23080876	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC23080928	Blank 1	Sulfur	EPA 200.7	3.7			mg/L
QC23080952	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23081121	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC23090669	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L
		Uranium, Dissolved	EPA 200.8	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080095	LCS 1	pH	SM 4500-H+ B	6.95	7.00	99	pH Units
QC23080095	LCS 2	pH	SM 4500-H+ B	6.94	7.00	99	pH Units
QC23080096	LCS 1	Total Alkalinity	SM 2320B	99.5	100	100	mg/L
QC23080096	LCS 2	Total Alkalinity	SM 2320B	100	100	100	mg/L
QC23080389	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	0.926	1.00	93	mg/L
QC23080408	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	146	150	97	mg/L
QC23080408	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	142	150	95	mg/L
QC23080422	LCS 1	Electrical Conductivity	SM 2510B	1417	1412	100	µmhos/cm
QC23080470	LCS 1	Mercury, Dissolved	EPA 245.1	0.005230	0.005	105	mg/L
QC23080545	LCS 1	Mercury, Dissolved	EPA 245.1	0.005450	0.005	109	mg/L
QC23080570	LCS 1	Aluminum	EPA 200.7	1.04	1.00	104	mg/L
		Barium	EPA 200.7	1.02	1.00	102	mg/L
		Beryllium	EPA 200.7	1.04	1.00	104	mg/L
		Boron	EPA 200.7	1.03	1.00	103	mg/L
		Cadmium	EPA 200.7	1.05	1.00	105	mg/L
		Calcium	EPA 200.7	10.4	10.0	104	mg/L
		Chromium	EPA 200.7	1.04	1.00	104	mg/L
		Copper	EPA 200.7	5.24	5.00	105	mg/L
		Iron	EPA 200.7	1.04	1.00	104	mg/L
		Lithium	EPA 200.7	1.04	1.00	104	mg/L
		Magnesium	EPA 200.7	10.4	10.0	104	mg/L
		Manganese	EPA 200.7	1.04	1.00	104	mg/L
		Nickel	EPA 200.7	5.20	5.00	104	mg/L
		Potassium	EPA 200.7	10.4	10.0	104	mg/L
		Silica	EPA 200.7	22.0	21.4	103	mg/L
		Silver	EPA 200.7	0.094	0.090	105	mg/L
		Sodium	EPA 200.7	10.2	10.0	102	mg/L
		Zinc	EPA 200.7	1.03	1.00	103	mg/L
QC23080638	LCS 1	Aluminum, Dissolved	EPA 200.7	1.05	1.00	106	mg/L
		Barium, Dissolved	EPA 200.7	1.04	1.00	104	mg/L
		Beryllium, Dissolved	EPA 200.7	1.04	1.00	104	mg/L
		Cadmium, Dissolved	EPA 200.7	1.03	1.00	103	mg/L
		Calcium, Dissolved	EPA 200.7	10.5	10.0	104	mg/L
		Chromium, Dissolved	EPA 200.7	1.04	1.00	104	mg/L
		Copper, Dissolved	EPA 200.7	5.22	5.00	104	mg/L
		Iron, Dissolved	EPA 200.7	1.04	1.00	104	mg/L
		Lithium, Dissolved	EPA 200.7	1.04	1.00	104	mg/L
		Magnesium, Dissolved	EPA 200.7	10.3	10.0	103	mg/L
		Manganese, Dissolved	EPA 200.7	1.04	1.00	104	mg/L
		Nickel, Dissolved	EPA 200.7	5.17	5.00	104	mg/L
		Potassium, Dissolved	EPA 200.7	10.3	10.0	103	mg/L
		Silver, Dissolved	EPA 200.7	0.093	0.090	103	mg/L
		Sodium, Dissolved	EPA 200.7	10.5	10.0	105	mg/L
		Zinc, Dissolved	EPA 200.7	1.03	1.00	103	mg/L

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tel (775) 777-9933
fax (775) 777-9933
EPA LAB ID: NV00926

LAS VEGAS
3230 Polaris Ave. Suite 4
Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080876	LCS 1	Chloride	EPA 300.0	10.2	10.0	102	mg/L
		Fluoride	EPA 300.0	2.17	2.00	109	mg/L
		Sulfate	EPA 300.0	25.6	25.0	102	mg/L
QC23080928	LCS 1	Sulfur	EPA 200.7	10.7	10.0	108	mg/L
QC23080952	LCS 1	Antimony, Dissolved	EPA 200.8	0.0095	0.010	95	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0479	0.050	96	mg/L
		Lead, Dissolved	EPA 200.8	0.0098	0.010	98	mg/L
		Selenium, Dissolved	EPA 200.8	0.0476	0.050	95	mg/L
		Thallium, Dissolved	EPA 200.8	0.0096	0.010	96	mg/L
QC23081121	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	0.954	1.00	95	mg/L
QC23090669	LCS 1	Antimony, Dissolved	EPA 200.8	0.0098	0.010	98	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0480	0.050	96	mg/L
		Lead, Dissolved	EPA 200.8	0.0105	0.010	105	mg/L
		Selenium, Dissolved	EPA 200.8	0.0500	0.050	100	mg/L
		Thallium, Dissolved	EPA 200.8	0.0097	0.010	97	mg/L
		Uranium, Dissolved	EPA 200.8	0.0102	0.010	102	mg/L

QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result		Units	RPD
QC23080041	Duplicate 1	Density	Gravimetric	23070884-001	1.04	1.04		g/cubic cm	<1%
QC23080095	Duplicate 1	pH	SM 4500-H+ B	23070839-008	7.95	7.95	HT	pH Units	<1%
QC23080095	Duplicate 2	pH	SM 4500-H+ B	23070841-002	7.73	7.73	HT	pH Units	<1%
QC23080095	Duplicate 3	pH	SM 4500-H+ B	23070884-001	7.62	7.66	HT	pH Units	1 %
QC23080096	Duplicate 1	Total Alkalinity	SM 2320B	23070839-008	294	294		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	23070839-008	294	294		mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	23070839-008	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23070839-008	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080096	Duplicate 2	Total Alkalinity	SM 2320B	23070841-002	29.5	29.2		mg/L as CaCO3	1 %
		Bicarbonate (HCO3)	SM 2320B	23070841-002	29.5	29.2		mg/L as CaCO3	1 %
		Carbonate (CO3)	SM 2320B	23070841-002	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23070841-002	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080096	Duplicate 3	Total Alkalinity	SM 2320B	23070884-001	369	370		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	23070884-001	369	370		mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	23070884-001	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23070884-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080408	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	23070856-001	429	469		mg/L	9 %
QC23080408	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	23080037-003	272	294		mg/L	8 %
QC23080422	Duplicate 1	Electrical Conductivity	SM 2510B	23080110-001	105	110		µmhos/cm	5 %
QC23080422	Duplicate 2	Electrical Conductivity	SM 2510B	23080111-004	121	114		µmhos/cm	6 %

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC23080389	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	23070654-001	<0.400	M	0.768	0.728	1	mg/L	NC	NC	NC
QC23080389	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	23070658-002	<0.400		1.000	0.861	1	mg/L	92	78	15
QC23080470	MS 1	Mercury, Dissolved	EPA 245.1	23070654-001	<0.000450		0.005510	0.005660	0.005	mg/L	110	113	3
QC23080545	MS 1	Mercury, Dissolved	EPA 245.1	23070611-001	<0.000450		0.005830	0.005840	0.005	mg/L	117	117	<1
QC23080570	MS 1	Aluminum	EPA 200.7	23070884-002	<2.500	D	1.83	1.85	1	mg/L	90	92	1
		Barium	EPA 200.7	23070884-002	<1.000	D	1.20	1.16	1	mg/L	110	106	3

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
		Beryllium	EPA 200.7	23070884-002	<0.050	D	1.25	1.21	1	mg/L	123	119	3
		Boron	EPA 200.7	23070884-002	32.1	M	34.6	34.5	1	mg/L	NC	NC	NC
		Cadmium	EPA 200.7	23070884-002	<0.050	D	1.17	1.14	1	mg/L	118	115	3
		Calcium	EPA 200.7	23070884-002	666	M	700	699	10	mg/L	NC	NC	NC
		Chromium	EPA 200.7	23070884-002	<0.250	D	1.15	1.11	1	mg/L	116	112	4
		Copper	EPA 200.7	23070884-002	<2.000	D	6.08	5.85	5	mg/L	120	116	4
		Iron	EPA 200.7	23070884-002	<5.000	D	1.88	2.11	1	mg/L	89	112	12
		Lithium	EPA 200.7	23070884-002	101	M	105	106	1	mg/L	NC	NC	NC
		Magnesium	EPA 200.7	23070884-002	437	M	465	463	10	mg/L	NC	NC	NC
		Manganese	EPA 200.7	23070884-002	1.89		3.13	3.09	1	mg/L	123	120	1
		Nickel	EPA 200.7	23070884-002	<1.500	D	5.75	5.55	5	mg/L	115	111	4
		Potassium	EPA 200.7	23070884-002	1880	M	1977	1963	10	mg/L	NC	NC	NC
		Silica	EPA 200.7	23070884-002	38.5		63.5	62.3	21.4	mg/L	117	111	2
		Silver	EPA 200.7	23070884-002	<0.250	M,D	0.124	0.092	0.09	mg/L	NC	NC	NC
		Sodium	EPA 200.7	23070884-002	22120	M	22814	22735	10	mg/L	NC	NC	NC
		Zinc	EPA 200.7	23070884-002	1.25		2.45	2.40	1	mg/L	120	115	2
QC23080638	MS 1	Aluminum, Dissolved	EPA 200.7	23070884-001	0.553	J	1.43	1.33	1	mg/L	87	78	7
		Barium, Dissolved	EPA 200.7	23070884-001	<0.400	D	1.08	1.11	1	mg/L	98	100	3
		Beryllium, Dissolved	EPA 200.7	23070884-001	0.020	J	1.17	1.19	1	mg/L	115	117	2
		Cadmium, Dissolved	EPA 200.7	23070884-001	<0.010	U,D	1.03	1.03	1	mg/L	103	103	<1
		Calcium, Dissolved	EPA 200.7	23070884-001	650	M	642	665	10	mg/L	NC	NC	NC
		Chromium, Dissolved	EPA 200.7	23070884-001	<0.020	U,D	1.03	1.02	1	mg/L	103	102	1
		Copper, Dissolved	EPA 200.7	23070884-001	<0.150	U,D	5.52	5.64	5	mg/L	109	112	2
		Iron, Dissolved	EPA 200.7	23070884-001	<1.000	U,D	1.30	1.33	1	mg/L	126	129	2
		Lithium, Dissolved	EPA 200.7	23070884-001	101	M	105	114	1	mg/L	NC	NC	NC
		Magnesium, Dissolved	EPA 200.7	23070884-001	418	M	415	429	10	mg/L	NC	NC	NC
		Manganese, Dissolved	EPA 200.7	23070884-001	1.88		2.87	2.93	1	mg/L	99	105	2
		Nickel, Dissolved	EPA 200.7	23070884-001	<0.200	U,D	5.06	5.01	5	mg/L	101	100	1
		Potassium, Dissolved	EPA 200.7	23070884-001	1939	M	1941	2062	10	mg/L	NC	NC	NC
		Silver, Dissolved	EPA 200.7	23070884-001	<0.050	U,D	0.089	0.087	0.09	mg/L	112	109	2
		Sodium, Dissolved	EPA 200.7	23070884-001	23091	M	23072	26862	10	mg/L	NC	NC	NC
		Zinc, Dissolved	EPA 200.7	23070884-001	1.50		2.45	2.46	1	mg/L	94	96	<1
QC23080876	MS 1	Chloride	EPA 300.0	23080038-002	8.11		13.6	13.5	5	mg/L	110	107	<1
		Fluoride	EPA 300.0	23080038-002	<0.300	M	2.57	2.55	2	mg/L	NC	NC	NC
		Sulfate	EPA 300.0	23080038-002	44.3		54.9	53.9	10	mg/L	106	95	2
QC23080876	MS 2	Chloride	EPA 300.0	23080038-001	14.0		18.7	19.2	5	mg/L	94	104	3
		Fluoride	EPA 300.0	23080038-001	<0.300		2.48	2.57	2	mg/L	118	123	4
		Sulfate	EPA 300.0	23080038-001	48.3	M	56.1	58.5	10	mg/L	NC	NC	NC
QC23080928	MS 1	Sulfur	EPA 200.7	23070884-001	632	B,M	648	701	10	mg/L	NC	NC	NC
QC23080952	MS 1	Antimony, Dissolved	EPA 200.8	23070884-001	<0.0250	M,U	0.01785	0.01985	0.01	mg/L	NC	NC	NC
		Arsenic, Dissolved	EPA 200.8	23070884-001	<0.0750	M,U	0.0883	0.0244	0.05	mg/L	NC	NC	NC
		Lead, Dissolved	EPA 200.8	23070884-001	<0.0500	M,U	0.02485	0.02745	0.01	mg/L	NC	NC	NC
		Selenium, Dissolved	EPA 200.8	23070884-001	<0.1000	M,U	0.02575	0	0.05	mg/L	NC	NC	NC
		Thallium, Dissolved	EPA 200.8	23070884-001	0.0213	M,J	0.0368	0.0390	0.01	mg/L	NC	NC	NC
QC23081121	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	23070840-002	0.336		4.68	4.69	1	mg/L	91	91	<1
QC23081121	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	23080037-002	<0.100		4.51	4.53	1	mg/L	90	90	<1
QC23090669	MS 1	Antimony, Dissolved	EPA 200.8	23090228-001	<0.0025		0.0107	0.0107	0.01	mg/L	100	101	<1
		Arsenic, Dissolved	EPA 200.8	23090228-001	0.0264		0.0770	0.0793	0.05	mg/L	101	106	3
		Lead, Dissolved	EPA 200.8	23090228-001	<0.0025		0.0094	0.0091	0.01	mg/L	91	89	3
		Selenium, Dissolved	EPA 200.8	23090228-001	<0.0050		0.0501	0.0520	0.05	mg/L	95	99	4
		Thallium, Dissolved	EPA 200.8	23090228-001	<0.0010		0.0090	0.0087	0.01	mg/L	89	86	3
		Uranium, Dissolved	EPA 200.8	23090228-001	<0.0050		0.0133	0.0127	0.01	mg/L	99	93	5

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY *Specializing in Soil, Hazardous Waste and Water Analysis.*

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WETLAB Order ID. 2307-0884
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page ___ of ___

Client Confluence Water Resources, LLC
Address 14175 Saddlebow Dr.
City, State & Zip Reno, NV 89511
Contact Matt Banta
Phone 775-843-1908 | Collector's Name Matt Banta
Fax | PWS/Project Name ACME
P.O. Number | PWS/Project Number ACME
Email ashex@telus.net

Turnaround Time Requirements
Standard ☐ | 5 Day* (25%) ☑ | 72 Hour* (50%) ☐ | 48 Hour* (100%) ☐ | 24 Hour* (200%) ☐
*Surcharges Will Apply

Samples Collected From Which State? NV ☑ CA ☐ Other ☐
Compliance Monitoring? Yes ☐ No ☑
Report to Regulatory Agency? Yes ☐ No ☑
Report Results Via: PDF ☐ EDD ☐ Other email
Standard QC Required? Yes ☑ No ☐

Billing Address (if different than Client Address)
Company GeoXplor Corp
Address 8-650 Clyde Ave
City, State & Zip West Vancouver, BC, Canada
Contact Clive Ashworth
Phone 1-604-908-9201 Fax
Email ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE *	SAMPLE TYPE **	NO. OF CONTAINERS	Total Lithium	Total Boron	Dissolved Lithium	Profile 1 w/o WAD	Specific Conductance	Density	Salinity	Total Metals	Silica	Sulfur	Spl. No.
TW-1-1	7/29/23	12:00	1,3,5	GW		✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
TW-1-2	7/30/23	12:00	5	GW		✔	✔	✔								

Instructions/Comments/Special Requirements: ***Rush Turnaround Time Required for Lithium, Silica, Sulfur****
*Rush on Li

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

*SAMPLE PRESERVATIVES: 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
19.8 °C	Y N None	8	7/31/23	2:49	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB initial
To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB initial
WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB initial

301.2E

10/5/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23080142*

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 8/3/2023. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh
Project Manager

MckennaO@wetlaboratory.com
(775) 200-9876

Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 23080142

Specific Report Comments

Due to the sample matrix, it was necessary to analyze the following at a dilution. The reporting limits have been adjusted accordingly and may not meet NDEP-BMRR requirements. Lower reporting limits may not be possible for samples of this nature:

23080142-004 - Most Parameters (due to sample matrix and high TDS)

In general, when dealing with one sample, the result for any dissolved parameter should be lower than or equal to the result for the same parameter when analyzed as a total. However, this report contains data for the following samples/parameters where this is not the case:

23080142-004 - Lithium, Magnesium

WETLAB performed all original preparation, digestion and analysis in combined batches for all samples.

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

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General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Per NDEP-BMRR requirements, the analyses conducted on an extract from a Humidity Cell Testing (HCT), or Meteoric Water Mobility Procedure (MWMP) are analyzed on a coarse filtered aliquot with the exception of Trace Metals, which are filtered through a 0.45 micron filte

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Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME*

Date Printed: 10/5/2023
OrderID: *23080142*

Customer Sample ID: TW-1-3
WETLAB Sample ID: 23080142-001
Collect Date/Time: 7/31/2023 12:00
Receive Date: 8/3/2023 14:46

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	30	mg/L	20	2.0	8/15/2023	NV00925
Lithium	EPA 200.7	88	mg/L	20	2.0	8/15/2023	NV00925
Lithium, Dissolved	EPA 200.7	92	mg/L	20	2.0	8/15/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230808-4B		1		8/8/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230809-3A		1		8/9/2023	NV00925
Filter_Preserve HNO3	N/A	Complete		1		8/3/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Las Vegas, Nevada 89102
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EPA LAB ID: NV00932

Customer Sample ID: TW-1-4
WETLAB Sample ID: 23080142-002

Collect Date/Time: 8/1/2023 12:00
Receive Date: 8/3/2023 14:46

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	31	mg/L	20	2.0	8/15/2023	NV00925
Lithium	EPA 200.7	87	mg/L	20	2.0	8/15/2023	NV00925
Lithium, Dissolved	EPA 200.7	89	mg/L	20	2.0	8/15/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230808-4B		1		8/8/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230809-3A		1		8/9/2023	NV00925
Filter_Preserve HNO3	N/A	Complete		1		8/3/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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fax (702) 622-2868
EPA LAB ID: NV00932

Customer Sample ID: TW-1-5 **Collect Date/Time:** 8/2/2023 12:00

WETLAB Sample ID: 23080142-003 **Receive Date:** 8/3/2023 14:46

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	29	mg/L	1	0.10	8/11/2023	NV00925
Lithium	EPA 200.7	88	mg/L	1	0.10	8/11/2023	NV00925
Lithium, Dissolved	EPA 200.7	83	mg/L	20	2.0	8/15/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230808-6A		1		8/8/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230809-3A		1		8/9/2023	NV00925
Filter_Preserve HNO3	N/A	Complete		1		8/3/2023	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: TW-1 8/2/22 @ 12 **Collect Date/Time:** 8/2/2023 12:00
WETLAB Sample ID: 23080142-004 **Receive Date:** 8/3/2023 14:46

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Salinity (as Electrical Conductivity)	SM 2520B	88000		µmhos/cm	1	4.0	8/4/2023	NV00925
Density	Gravimetric	1.05		g/cubic cm	1	0.00400	8/14/2023	NV00925
Temperature at pH	SM 2550B	25		°C	1		8/4/2023	NV00925
pH	SM 4500-H+ B	7.69	HT	pH Units	1		8/4/2023	NV00925
Total Alkalinity	SM 2320B	380		mg/L as CaCO3	1	1.0	8/4/2023	NV00925
Bicarbonate (HCO3)	SM 2320B	380		mg/L as CaCO3	1	1.0	8/4/2023	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	8/4/2023	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	8/4/2023	NV00925
Total Nitrogen	Calc.	<0.50		mg/L	1	0.50	8/18/2023	NV00925
Total Dissolved Solids (TDS)	SM 2540C	58000		mg/L	1	25	8/9/2023	NV00925
Electrical Conductivity	SM 2510B	88000		µmhos/cm	1	4.0	8/4/2023	NV00925
Anions by Ion Chromatography								
Chloride	EPA 300.0	34000		mg/L	1000	1000	8/15/2023	NV00925
Fluoride	EPA 300.0	<10	U,D	mg/L	100	10	8/15/2023	NV00925
Sulfate	EPA 300.0	1700		mg/L	1000	1500	8/15/2023	NV00925
Flow Injection Analyses								
Nitrate + Nitrite Nitrogen	EPA 353.2	<0.10		mg/L	5	0.10	8/18/2023	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	<0.40		mg/L	1	0.40	8/9/2023	NV00925
Trace Metals by ICP-OES								
Sulfur	EPA 200.7	660	M	mg/L	25	25	8/15/2023	NV00925
Aluminum	EPA 200.7	<0.10	D	mg/L	2	0.10	8/31/2023	NV00925
Aluminum, Dissolved	EPA 200.7	<0.10	D	mg/L	2	0.10	10/3/2023	NV00925
Barium	EPA 200.7	0.074		mg/L	2	0.040	8/31/2023	NV00925
Barium, Dissolved	EPA 200.7	0.082		mg/L	2	0.040	10/3/2023	NV00925
Beryllium	EPA 200.7	<0.0020	D	mg/L	2	0.0020	8/31/2023	NV00925
Beryllium, Dissolved	EPA 200.7	<0.0020	D	mg/L	2	0.0020	10/3/2023	NV00925
Boron	EPA 200.7	30		mg/L	50	5.0	9/6/2023	NV00925
Cadmium	EPA 200.7	<0.0020	D	mg/L	2	0.0020	8/31/2023	NV00925
Cadmium, Dissolved	EPA 200.7	<0.0020	D	mg/L	2	0.0020	10/3/2023	NV00925
Calcium	EPA 200.7	590		mg/L	25	12	8/30/2023	NV00925
Calcium, Dissolved	EPA 200.7	640		mg/L	100	50	10/3/2023	NV00925
Chromium	EPA 200.7	<0.010	D	mg/L	2	0.010	8/31/2023	NV00925
Chromium, Dissolved	EPA 200.7	<0.010	D	mg/L	2	0.010	10/3/2023	NV00925
Copper	EPA 200.7	<0.080	D	mg/L	2	0.080	8/31/2023	NV00925
Copper, Dissolved	EPA 200.7	<0.080	D	mg/L	2	0.080	10/3/2023	NV00925
Iron	EPA 200.7	0.45		mg/L	2	0.20	8/31/2023	NV00925
Iron, Dissolved	EPA 200.7	<0.20	D	mg/L	2	0.20	10/3/2023	NV00925
Lithium	EPA 200.7	88		mg/L	50	5.0	9/6/2023	NV00925
Lithium, Dissolved	EPA 200.7	110		mg/L	2	0.20	10/3/2023	NV00925
Magnesium	EPA 200.7	290		mg/L	2	1.0	8/31/2023	NV00925
Magnesium, Dissolved	EPA 200.7	370		mg/L	2	1.0	10/3/2023	NV00925
Manganese	EPA 200.7	1.4		mg/L	2	0.020	8/31/2023	NV00925
Manganese, Dissolved	EPA 200.7	1.6		mg/L	2	0.020	10/3/2023	NV00925
Nickel	EPA 200.7	<0.050	U,D	mg/L	2	0.050	8/31/2023	NV00925
Nickel, Dissolved	EPA 200.7	<0.050	U,D	mg/L	2	0.050	10/3/2023	NV00925
Potassium	EPA 200.7	1600		mg/L	50	50	9/6/2023	NV00925
Potassium, Dissolved	EPA 200.7	1800		mg/L	2	2.0	10/3/2023	NV00925
Silver	EPA 200.7	<0.010	D	mg/L	2	0.010	8/31/2023	NV00925

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Customer Sample ID: TW-1 8/2/22 @ 12 **Collect Date/Time:** 8/2/2023 12:00
WETLAB Sample ID: 23080142-004 **Receive Date:** 8/3/2023 14:46

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Silica	EPA 200.7	31.9		mg/L	25	8.00	8/30/2023	NV00925
Silver, Dissolved	EPA 200.7	<0.010	D	mg/L	2	0.010	10/3/2023	NV00925
Sodium	EPA 200.7	20000		mg/L	500	750	8/30/2023	NV00925
Sodium, Dissolved	EPA 200.7	20000		mg/L	100	150	10/3/2023	NV00925
Zinc	EPA 200.7	1.1		mg/L	25	0.50	8/30/2023	NV00925
Zinc, Dissolved	EPA 200.7	1.0		mg/L	2	0.040	10/3/2023	NV00925
Trace Metals by ICP-MS								
Antimony	EPA 200.8	<0.025	U,D	mg/L	50	0.025	9/25/2023	NV00925
Antimony, Dissolved	EPA 200.8	<0.025	U,D	mg/L	50	0.025	9/21/2023	NV00925
Arsenic	EPA 200.8	0.16	J	mg/L	50	0.075	9/25/2023	NV00925
Arsenic, Dissolved	EPA 200.8	<0.075	U,D	mg/L	50	0.075	9/21/2023	NV00925
Lead	EPA 200.8	<0.050	U,D	mg/L	50	0.050	9/25/2023	NV00925
Lead, Dissolved	EPA 200.8	<0.050	U,D	mg/L	50	0.050	9/21/2023	NV00925
Selenium	EPA 200.8	<0.10	U,D	mg/L	50	0.10	9/25/2023	NV00925
Selenium, Dissolved	EPA 200.8	<0.10	U,D	mg/L	50	0.10	9/21/2023	NV00925
Thallium	EPA 200.8	<0.010	U,D	mg/L	50	0.010	9/25/2023	NV00925
Thallium, Dissolved	EPA 200.8	<0.010	U,D	mg/L	50	0.010	9/21/2023	NV00925
Uranium	EPA 200.8	<0.050	U,D	mg/L	50	0.050	9/25/2023	NV00925
Uranium, Dissolved	EPA 200.8	<0.050	U,D	mg/L	50	0.050	9/21/2023	NV00925
Mercury by CVAA								
Mercury	EPA 245.1	<0.00045		mg/L	1	0.00045	8/9/2023	NV00925
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	8/9/2023	NV00925
Ion Balance								
Anions	Calculation	1000		meq/L	1	0.100		NV00925
Cations	Calculation	1010		meq/L	1	0.100		NV00925
Error	Calculation	<1.00		%	1	1.00		NV00925
Sample Preparation								
Trace Metals Digestion (Sulfur)	EPA 200.2	W230808-1A			1		8/8/2023	NV00925
Trace Metals Digestion	EPA 200.2	W230808-6A			1		8/8/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230809-3A			1		8/9/2023	NV00925
Filter_Preserve HNO3	N/A	Complete			1		8/3/2023	NV00925

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Western Environmental Testing Laboratory
QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080422	Blank 1	Electrical Conductivity	SM 2510B	ND			µmhos/cm
QC23080590	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC23080593	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC23080619	Blank 1	Mercury	EPA 245.1	ND			mg/L
QC23080922	Blank 1	Boron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
QC23080929	Blank 1	Sulfur	EPA 200.7	ND			mg/L
QC23080976	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC23080987	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Calcium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L
		Lithium, Dissolved	EPA 200.7	ND			mg/L
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
		Sodium, Dissolved	EPA 200.7	ND			mg/L
		Zinc, Dissolved	EPA 200.7	ND			mg/L
QC23080988	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Boron, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L
		Lithium, Dissolved	EPA 200.7	ND			mg/L
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
QC23081124	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC23081651	Blank 1	Calcium, Dissolved	EPA 200.7	ND			mg/L
QC23081652	Blank 1	Sodium, Dissolved	EPA 200.7	ND			mg/L
QC23081655	Blank 1	Silica, Dissolved	EPA 200.7	ND			mg/L
QC23081656	Blank 1	Zinc, Dissolved	EPA 200.7	ND			mg/L
QC23090403	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L
		Uranium, Dissolved	EPA 200.8	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080422	LCS 1	Electrical Conductivity	SM 2510B	1417	1412	100	µmhos/cm
QC23080461	LCS 1	pH	SM 4500-H+ B	6.94	7.00	99	pH Units
QC23080461	LCS 2	pH	SM 4500-H+ B	6.91	7.00	99	pH Units
QC23080462	LCS 1	Total Alkalinity	SM 2320B	102	100	102	mg/L
QC23080462	LCS 2	Total Alkalinity	SM 2320B	101	100	101	mg/L
QC23080590	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	149	150	99	mg/L
QC23080590	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	148	150	99	mg/L
QC23080593	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	1.03	1.00	103	mg/L
QC23080619	LCS 1	Mercury	EPA 245.1	0.005160	0.005	103	mg/L
QC23080922	LCS 1	Boron	EPA 200.7	0.976	1.00	98	mg/L
		Lithium	EPA 200.7	0.963	1.00	96	mg/L
QC23080929	LCS 1	Sulfur	EPA 200.7	10.8	10.0	108	mg/L
QC23080976	LCS 1	Chloride	EPA 300.0	9.94	10.0	99	mg/L
		Fluoride	EPA 300.0	2.17	2.00	109	mg/L
		Sulfate	EPA 300.0	25.8	25.0	103	mg/L
QC23080987	LCS 1	Aluminum, Dissolved	EPA 200.7	1.02	1.00	102	mg/L
		Barium, Dissolved	EPA 200.7	1.02	1.00	102	mg/L
		Beryllium, Dissolved	EPA 200.7	1.01	1.00	101	mg/L
		Cadmium, Dissolved	EPA 200.7	1.02	1.00	102	mg/L
		Calcium, Dissolved	EPA 200.7	10.2	10.0	102	mg/L
		Chromium, Dissolved	EPA 200.7	1.01	1.00	101	mg/L
		Copper, Dissolved	EPA 200.7	5.11	5.00	102	mg/L
		Iron, Dissolved	EPA 200.7	1.02	1.00	102	mg/L
		Lithium, Dissolved	EPA 200.7	1.01	1.00	101	mg/L
		Magnesium, Dissolved	EPA 200.7	10.1	10.0	101	mg/L
		Manganese, Dissolved	EPA 200.7	1.00	1.00	100	mg/L
		Nickel, Dissolved	EPA 200.7	5.08	5.00	102	mg/L
		Potassium, Dissolved	EPA 200.7	9.92	10.0	99	mg/L
		Silver, Dissolved	EPA 200.7	0.094	0.090	104	mg/L
		Sodium, Dissolved	EPA 200.7	10.2	10.0	102	mg/L
		Zinc, Dissolved	EPA 200.7	1.01	1.00	101	mg/L
QC23080988	LCS 1	Aluminum, Dissolved	EPA 200.7	0.915	1.00	92	mg/L
		Barium, Dissolved	EPA 200.7	0.926	1.00	93	mg/L
		Beryllium, Dissolved	EPA 200.7	0.927	1.00	93	mg/L
		Boron, Dissolved	EPA 200.7	0.956	1.00	96	mg/L
		Cadmium, Dissolved	EPA 200.7	0.922	1.00	92	mg/L
		Chromium, Dissolved	EPA 200.7	0.926	1.00	93	mg/L
		Copper, Dissolved	EPA 200.7	4.65	5.00	93	mg/L
		Iron, Dissolved	EPA 200.7	0.883	1.00	88	mg/L
		Lithium, Dissolved	EPA 200.7	0.881	1.00	88	mg/L
		Magnesium, Dissolved	EPA 200.7	9.37	10.0	94	mg/L
		Manganese, Dissolved	EPA 200.7	0.966	1.00	97	mg/L
		Nickel, Dissolved	EPA 200.7	4.60	5.00	92	mg/L
		Potassium, Dissolved	EPA 200.7	9.34	10.0	93	mg/L
		Silver, Dissolved	EPA 200.7	0.088	0.090	97	mg/L
QC23081124	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	0.952	1.00	95	mg/L
QC23081651	LCS 1	Calcium, Dissolved	EPA 200.7	10.5	10.0	105	mg/L
QC23081652	LCS 1	Sodium, Dissolved	EPA 200.7	10.3	10.0	103	mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23081655	LCS 1	Silica, Dissolved	EPA 200.7	20.9	21.4	98	mg/L
QC23081656	LCS 1	Zinc, Dissolved	EPA 200.7	1.03	1.00	103	mg/L
QC23090403	LCS 1	Antimony, Dissolved	EPA 200.8	0.0099	0.010	99	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0508	0.050	102	mg/L
		Lead, Dissolved	EPA 200.8	0.0104	0.010	104	mg/L
		Selenium, Dissolved	EPA 200.8	0.0493	0.050	99	mg/L
		Thallium, Dissolved	EPA 200.8	0.0100	0.010	100	mg/L
		Uranium, Dissolved	EPA 200.8	0.0102	0.010	102	mg/L

QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result		Units	RPD
QC23080422	Duplicate 1	Electrical Conductivity	SM 2510B	23080110-001	105	110		µmhos/cm	5 %
QC23080422	Duplicate 2	Electrical Conductivity	SM 2510B	23080111-004	121	114		µmhos/cm	6 %
QC23080461	Duplicate 1	pH	SM 4500-H+ B	23070727-001	7.4	7.43	HT	pH Units	<1%
QC23080461	Duplicate 2	pH	SM 4500-H+ B	23080096-006	8.14	8.18	HT	pH Units	<1%
QC23080461	Duplicate 3	pH	SM 4500-H+ B	23080159-001	7.73	7.80	HT	pH Units	1 %
QC23080462	Duplicate 1	Total Alkalinity	SM 2320B	23070727-001	364	355		mg/L as CaCO3	2 %
		Bicarbonate (HCO3)	SM 2320B	23070727-001	364	355		mg/L as CaCO3	2 %
		Carbonate (CO3)	SM 2320B	23070727-001	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23070727-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080462	Duplicate 2	Total Alkalinity	SM 2320B	23080096-006	182	177		mg/L as CaCO3	3 %
		Bicarbonate (HCO3)	SM 2320B	23080096-006	182	177		mg/L as CaCO3	3 %
		Carbonate (CO3)	SM 2320B	23080096-006	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23080096-006	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080462	Duplicate 3	Total Alkalinity	SM 2320B	23080159-001	38.8	38.5		mg/L as CaCO3	1 %
		Bicarbonate (HCO3)	SM 2320B	23080159-001	38.8	38.5		mg/L as CaCO3	1 %
		Carbonate (CO3)	SM 2320B	23080159-001	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23080159-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080590	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	23080063-001	123	133		mg/L	8 %
QC23080590	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	23080138-003	262	281		mg/L	7 %
QC23080861	Duplicate 1	Density	Gravimetric	23080142-004	1.05	1.04		g/cubic cm	1 %

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC23080593	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	23080136-001	1.87	M	1.05	1.45	1	mg/L	NC	NC	NC
QC23080593	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	23070849-008	<0.400	M	0.736	0.860	1	mg/L	NC	NC	NC
QC23080619	MS 1	Mercury	EPA 245.1	23070532-002	<0.000450		0.005180	0.005130	0.005	mg/L	104	103	1
QC23080922	MS 1	Boron	EPA 200.7	23080116-011	0.130		1.11	1.10	1	mg/L	98	97	<1
		Lithium	EPA 200.7	23080116-011	<0.100		0.959	0.969	1	mg/L	95	96	1
QC23080929	MS 1	Sulfur	EPA 200.7	23080142-004	663	M	706	660	10	mg/L	NC	NC	NC
QC23080976	MS 1	Chloride	EPA 300.0	23080106-001	16.4		21.5	21.4	5	mg/L	102	100	<1
		Fluoride	EPA 300.0	23080106-001	0.473		2.73	2.71	2	mg/L	113	112	<1
		Sulfate	EPA 300.0	23080106-001	45.1		54.8	54.7	10	mg/L	97	95	<1
QC23080976	MS 2	Chloride	EPA 300.0	23080106-002	17.8		22.9	22.7	5	mg/L	101	98	<1
		Fluoride	EPA 300.0	23080106-002	0.754		2.98	2.93	2	mg/L	111	109	2
		Sulfate	EPA 300.0	23080106-002	59.6		69.0	68.8	10	mg/L	94	91	<1
QC23080987	MS 1	Aluminum, Dissolved	EPA 200.7	23080204-001	<0.050		0.950	1.01	1	mg/L	95	101	6
		Barium, Dissolved	EPA 200.7	23080204-001	0.098		1.10	1.12	1	mg/L	100	102	2

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
		Beryllium, Dissolved	EPA 200.7	23080204-001	<0.001		1.02	1.03	1	mg/L	102	103	1
		Cadmium, Dissolved	EPA 200.7	23080204-001	0.003		1.04	1.01	1	mg/L	104	101	3
		Calcium, Dissolved	EPA 200.7	23080204-001	21.2		32.8	31.0	10	mg/L	116	98	6
		Chromium, Dissolved	EPA 200.7	23080204-001	<0.005		0.985	1.01	1	mg/L	98	101	2
		Copper, Dissolved	EPA 200.7	23080204-001	0.171		5.48	5.32	5	mg/L	106	103	3
		Iron, Dissolved	EPA 200.7	23080204-001	<0.100		1.02	1.09	1	mg/L	97	104	7
		Lithium, Dissolved	EPA 200.7	23080204-001	<0.100	M	1.01	1.04	1	mg/L	NC	NC	NC
		Magnesium, Dissolved	EPA 200.7	23080204-001	2.43		13.0	12.4	10	mg/L	106	100	5
		Manganese, Dissolved	EPA 200.7	23080204-001	0.408		1.40	1.38	1	mg/L	99	97	1
		Nickel, Dissolved	EPA 200.7	23080204-001	<0.030		5.08	5.05	5	mg/L	102	101	<1
		Potassium, Dissolved	EPA 200.7	23080204-001	9.89		19.6	19.8	10	mg/L	97	99	1
		Silver, Dissolved	EPA 200.7	23080204-001	<0.005		0.101	0.095	0.09	mg/L	109	103	6
		Sodium, Dissolved	EPA 200.7	23080204-001	11.0		21.2	21.4	10	mg/L	102	103	<1
		Zinc, Dissolved	EPA 200.7	23080204-001	0.045		1.00	1.05	1	mg/L	96	100	5
QC23080988	MS 1	Aluminum, Dissolved	EPA 200.7	23080136-001	<0.050		0.783	0.783	1	mg/L	76	76	<1
		Barium, Dissolved	EPA 200.7	23080136-001	0.020	M	0.500	0.438	1	mg/L	NC	NC	NC
		Beryllium, Dissolved	EPA 200.7	23080136-001	<0.001		0.971	0.966	1	mg/L	97	97	<1
		Boron, Dissolved	EPA 200.7	23080136-001	1.60		2.53	2.56	1	mg/L	92	96	1
		Cadmium, Dissolved	EPA 200.7	23080136-001	<0.001		0.876	0.882	1	mg/L	88	88	<1
		Chromium, Dissolved	EPA 200.7	23080136-001	0.009		0.893	0.892	1	mg/L	88	88	<1
		Copper, Dissolved	EPA 200.7	23080136-001	<0.040		4.09	4.12	5	mg/L	81	82	<1
		Iron, Dissolved	EPA 200.7	23080136-001	<0.100		0.877	0.884	1	mg/L	86	87	<1
		Lithium, Dissolved	EPA 200.7	23080136-001	0.230		1.21	1.23	1	mg/L	98	100	2
		Magnesium, Dissolved	EPA 200.7	23080136-001	68.5		77.8	79.6	10	mg/L	94	111	2
		Manganese, Dissolved	EPA 200.7	23080136-001	0.065		1.03	1.03	1	mg/L	96	97	<1
		Nickel, Dissolved	EPA 200.7	23080136-001	<0.030		4.24	4.24	5	mg/L	85	85	<1
		Potassium, Dissolved	EPA 200.7	23080136-001	11.1		23.3	23.6	10	mg/L	122	125	1
		Silver, Dissolved	EPA 200.7	23080136-001	<0.005		0.087	0.087	0.09	mg/L	97	98	<1
QC23081124	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	23080160-001	2.27		6.89	6.92	1	mg/L	92	93	<1
QC23081124	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	23070879-001	<0.100		4.64	4.67	1	mg/L	91	92	<1
QC23081651	MS 1	Calcium, Dissolved	EPA 200.7	23080136-002	143	M	163	150	10	mg/L	NC	NC	NC
QC23081652	MS 1	Sodium, Dissolved	EPA 200.7	23080136-002	800	M	919	799	10	mg/L	NC	NC	NC
QC23081655	MS 1	Silica, Dissolved	EPA 200.7	23080136-002	44.6	M	76.5	63.7	21.4	mg/L	NC	NC	NC
QC23081656	MS 1	Zinc, Dissolved	EPA 200.7	23080136-002	<0.040	D	1.000	1.02	1	mg/L	100	102	2
QC23090403	MS 1	Antimony, Dissolved	EPA 200.8	23080159-001	<0.0025		0.0101	0.0101	0.01	mg/L	98	98	<1
		Arsenic, Dissolved	EPA 200.8	23080159-001	<0.0050		0.0506	0.0505	0.05	mg/L	97	96	<1
		Lead, Dissolved	EPA 200.8	23080159-001	<0.0025		0.0102	0.0099	0.01	mg/L	95	92	3
		Selenium, Dissolved	EPA 200.8	23080159-001	<0.0050		0.0501	0.0513	0.05	mg/L	96	98	2
		Thallium, Dissolved	EPA 200.8	23080159-001	0.0015		0.0098	0.0095	0.01	mg/L	83	80	3
		Uranium, Dissolved	EPA 200.8	23080159-001	<0.0050		0.0103	0.0099	0.01	mg/L	101	97	4

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WETLAB WESTERN ENVIRONMENTAL TESTING LABORATORY *Specializing in Soil, Hazardous Waste and Water Analysis.*
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tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. 2308042
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page ___ of ___

Client Confluence Water Resources, LLC
Address 14175 Saddlebow Dr.
City, State & Zip Reno, NV 89511
Contact Matt Banta
Phone 775-843-1908 | Collector's Name Matt Banta
Fax | PWS/Project Name ACME
P.O. Number | PWS/Project Number ACME
Email ashex@telus.net

Turnaround Time Requirements
Standard ☐
5 Day* (25%) ☑ 72 Hour* (50%) ☐
48 Hour* (100%) ☐ 24 Hour* (200%) ☐
*Surcharges Will Apply

Samples Collected From Which State? NV ☑ CA ☐ Other ☐
Compliance Monitoring? Yes ☐ No ☑
Report to Regulatory Agency? Yes ☐ No ☑
Report Results Via PDF ☐ EDD ☐ Other email
Standard QC Required? Yes ☑ No ☐

Billing Address (if different than Client Address)
Company GeoXplor Corp
Address 8-650 Clyde Ave
City, State & Zip West Vancouver, BC, Canada
Contact Clive Ashworth
Phone 1-604-908-9201 Fax
Email ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE *	SAMPLE TYPE **	NO. OF CONTAINERS	Total Lithium	Total Boron	Dissolved Lithium	Profile 1 w/o WAD	Specific Conductance	Density	Salinity	Total Metals	Silica	Sulfur	Spl. No.
TW-1-3	7/31/23	12:00	5	GW		✓	✓	✓								
TW-1-4	8/1/23	12:00	5	GW		✓	✓	✓								
TW-1-5	8/2/23	12:00	5			✓	✓	✓								
TW-1 8/2/22 @ 12:00	8/2/23	12:00	1,3,5			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

2308 1
0142 4

Instructions/Comments/Special Requirements: ***Rush Turnaround Time Required for Lithium, Silica, Sulfur****
Please Filter for Dissolved Metals Profile 1

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

***SAMPLE PRESERVATIVES:** 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
10.9°C	Y N None		8/3/23	14:46	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB ______ initial
To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB ______ initial
WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB ______ initial 301.2E

10/26/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23080275*
Amended

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 8/9/2023. Additional comments are located on page 2 of this report.

This amended report has been generated to include additional analysis for Uranium on sample 23080275-005 per client request. If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh
Project Manager
McKennaO@wetlaboratory.com
(775) 200-9876

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Western Environmental Testing Laboratory
Report Comments

Specific Report Comments

Due to the sample matrix, it was necessary to analyze the following at a dilution. The reporting limits have been adjusted accordingly and may not meet NDEP-BMRR requirements. Lower reporting limits may not be possible for samples of this nature:

23080275-005 - Most Parameters (due to sample matrix and high TDS)

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

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General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Per NDEP-BMRR requirements, the analyses conducted on an extract from a Humidity Cell Testing (HCT), or Meteoric Water Mobility Procedure (MWMP) are analyzed on a coarse filtered aliquot with the exception of Trace Metals, which are filtered through a 0.45 micron filte

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Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME*

Date Printed: 10/26/2023
OrderID: *23080275*
Amended

Customer Sample ID: TW-1-6
WETLAB Sample ID: 23080275-001
Collect Date/Time: 8/3/2023 12:00
Receive Date: 8/9/2023 12:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	30	mg/L	50	5.0	8/23/2023	NV00925
Lithium	EPA 200.7	97	mg/L	50	5.0	8/23/2023	NV00925
Lithium, Dissolved	EPA 200.7	97	mg/L	50	5.0	8/23/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230815-3A		1		8/15/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230815-3A		1		8/15/2023	NV00925
Filter_Preserve HNO3	N/A	Complete		1		8/11/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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fax (702) 622-2868
EPA LAB ID: NV00932

Customer Sample ID: TW-1-7   **Collect Date/Time:** 8/4/2023 12:00
WETLAB Sample ID: 23080275-002   **Receive Date:** 8/9/2023 12:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	30	mg/L	50	5.0	8/23/2023	NV00925
Lithium	EPA 200.7	100	mg/L	50	5.0	8/23/2023	NV00925
Lithium, Dissolved	EPA 200.7	97	mg/L	50	5.0	8/23/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230815-3A		1		8/15/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230815-3A		1		8/15/2023	NV00925
Filter_Preserve HNO3	N/A	Complete		1		8/11/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: TW-1-8 **Collect Date/Time:** 8/5/2023 12:00
WETLAB Sample ID: 23080275-003 **Receive Date:** 8/9/2023 12:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	31	mg/L	50	5.0	8/23/2023	NV00925
Lithium	EPA 200.7	100	mg/L	50	5.0	8/23/2023	NV00925
Lithium, Dissolved	EPA 200.7	98	mg/L	50	5.0	8/23/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230815-3A		1		8/15/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230815-3A		1		8/15/2023	NV00925
Filter_Preserve HNO3	N/A	Complete		1		8/11/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

Customer Sample ID: TW-1-9 **Collect Date/Time:** 8/6/2023 12:00
WETLAB Sample ID: 23080275-004 **Receive Date:** 8/9/2023 12:37

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES								
Boron	EPA 200.7	31	M	mg/L	50	5.0	8/23/2023	NV00925
Lithium	EPA 200.7	100	M	mg/L	50	5.0	8/23/2023	NV00925
Lithium, Dissolved	EPA 200.7	99		mg/L	50	5.0	8/23/2023	NV00925
Sample Preparation								
Trace Metals Digestion	EPA 200.2	W230815-3B			1		8/15/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230815-3B			1		8/15/2023	NV00925
Filter_Preserve HNO3	N/A	Complete			1		8/11/2023	NV00925

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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Customer Sample ID: TW-1-10
WETLAB Sample ID: 23080275-005
Collect Date/Time: 8/7/2023 11:00
Receive Date: 8/9/2023 12:37

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
General Chemistry								
Density	Gravimetric	1.03		g/cubic cm	1	0.00400	8/14/2023	NV00925
Temperature at pH	SM 2550B	25		°C	1		8/11/2023	NV00925
pH	SM 4500-H+ B	7.24	HT	pH Units	1		8/11/2023	NV00925
WAD Cyanide	SM 4500CN I, E	<0.010		mg/L	1	0.010	8/11/2023	NV00925
Total Alkalinity	SM 2320B	370		mg/L as CaCO3	1	1.0	8/11/2023	NV00925
Bicarbonate (HCO3)	SM 2320B	370		mg/L as CaCO3	1	1.0	8/11/2023	NV00925
Carbonate (CO3)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	8/11/2023	NV00925
Hydroxide (OH)	SM 2320B	<1.0		mg/L as CaCO3	1	1.0	8/11/2023	NV00925
Total Nitrogen	Calc.	1.0		mg/L	1	0.50	8/23/2023	NV00925
Total Dissolved Solids (TDS)	SM 2540C	58000		mg/L	1	25	8/11/2023	NV00925
Electrical Conductivity	SM 2510B	88000		µmhos/cm	1	4.0	8/11/2023	NV00925
Anions by Ion Chromatography								
Chloride	EPA 300.0	30000		mg/L	1000	1000	8/15/2023	NV00925
Fluoride	EPA 300.0	<50	U,D	mg/L	500	50	8/15/2023	NV00925
Sulfate	EPA 300.0	9700		mg/L	500	750	8/15/2023	NV00925
Flow Injection Analyses								
Nitrate + Nitrite Nitrogen	EPA 353.2	<0.10		mg/L	5	0.10	8/23/2023	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	1.0		mg/L	1	0.40	8/17/2023	NV00925
Trace Metals by ICP-OES								
Sulfur	EPA 200.7	620	M	mg/L	10	10	8/22/2023	NV00925
Aluminum	EPA 200.7	<1.0	U,D	mg/L	50	1.0	8/23/2023	NV00925
Aluminum, Dissolved	EPA 200.7	<1.0	U,D	mg/L	50	1.0	8/23/2023	NV00925
Barium	EPA 200.7	<1.0	D	mg/L	50	1.0	8/23/2023	NV00925
Barium, Dissolved	EPA 200.7	<1.0	D	mg/L	50	1.0	8/23/2023	NV00925
Beryllium	EPA 200.7	0.018	J	mg/L	50	0.015	8/23/2023	NV00925
Beryllium, Dissolved	EPA 200.7	0.022	J	mg/L	50	0.015	8/23/2023	NV00925
Boron	EPA 200.7	30		mg/L	50	5.0	8/23/2023	NV00925
Cadmium	EPA 200.7	<0.020	U,D	mg/L	50	0.020	8/23/2023	NV00925
Cadmium, Dissolved	EPA 200.7	<0.020	U,D	mg/L	50	0.020	8/23/2023	NV00925
Calcium	EPA 200.7	580		mg/L	50	25	8/23/2023	NV00925
Calcium, Dissolved	EPA 200.7	570		mg/L	50	25	8/23/2023	NV00925
Chromium	EPA 200.7	<0.050	U,D	mg/L	50	0.050	8/23/2023	NV00925
Chromium, Dissolved	EPA 200.7	<0.050	U,D	mg/L	50	0.050	8/23/2023	NV00925
Copper	EPA 200.7	<0.50	U,D	mg/L	50	0.50	8/23/2023	NV00925
Copper, Dissolved	EPA 200.7	<0.50	U,D	mg/L	50	0.50	8/23/2023	NV00925
Iron	EPA 200.7	<2.0	U,D	mg/L	50	2.0	8/23/2023	NV00925
Iron, Dissolved	EPA 200.7	<2.0	U,D	mg/L	50	2.0	8/23/2023	NV00925
Lithium	EPA 200.7	91		mg/L	50	5.0	8/23/2023	NV00925
Lithium, Dissolved	EPA 200.7	94		mg/L	50	5.0	8/23/2023	NV00925
Magnesium	EPA 200.7	380		mg/L	50	25	8/23/2023	NV00925
Magnesium, Dissolved	EPA 200.7	380		mg/L	50	25	8/23/2023	NV00925
Manganese	EPA 200.7	1.7		mg/L	50	0.50	8/23/2023	NV00925
Manganese, Dissolved	EPA 200.7	1.6		mg/L	50	0.50	8/23/2023	NV00925
Nickel	EPA 200.7	<0.50	U,D	mg/L	50	0.50	8/23/2023	NV00925
Nickel, Dissolved	EPA 200.7	<0.50	U,D	mg/L	50	0.50	8/23/2023	NV00925
Potassium	EPA 200.7	1700		mg/L	50	50	8/23/2023	NV00925
Potassium, Dissolved	EPA 200.7	1700		mg/L	50	50	8/23/2023	NV00925
Selenium	EPA 200.7	<0.10	U,D	mg/L	50	0.10	8/23/2023	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: TW-1-10 **Collect Date/Time:** 8/7/2023 11:00
WETLAB Sample ID: 23080275-005 **Receive Date:** 8/9/2023 12:37

Analyte	Method	Results		Units	DF	RL	Analyzed	LabID
Selenium, Dissolved	EPA 200.7	<0.10	U,D	mg/L	50	0.10	8/23/2023	NV00925
Silica	EPA 200.7	33.6		mg/L	50	16.0	8/23/2023	NV00925
Silver	EPA 200.7	<0.10	U,D	mg/L	50	0.10	8/23/2023	NV00925
Silver, Dissolved	EPA 200.7	<0.10	U,D	mg/L	50	0.10	8/23/2023	NV00925
Sodium	EPA 200.7	20000		mg/L	50	75	8/23/2023	NV00925
Sodium, Dissolved	EPA 200.7	19000		mg/L	50	75	8/23/2023	NV00925
Zinc	EPA 200.7	1.6		mg/L	50	1.0	8/23/2023	NV00925
Zinc, Dissolved	EPA 200.7	1.6		mg/L	50	1.0	8/23/2023	NV00925
Trace Metals by ICP-MS								
Antimony	EPA 200.8	<0.050	U,D	mg/L	100	0.050	8/21/2023	NV00925
Antimony, Dissolved	EPA 200.8	<0.050	U,D	mg/L	100	0.050	8/21/2023	NV00925
Arsenic	EPA 200.8	<0.15	U,D	mg/L	100	0.15	8/21/2023	NV00925
Arsenic, Dissolved	EPA 200.8	<0.15	U,D	mg/L	100	0.15	8/21/2023	NV00925
Lead	EPA 200.8	<0.050	U,D	mg/L	50	0.050	8/18/2023	NV00925
Lead, Dissolved	EPA 200.8	<0.050	U,D	mg/L	50	0.050	8/18/2023	NV00925
Thallium	EPA 200.8	0.036	J	mg/L	50	0.010	8/18/2023	NV00925
Thallium, Dissolved	EPA 200.8	0.037	J	mg/L	50	0.010	8/18/2023	NV00925
Uranium	EPA 200.8	0.12	J	mg/L	50	0.050	8/18/2023	NV00925
Mercury by CVAA								
Mercury	EPA 245.1	<0.00045		mg/L	1	0.00045	8/16/2023	NV00925
Mercury, Dissolved	EPA 245.1	<0.00045		mg/L	1	0.00045	8/17/2023	NV00925
Ion Balance								
Anions	Calculation	1060		meq/L	1	0.100		NV00925
Cations	Calculation	930		meq/L	1	0.100		NV00925
Error	Calculation	6.34		%	1	1.00		NV00925
Sample Preparation								
Trace Metals Digestion (Sulfur)	EPA 200.2	W230815-1A			1		8/15/2023	NV00925
Trace Metals Digestion	EPA 200.2	W230815-3A			1		8/15/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230815-3A			1		8/15/2023	NV00925
Filter_Preserve HNO3	N/A	Complete			1		8/11/2023	NV00925

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EPA LAB ID: NV00932

Customer Sample ID: TW-1-10A
WETLAB Sample ID: 23080275-006

Collect Date/Time: 8/7/2023 11:00
Receive Date: 8/9/2023 12:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Trace Metals by ICP-OES							
Boron	EPA 200.7	30	mg/L	50	5.0	8/23/2023	NV00925
Lithium	EPA 200.7	95	mg/L	50	5.0	8/23/2023	NV00925
Lithium, Dissolved	EPA 200.7	99	mg/L	50	5.0	8/23/2023	NV00925
Sample Preparation							
Trace Metals Digestion	EPA 200.2	W230815-3B		1		8/15/2023	NV00925
Trace Metals Digestion, Dissolved	EPA 200.2	W230815-3B		1		8/15/2023	NV00925
Filter_Preserve HNO3	N/A	Complete		1		8/11/2023	NV00925

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Western Environmental Testing Laboratory
QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080742	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC23080768	Blank 1	Electrical Conductivity	SM 2510B	ND			µmhos/cm
QC23080775	Blank 1	WAD Cyanide	SM 4500CN I, E	ND			mg/L
QC23080976	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC23080981	Blank 1	Mercury	EPA 245.1	ND			mg/L
QC23081031	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC23081040	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L
QC23081234	Blank 1	Sulfur	EPA 200.7	ND			mg/L
QC23081313	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC23081385	Blank 1	Aluminum	EPA 200.7	ND			mg/L
		Barium	EPA 200.7	ND			mg/L
		Beryllium	EPA 200.7	ND			mg/L
		Boron	EPA 200.7	ND			mg/L
		Cadmium	EPA 200.7	ND			mg/L
		Calcium	EPA 200.7	ND			mg/L
		Chromium	EPA 200.7	ND			mg/L
		Copper	EPA 200.7	ND			mg/L
		Iron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
		Magnesium	EPA 200.7	ND			mg/L
		Manganese	EPA 200.7	ND			mg/L
		Nickel	EPA 200.7	ND			mg/L
		Potassium	EPA 200.7	ND			mg/L
		Selenium	EPA 200.7	ND			mg/L
		Silver	EPA 200.7	ND			mg/L
		Silica	EPA 200.7	ND			mg/L
		Sodium	EPA 200.7	ND			mg/L
		Zinc	EPA 200.7	ND			mg/L
QC23081386	Blank 1	Boron	EPA 200.7	ND			mg/L
		Lithium	EPA 200.7	ND			mg/L
QC23081451	Blank 1	Antimony	EPA 200.8	ND			mg/L
		Arsenic	EPA 200.8	ND			mg/L
		Lead	EPA 200.8	ND			mg/L
		Thallium	EPA 200.8	ND			mg/L
		Uranium	EPA 200.8	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080742	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	143	150	95	mg/L
QC23080742	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	138	150	92	mg/L
QC23080768	LCS 1	Electrical Conductivity	SM 2510B	1406	1412	100	µmhos/cm
QC23080775	LCS 1	WAD Cyanide	SM 4500CN I, E	0.085	0.100	85	mg/L
QC23080810	LCS 1	pH	SM 4500-H+ B	7.00	7.00	100	pH Units
QC23080813	LCS 1	Total Alkalinity	SM 2320B	108	100	108	mg/L
QC23080976	LCS 1	Chloride	EPA 300.0	9.94	10.0	99	mg/L
		Fluoride	EPA 300.0	2.17	2.00	109	mg/L
		Sulfate	EPA 300.0	25.8	25.0	103	mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC23080981	LCS 1	Mercury	EPA 245.1	0.005230	0.005	105	mg/L
QC23081031	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	1.00	1.00	100	mg/L
QC23081040	LCS 1	Mercury, Dissolved	EPA 245.1	0.005420	0.005	108	mg/L
QC23081234	LCS 1	Sulfur	EPA 200.7	9.98	10.0	100	mg/L
QC23081313	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	0.993	1.00	99	mg/L
QC23081385	LCS 1	Aluminum	EPA 200.7	1.02	1.00	102	mg/L
		Barium	EPA 200.7	1.03	1.00	103	mg/L
		Beryllium	EPA 200.7	1.02	1.00	102	mg/L
		Boron	EPA 200.7	1.01	1.00	100	mg/L
		Cadmium	EPA 200.7	1.01	1.00	101	mg/L
		Calcium	EPA 200.7	11.0	10.0	110	mg/L
		Chromium	EPA 200.7	1.02	1.00	102	mg/L
		Copper	EPA 200.7	5.09	5.00	102	mg/L
		Iron	EPA 200.7	1.04	1.00	104	mg/L
		Lithium	EPA 200.7	1.03	1.00	103	mg/L
		Magnesium	EPA 200.7	10.3	10.0	103	mg/L
		Manganese	EPA 200.7	1.01	1.00	101	mg/L
		Nickel	EPA 200.7	5.09	5.00	102	mg/L
		Potassium	EPA 200.7	10.5	10.0	105	mg/L
		Selenium	EPA 200.7	5.09	5.00	102	mg/L
		Silica	EPA 200.7	21.5	21.4	101	mg/L
		Silver	EPA 200.7	0.092	0.090	102	mg/L
		Sodium	EPA 200.7	11.2	10.0	112	mg/L
		Zinc	EPA 200.7	1.03	1.00	103	mg/L
QC23081386	LCS 1	Boron	EPA 200.7	1.01	1.00	100	mg/L
		Lithium	EPA 200.7	1.03	1.00	103	mg/L
QC23081451	LCS 1	Antimony	EPA 200.8	0.0097	0.010	97	mg/L
		Arsenic	EPA 200.8	0.0470	0.050	94	mg/L
		Lead	EPA 200.8	0.0098	0.010	98	mg/L
		Thallium	EPA 200.8	0.0095	0.010	95	mg/L
		Uranium	EPA 200.8	0.0097	0.010	97	mg/L

QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result		Units	RPD
QC23080742	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	23080180-001	223	234		mg/L	5 %
QC23080742	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	23080255-003	355	391		mg/L	10 %
QC23080768	Duplicate 1	Electrical Conductivity	SM 2510B	23080255-003	631	626		µmhos/cm	1 %
QC23080810	Duplicate 1	pH	SM 4500-H+ B	23080251-001	7.88	8.00	HT,QD	pH Units	2 %
QC23080810	Duplicate 2	pH	SM 4500-H+ B	23080271-001	8.67	8.66	HT	pH Units	<1%
QC23080813	Duplicate 1	Total Alkalinity	SM 2320B	23080251-001	62.8	64.3		mg/L as CaCO3	2 %
		Bicarbonate (HCO3)	SM 2320B	23080251-001	62.8	64.3		mg/L as CaCO3	2 %
		Carbonate (CO3)	SM 2320B	23080251-001	<1.000	<1.000		mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	23080251-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080813	Duplicate 2	Total Alkalinity	SM 2320B	23080271-001	376	377		mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	23080271-001	307	310		mg/L as CaCO3	1 %
		Carbonate (CO3)	SM 2320B	23080271-001	69.4	66.5		mg/L as CaCO3	4 %
		Hydroxide (OH)	SM 2320B	23080271-001	<1.000	<1.000		mg/L as CaCO3	<1%
QC23080861	Duplicate 1	Density	Gravimetric	23080142-004	1.05	1.04		g/cubic cm	1 %

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QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result		MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC23080775	MS 1	WAD Cyanide	SM 4500CN I, E	23080140-005	<0.010		0.098	0.096	0.1	mg/L	96	94	2
QC23080775	MS 2	WAD Cyanide	SM 4500CN I, E	23080146-001	<0.010		0.094	0.098	0.1	mg/L	91	96	4
QC23080976	MS 1	Chloride	EPA 300.0	23080106-001	16.4		21.5	21.4	5	mg/L	102	100	<1
		Fluoride	EPA 300.0	23080106-001	0.473		2.73	2.71	2	mg/L	113	112	<1
		Sulfate	EPA 300.0	23080106-001	45.1		54.8	54.7	10	mg/L	97	95	<1
QC23080976	MS 2	Chloride	EPA 300.0	23080106-002	17.8		22.9	22.7	5	mg/L	101	98	<1
		Fluoride	EPA 300.0	23080106-002	0.754		2.98	2.93	2	mg/L	111	109	2
		Sulfate	EPA 300.0	23080106-002	59.6		69.0	68.8	10	mg/L	94	91	<1
QC23080981	MS 1	Mercury	EPA 245.1	23070848-006	<0.000300	U	0.005380	0.005380	0.005	mg/L	106	106	<1
QC23081031	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	23080210-003	0.497		1.48	1.48	1	mg/L	99	98	<1
QC23081031	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	23080224-002	0.698	M	1.50	1.50	1	mg/L	NC	NC	NC
QC23081040	MS 1	Mercury, Dissolved	EPA 245.1	23080027-002	<0.000450		0.005680	0.005480	0.005	mg/L	111	107	4
QC23081234	MS 1	Sulfur	EPA 200.7	23080275-005	618	M	656	644	10	mg/L	NC	NC	NC
QC23081313	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	23080180-001	<0.100		4.73	4.75	1	mg/L	94	95	<1
QC23081313	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	23080168-001	0.388		5.59	6.25	1	mg/L	104	117	11
QC23081385	MS 1	Aluminum	EPA 200.7	23080365-001	<0.050		0.995	0.997	1	mg/L	98	98	<1
		Barium	EPA 200.7	23080365-001	0.037		1.01	1.03	1	mg/L	98	99	2
		Beryllium	EPA 200.7	23080365-001	<0.001		1.03	1.04	1	mg/L	103	104	1
		Boron	EPA 200.7	23080365-001	0.287		1.28	1.29	1	mg/L	99	100	<1
		Cadmium	EPA 200.7	23080365-001	<0.001		0.971	0.978	1	mg/L	97	98	<1
		Calcium	EPA 200.7	23080365-001	11.3		20.8	20.8	10	mg/L	96	96	<1
		Chromium	EPA 200.7	23080365-001	0.061		1.07	1.07	1	mg/L	101	101	<1
		Copper	EPA 200.7	23080365-001	<0.040		5.05	5.07	5	mg/L	101	101	<1
		Iron	EPA 200.7	23080365-001	0.218		1.29	1.29	1	mg/L	107	108	<1
		Lithium	EPA 200.7	23080365-001	<0.100		1.06	1.08	1	mg/L	105	107	2
		Magnesium	EPA 200.7	23080365-001	4.99		14.6	14.6	10	mg/L	96	96	<1
		Manganese	EPA 200.7	23080365-001	<0.010		0.989	0.997	1	mg/L	99	99	<1
		Nickel	EPA 200.7	23080365-001	<0.030		4.91	4.95	5	mg/L	98	99	<1
		Potassium	EPA 200.7	23080365-001	40.7		51.0	51.3	10	mg/L	103	106	<1
		Selenium	EPA 200.7	23080365-001	<0.050		4.91	4.93	5	mg/L	98	99	<1
		Silica	EPA 200.7	23080365-001	53.6	M	67.9	75.8	21.4	mg/L	NC	NC	NC
		Silver	EPA 200.7	23080365-001	<0.005		0.090	0.091	0.09	mg/L	101	101	1
		Sodium	EPA 200.7	23080365-001	135		143	144	10	mg/L	82	86	<1
		Zinc	EPA 200.7	23080365-001	<0.020		1.02	1.03	1	mg/L	100	101	1
QC23081386	MS 1	Boron	EPA 200.7	23080275-004	31.2	M	29.8	30.2	1	mg/L	NC	NC	NC
		Lithium	EPA 200.7	23080275-004	104	M	93.4	94.1	1	mg/L	NC	NC	NC
QC23081451	MS 1	Antimony	EPA 200.8	23080365-001	<0.0025	M	0.0032	0.0031	0.01	mg/L	NC	NC	NC
		Arsenic	EPA 200.8	23080365-001	<0.0050	M	0.0233	0.0211	0.05	mg/L	NC	NC	NC
		Lead	EPA 200.8	23080365-001	<0.0025		0.0091	0.0088	0.01	mg/L	88	86	3
		Thallium	EPA 200.8	23080365-001	<0.0010		0.0082	0.0073	0.01	mg/L	81	71	12
		Uranium	EPA 200.8	23080365-001	<0.0050		0.0122	0.0119	0.01	mg/L	96	93	2

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tel (775) 355-0202
fax (775) 355-0817
EPA LAB ID: NV00925 - ELAP No: 2523

ELKO
1084 Lamoille Hwy
Elko, Nevada 89801
tel (775) 777-9933
fax (775) 777-9933
EPA LAB ID: NV00926

LAS VEGAS
3230 Polaris Ave. Suite 4
Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

WETLAB WESTERN ENVIRONMENTAL TESTING LABORATORY *Specializing in Soil, Hazardous Waste and Water Analysis.*

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tel (775) 355-0202 | fax (775) 355-0817
1084 Lamoille Highway | Elko, Nevada 89801
tel (775) 777-9933 | fax (775) 777-9933
3230 Polaris Ave., Suite 4 | Las Vegas, Nevada 89102
tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. 23080275
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page ___ of ___

Client: Confluence Water Resources, LLC
Address: 14175 Saddlebow Dr.
City, State & Zip: Reno, NV 89511
Contact: Matt Banta
Phone: 775-843-1908 — Collector's Name: Matt Banta
Fax — PWS/Project Name: ACME
P.O. Number — PWS/Project Number: ACME
Email: ashex@telus.net

2308 5 / 0275 6

Turnaround Time Requirements
Standard [ ] — 5 Day* (25%) [✔] — 72 Hour* (50%) [ ] — 48 Hour* (100%) [ ] — 24 Hour* (200%) [ ]
*Surcharges Will Apply

Samples Collected From Which State? NV [✔] CA [ ] Other [ ]
Report Results Via PDF [ ] EDD [ ] Other email
Compliance Monitoring? Yes [ ] No [✔]
Report to Regulatory Agency? Yes [ ] No [✔]
Standard QC Required? Yes [✔] No [ ]

Billing Address (if different than Client Address)
Company: GeoXplor Corp
Address: 8-650 Clyde Ave
City, State & Zip: West Vancouver, BC, Canada
Contact: Clive Ashworth
Phone: 1-604-908-9201 Fax:
Email: ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE *	SAMPLE TYPE **	NO. OF CONTAINERS	Total Lithium	Total Boron	Dissolved Lithium	Profile 1 w/o WAD	Specific Conductance	Density	Salinity	Total Metals	Silica	Sulfur	Spl. No.
TW-1-6	8/3/23	12:00	5	GW	2	✔	✔	✔								
TW-1-7	8/4/23	12:00	5	GW	2	✔	✔	✔								
TW-1-8	8/5/23	12:00	5	GW	2	✔	✔	✔								
TW-1-9	8/6/23	12:00	5	GW	2	✔	✔	✔								
TW-1-10	8/7/23	11:00	1,3,5	GW	7	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
TW-1-10A	8.7.23	11:00	5	GW	2	✔	✔	✔								

Instructions/Comments/Special Requirements: ***Rush Turnaround Time Required for Lithium, Silica, Sulfur****
Please Filter for Dissolved Metals Profile 1

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

***SAMPLE PRESERVATIVES:** 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
17.8 °C	Y N None	~~15~~ 17	8/9/23	12:37	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB ______ initial

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB ______ initial

WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB ______ initial

301.2E

Alpha Analytical, Inc.
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Website: www.alpha-analytical.com

August 23, 2023

Matt Banta
Confluence Water Resources
14175 Saddlebow Drive
Reno, NV 89511
TEL: (775) 843-1908
FAX:

RE: ACME/CLAYTON VALLEY

Order No.: CWR2308061

Dear Matt Banta:

The result of this report apply to the sample(s) as received.

There were no problems with the analytical events associated with this report unless noted.

Quality control data is within laboratory defined or method specified acceptance limits except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Randy Gardner
Laboratory Director
255 Glendale Ave, #21
Sparks, Nevada 89431

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 7/30/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-01
Matrix: AQUEOUS
Client Sample ID: TW-1-2

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li)	80	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 7/31/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-02
Matrix: AQUEOUS
Client Sample ID: TW-1-3

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li)	71	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 8/1/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-03
Matrix: AQUEOUS
Client Sample ID: TW-1-4

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li)	74	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 8/2/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-04
Matrix: AQUEOUS
Client Sample ID: TW-1-5

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li), Dissolved	81	1.0		mg/L	8/23/2023	EPA 200.8
Lithium (Li)	81	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 8/3/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-05
Matrix: AQUEOUS
Client Sample ID: TW-1-6

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li), Dissolved	77	1.0		mg/L	8/23/2023	EPA 200.8
Lithium (Li)	89	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources **Collection Date:** 8/4/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-06 **Matrix:** AQUEOUS
Client Sample ID: TW-1-7

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li), Dissolved	84	1.0		mg/L	8/23/2023	EPA 200.8
Lithium (Li)	86	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 8/5/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-07
Matrix: AQUEOUS
Client Sample ID: TW-1-8

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li)	75	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 8/6/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-08
Matrix: AQUEOUS
Client Sample ID: TW-1-9

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li)	77	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 8/7/2023 11:00:00 AM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-09
Matrix: AQUEOUS
Client Sample ID: TW-1-10

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Mercury (Hg), Dissolved	ND	0.0010		mg/L	8/21/2023	EPA 245.1
Fluoride	ND	2.5		mg/L	8/10/2023	EPA 300.0
Chloride	41,000	5,000		mg/L	8/10/2023	EPA 300.0
Sulfate (SO4)	2,000	50		mg/L	8/10/2023	EPA 300.0
Nitrate-Nitrite, Total - N	ND	2.5		mg/L	8/10/2023	EPA 300.0
Alkalinity, Bicarbonate (As CaCO3)	370	10		mg/L	8/14/2023	SM 2320 B
Alkalinity, Total (As CaCO3 at pH 4.5)	370	10		mg/L	8/14/2023	SM 2320 B
Cyanide, WAD	ND	0.10		mg/L	8/10/2023	SM4500-CN I,E
Lithium (Li), Dissolved	84	2.0		mg/L	8/23/2023	EPA 200.8
Beryllium (Be), Dissolved	ND	0.0020		mg/L	8/22/2023	EPA 200.8
Sodium (Na), Dissolved	21,000	0.50		mg/L	8/22/2023	EPA 200.8
Magnesium (Mg), Dissolved	380	0.50		mg/L	8/22/2023	EPA 200.8
Aluminum (Al), Dissolved	ND	0.10		mg/L	8/22/2023	EPA 200.8
Potassium (K), Dissolved	1,500	0.50		mg/L	8/22/2023	EPA 200.8
Calcium (Ca), Dissolved	680	0.50		mg/L	8/22/2023	EPA 200.8
Chromium (Cr), Dissolved	ND	0.010		mg/L	8/22/2023	EPA 200.8
Manganese (Mn), Dissolved	1.6	0.0050		mg/L	8/22/2023	EPA 200.8
Iron (Fe), Dissolved	ND	0.30		mg/L	8/22/2023	EPA 200.8
Nickel (Ni), Dissolved	ND	0.010		mg/L	8/22/2023	EPA 200.8
Copper (Cu), Dissolved	0.026	0.020		mg/L	8/22/2023	EPA 200.8
Zinc (Zn), Dissolved	1.4	0.10		mg/L	8/22/2023	EPA 200.8
Arsenic (As), Dissolved	ND	0.0050		mg/L	8/22/2023	EPA 200.8
Selenium (Se), Dissolved	ND	0.0050		mg/L	8/22/2023	EPA 200.8
Silver (Ag), Dissolved	ND	0.0050		mg/L	8/22/2023	EPA 200.8
Cadmium (Cd), Dissolved	ND	0.0020		mg/L	8/22/2023	EPA 200.8
Antimony (Sb), Dissolved	ND	0.0030		mg/L	8/22/2023	EPA 200.8
Barium (Ba), Dissolved	0.095	0.0050		mg/L	8/22/2023	EPA 200.8
Thallium (Tl), Dissolved	0.0068	0.0010		mg/L	8/22/2023	EPA 200.8
Lead (Pb), Dissolved	ND	0.0050		mg/L	8/22/2023	EPA 200.8
Lithium (Li)	78	2.0		mg/L	8/23/2023	EPA 200.8
Nitrogen, Kjeldahl, Total	1.2	1.0		mg/L	8/11/2023	EPA 351.2
Total Nitrogen as N	ND	2.5		mg/L	8/11/2023	Total by Calculation
pH	7.00	1.70		pH Units	8/14/2023	SM 4500-H+ B
Solids, Total Dissolved (TDS)	60,000	500		mg/L	8/10/2023	SM 2540 C

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 8/7/2023 11:00:00 AM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-10
Matrix: AQUEOUS
Client Sample ID: TW-1-10A

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li), Dissolved	78	1.0		mg/L	8/23/2023	EPA 200.8
Lithium (Li)	69	1.0		mg/L	8/23/2023	EPA 200.8

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Analytical Report

WO#: **CWR2308061**
Report Date: **8/23/2023**

CLIENT: Confluence Water Resources
Collection Date: 7/29/2023 12:00:00 PM
Project: ACME/CLAYTON VALLEY
Lab ID: 2308061-11
Matrix: AQUEOUS
Client Sample ID: TW-1-1

Analyses	Result	RL	Qual	Units	Date Analyzed	Method
Lithium (Li), Dissolved	85	1.0		mg/L	8/23/2023	EPA 200.8
Lithium (Li)	56	1.0		mg/L	8/23/2023	EPA 200.8

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QC SUMMARY REPORT

WO#: **2308061**
23-Aug-23

Client: Confluence Water Resources
Project: ACME/CLAYTON VALLEY
TestCode: 245_1DISS

Sample ID: **MB-19084** SampType: **MBLK** TestCode: **245_1Diss** Units: **mg/L**
Client ID: **PBW** Batch ID: **19084** TestNo: **E245.1** **E245.1**
Prep Date: **8/11/2023** RunNo: **17581** SeqNo: **509240**
Analysis Date: **8/14/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury (Hg), Dissolved	ND	0.001									

Sample ID: **LCS-19084** SampType: **LCS** TestCode: **245_1Diss** Units: **mg/L**
Client ID: **LCSW** Batch ID: **19084** TestNo: **E245.1** **E245.1**
Prep Date: **8/11/2023** RunNo: **17581** SeqNo: **509241**
Analysis Date: **8/14/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury (Hg), Dissolved	0.00164	0.001	0.0015	0	109	85	115				

Sample ID: **2308053-01AMS** SampType: **MS** TestCode: **245_1Diss** Units: **mg/L**
Client ID: **BatchQC** Batch ID: **19084** TestNo: **E245.1** **E245.1**
Prep Date: **8/11/2023** RunNo: **17581** SeqNo: **509243**
Analysis Date: **8/14/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury (Hg), Dissolved	0.0162	0.001	0.015	0	108	70	130				

Sample ID: **2308053-01AMSD** SampType: **MSD** TestCode: **245_1Diss** Units: **mg/L**
Client ID: **BatchQC** Batch ID: **19084** TestNo: **E245.1** **E245.1**
Prep Date: **8/11/2023** RunNo: **17581** SeqNo: **509244**
Analysis Date: **8/14/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury (Hg), Dissolved	0.0165	0.001	0.015	0	110	70	130	0.0162	1.8	20	

Qualifiers:
- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY **TestCode:** **300_0_W**

Sample ID: **MB-19065** SampType: **MBLK** TestCode: **300_0_W** Units: **mg/L**
Client ID: **PBW** Batch ID: **19065** TestNo: **E300.0**
Prep Date: **8/8/2023** RunNo: **17557** SeqNo: **508524**
Analysis Date: **8/8/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	ND	0.25									
Chloride	ND	0.5									
Sulfate (SO4)	ND	0.5									
Nitrate-Nitrite, Total - N	ND	0.25									

Sample ID: **LCS-19065** SampType: **LCS** TestCode: **300_0_W** Units: **mg/L**
Client ID: **LCSW** Batch ID: **19065** TestNo: **E300.0**
Prep Date: **8/8/2023** RunNo: **17557** SeqNo: **508522**
Analysis Date: **8/8/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	5.01	0.25	5	0	100	89.51	110.49				
Chloride	54.1	0.5	50	0	108	89.51	110.49				
Sulfate (SO4)	52.5	0.5	50	0	105	89.51	110.49				
Nitrate-Nitrite, Total - N	10.6	0.25	10	0	106	89.51	110.49				

Sample ID: **LCSD-19065** SampType: **LCSD** TestCode: **300_0_W** Units: **mg/L**
Client ID: **LCSS02** Batch ID: **19065** TestNo: **E300.0**
Prep Date: **8/8/2023** RunNo: **17557** SeqNo: **508523**
Analysis Date: **8/8/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	5	0.25	5	0	100	89.51	110.49	5.01	0.21	15	
Chloride	54.1	0.5	50	0	108	89.51	110.49	54.1	0.049	15	
Sulfate (SO4)	52.5	0.5	50	0	105	89.51	110.49	52.5	0.017	15	
Nitrate-Nitrite, Total - N	10.6	0.25	10	0	106	89.51	110.49	10.6	0.4	15	

Sample ID: **2307175-04AMS** SampType: **MS** TestCode: **300_0_W** Units: **mg/L**
Client ID: **BatchQC** Batch ID: **19065** TestNo: **E300.0**
Prep Date: **8/8/2023** RunNo: **17557** SeqNo: **508526**
Analysis Date: **8/8/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	25.9	1.25	25	0.197	103	79.51	120.49				
Chloride	284	2.5	250	7.61	111	79.51	120.49				
Sulfate (SO4)	278	2.5	250	8.07	108	79.51	120.49				
Nitrate-Nitrite, Total - N	54.3	1.25	50	0	109	79.51	120.49				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

Alpha Analytical, Inc.
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Website: www.alpha-analytical.com

QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY **TestCode:** **300_0_W**

Sample ID: **2307175-04AMSD** SampType: **MSD** TestCode: **300_0_W** Units: **mg/L**

Client ID: **BatchQC** Batch ID: **19065** TestNo: **E300.0**

Prep Date: **8/8/2023** RunNo: **17557** SeqNo: **508527**

Analysis Date: **8/8/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Fluoride	25.9	1.25	25	0.197	103	79.51	120.49	25.9	0.15	15	
Chloride	285	2.5	250	7.61	111	79.51	120.49	284	0.28	15	
Sulfate (SO4)	279	2.5	250	8.07	109	79.51	120.49	278	0.61	15	
Nitrate-Nitrite, Total - N	54.5	1.25	50	0	109	79.51	120.49	54.3	0.29	15	

Qualifiers:
- B Analyte detected in the associated Method Blank
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY **TestCode:** **ALKALINITY_W**

Sample ID: **LCS-19094** SampType: **LCS** TestCode: **ALKALINITY_** Units: **mg/L**

Client ID: **LCSW** Batch ID: **19094** TestNo: **Alkalinity** **Alkalinity**

Prep Date: **8/14/2023** RunNo: **17583** SeqNo: **509254**

Analysis Date: **8/14/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3 at pH 4.5)	255	10	250	0	102	79.51	120.49				

Qualifiers:
- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**
23-Aug-23

Client: Confluence Water Resources
Project: ACME/CLAYTON VALLEY
TestCode: CYANIDE_WAD_W

Sample ID: **MB-19076** SampType: **MBLK** TestCode: **CYANIDE_W** Units: **mg/L**
Client ID: **PBW** Batch ID: **19076** TestNo: **Cyanide**
Prep Date: **8/10/2023** RunNo: **17577** SeqNo: **509190**
Analysis Date: **8/10/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	ND	0.1									

Sample ID: **LCS-19076** SampType: **LCS** TestCode: **CYANIDE_W** Units: **mg/L**
Client ID: **LCSW** Batch ID: **19076** TestNo: **Cyanide**
Prep Date: **8/10/2023** RunNo: **17577** SeqNo: **509191**
Analysis Date: **8/10/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	0.143	0.1	0.15	0	95.3	89.5	110.4				

Sample ID: **2308053-01AMS** SampType: **MS** TestCode: **CYANIDE_W** Units: **mg/L**
Client ID: **BatchQC** Batch ID: **19076** TestNo: **Cyanide**
Prep Date: **8/10/2023** RunNo: **17577** SeqNo: **509193**
Analysis Date: **8/10/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	0.138	0.1	0.15	0	91.9	69.5	120.4				

Sample ID: **2308053-01AMSD** SampType: **MSD** TestCode: **CYANIDE_W** Units: **mg/L**
Client ID: **BatchQC** Batch ID: **19076** TestNo: **Cyanide**
Prep Date: **8/10/2023** RunNo: **17577** SeqNo: **509194**
Analysis Date: **8/10/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Cyanide, WAD	0.131	0.1	0.15	0	87.6	69.5	120.4	0.138	4.8	14	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY **TestCode:** **METALS_D_200_8**

Sample ID: **MB-19152** SampType: **MBLK** TestCode: **METALS_D_2** Units: **mg/L**

Client ID: **PBW** Batch ID: **19152** TestNo: **E200.8Diss**

Prep Date: **8/22/2023** RunNo: **17618** SeqNo: **509973**

Analysis Date: **8/22/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium (Be), Dissolved	ND	0.002									
Sodium (Na), Dissolved	ND	0.5									
Magnesium (Mg), Dissolved	ND	0.5									
Aluminum (Al), Dissolved	ND	0.1									
Potassium (K), Dissolved	ND	0.5									
Calcium (Ca), Dissolved	ND	0.5									
Chromium (Cr), Dissolved	ND	0.01									
Manganese (Mn), Dissolved	ND	0.005									
Iron (Fe), Dissolved	ND	0.3									
Nickel (Ni), Dissolved	ND	0.01									
Copper (Cu), Dissolved	ND	0.02									
Zinc (Zn), Dissolved	ND	0.1									
Arsenic (As), Dissolved	ND	0.005									
Selenium (Se), Dissolved	ND	0.005									
Silver (Ag), Dissolved	ND	0.005									
Cadmium (Cd), Dissolved	ND	0.002									
Antimony (Sb), Dissolved	ND	0.003									
Barium (Ba), Dissolved	ND	0.005									
Thallium (Tl), Dissolved	ND	0.001									
Lead (Pb), Dissolved	ND	0.005									

Sample ID: **MB-19152** SampType: **MBLK** TestCode: **METALS_D_2** Units: **mg/L**

Client ID: **PBW** Batch ID: **19152** TestNo: **E200.8Diss**

Prep Date: **8/22/2023** RunNo: **17624** SeqNo: **510002**

Analysis Date: **8/23/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium (Li), Dissolved	ND	0.005									

Sample ID: **LCS-19152** SampType: **LCS** TestCode: **METALS_D_2** Units: **mg/L**

Client ID: **LCSW** Batch ID: **19152** TestNo: **E200.8Diss**

Prep Date: **8/22/2023** RunNo: **17618** SeqNo: **509974**

Analysis Date: **8/22/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium (Be), Dissolved	0.224	0.002	0.25	0	89.7	84.51	115.49				
Sodium (Na), Dissolved	2.45	0.5	2.5	0	97.9	84.51	115.49				
Magnesium (Mg), Dissolved	2.23	0.5	2.5	0	89.2	84.51	115.49				
Aluminum (Al), Dissolved	0.242	0.1	0.25	0	96.9	84.51	115.49				

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY

TestCode: **METALS_D_200_8**

Sample ID: **LCS-19152** SampType: **LCS** TestCode: **METALS_D_2** Units: **mg/L**
Client ID: **LCSW** Batch ID: **19152** TestNo: **E200.8Diss**
Prep Date: **8/22/2023** RunNo: **17618** SeqNo: **509974**
Analysis Date: **8/22/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Potassium (K), Dissolved	2.33	0.5	2.5	0	93.3	84.51	115.49				
Calcium (Ca), Dissolved	2.35	0.5	2.5	0	94.0	84.51	115.49				
Chromium (Cr), Dissolved	0.236	0.01	0.25	0	94.4	84.51	115.49				
Manganese (Mn), Dissolved	0.236	0.005	0.25	0	94.6	84.51	115.49				
Iron (Fe), Dissolved	2.39	0.3	2.5	0	95.7	84.51	115.49				
Nickel (Ni), Dissolved	0.235	0.01	0.25	0	94.0	84.51	115.49				
Copper (Cu), Dissolved	0.229	0.02	0.25	0	91.5	84.51	115.49				
Zinc (Zn), Dissolved	0.234	0.1	0.25	0	93.4	84.51	115.49				
Arsenic (As), Dissolved	0.232	0.005	0.25	0	93.0	84.51	115.49				
Selenium (Se), Dissolved	0.231	0.005	0.25	0	92.2	84.51	115.49				
Silver (Ag), Dissolved	0.228	0.005	0.25	0	91.1	84.51	115.49				
Cadmium (Cd), Dissolved	0.221	0.002	0.25	0	88.5	84.51	115.49				
Antimony (Sb), Dissolved	0.239	0.003	0.25	0	95.8	84.51	115.49				
Barium (Ba), Dissolved	0.228	0.005	0.25	0	91.0	84.51	115.49				
Thallium (Tl), Dissolved	0.231	0.001	0.25	0	92.5	84.51	115.49				
Lead (Pb), Dissolved	0.23	0.005	0.25	0	92.0	84.51	115.49				

Sample ID: **LCS-19152** SampType: **LCS** TestCode: **METALS_D_2** Units: **mg/L**
Client ID: **LCSW** Batch ID: **19152** TestNo: **E200.8Diss**
Prep Date: **8/22/2023** RunNo: **17624** SeqNo: **510003**
Analysis Date: **8/23/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium (Li), Dissolved	0.0459	0.005	0.05	0	91.9	84.51	115.49				

Sample ID: **LCSD-19152** SampType: **LCSD** TestCode: **METALS_D_2** Units: **mg/L**
Client ID: **LCSS02** Batch ID: **19152** TestNo: **E200.8Diss**
Prep Date: **8/22/2023** RunNo: **17618** SeqNo: **509975**
Analysis Date: **8/22/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Beryllium (Be), Dissolved	0.23	0.002	0.25	0	92.1	84.51	115.49	0.224	2.6	20	
Sodium (Na), Dissolved	2.58	0.5	2.5	0	103	84.51	115.49	2.45	5.3	20	
Magnesium (Mg), Dissolved	2.39	0.5	2.5	0	95.5	84.51	115.49	2.23	6.8	20	
Aluminum (Al), Dissolved	0.243	0.1	0.25	0	97.3	84.51	115.49	0.242	0.4	20	
Potassium (K), Dissolved	2.52	0.5	2.5	0	101	84.51	115.49	2.33	7.7	20	
Calcium (Ca), Dissolved	2.5	0.5	2.5	0	100	84.51	115.49	2.35	6.2	20	
Chromium (Cr), Dissolved	0.254	0.01	0.25	0	102	84.51	115.49	0.236	7.3	20	
Manganese (Mn), Dissolved	0.249	0.005	0.25	0	99.6	84.51	115.49	0.236	5.2	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY

TestCode: **METALS_D_200_8**

Sample ID: **LCSD-19152** SampType: **LCSD** TestCode: **METALS_D_2** Units: **mg/L**

Client ID: **LCSS02** Batch ID: **19152** TestNo: **E200.8Diss**

Prep Date: **8/22/2023** RunNo: **17618** SeqNo: **509975**

Analysis Date: **8/22/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Iron (Fe), Dissolved	2.54	0.3	2.5	0	101	84.51	115.49	2.39	5.8	20	
Nickel (Ni), Dissolved	0.254	0.01	0.25	0	101	84.51	115.49	0.235	7.7	20	
Copper (Cu), Dissolved	0.248	0.02	0.25	0	99.1	84.51	115.49	0.229	8	20	
Zinc (Zn), Dissolved	0.248	0.1	0.25	0	99.2	84.51	115.49	0.234	6	20	
Arsenic (As), Dissolved	0.251	0.005	0.25	0	100	84.51	115.49	0.232	7.7	20	
Selenium (Se), Dissolved	0.248	0.005	0.25	0	99.2	84.51	115.49	0.231	7.3	20	
Silver (Ag), Dissolved	0.245	0.005	0.25	0	98.1	84.51	115.49	0.228	7.4	20	
Cadmium (Cd), Dissolved	0.237	0.002	0.25	0	94.9	84.51	115.49	0.221	7	20	
Antimony (Sb), Dissolved	0.254	0.003	0.25	0	102	84.51	115.49	0.239	6	20	
Barium (Ba), Dissolved	0.242	0.005	0.25	0	96.9	84.51	115.49	0.228	6.3	20	
Thallium (Tl), Dissolved	0.247	0.001	0.25	0	98.8	84.51	115.49	0.231	6.5	20	
Lead (Pb), Dissolved	0.247	0.005	0.25	0	98.9	84.51	115.49	0.23	7.2	20	

Sample ID: **LCSD-19152** SampType: **LCSD** TestCode: **METALS_D_2** Units: **mg/L**

Client ID: **LCSS02** Batch ID: **19152** TestNo: **E200.8Diss**

Prep Date: **8/22/2023** RunNo: **17624** SeqNo: **510004**

Analysis Date: **8/23/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium (Li), Dissolved	0.0429	0.005	0.05	0	85.7	84.51	115.49	0.0459	6.9	20	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY

TestCode: **METALS_T_200_8**

Sample ID: **MB-19148** SampType: **MBLK** TestCode: **METALS_T_2** Units: **mg/L**
Client ID: **PBW** Batch ID: **19148** TestNo: **E200.8**
Prep Date: **8/22/2023** RunNo: **17624** SeqNo: **510020**
Analysis Date: **8/23/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium (Li)	ND	0.005									

Sample ID: **LCS-19148** SampType: **LCS** TestCode: **METALS_T_2** Units: **mg/L**
Client ID: **LCSW** Batch ID: **19148** TestNo: **E200.8**
Prep Date: **8/22/2023** RunNo: **17624** SeqNo: **510021**
Analysis Date: **8/23/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium (Li)	0.0494	0.005	0.05	0	98.8	84.51	115.49				

Sample ID: **LCSD-19148** SampType: **LCSD** TestCode: **METALS_T_2** Units: **mg/L**
Client ID: **LCSS02** Batch ID: **19148** TestNo: **E200.8**
Prep Date: **8/22/2023** RunNo: **17624** SeqNo: **510034**
Analysis Date: **8/23/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lithium (Li)	0.0555	0.005	0.05	0	111	84.51	115.49	0.0494	12	20	

Qualifiers:
- B Analyte detected in the associated Method Blank
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY

TestCode: **N_TKN_W**

Sample ID: **MB-19079** | SampType: **MBLK** | TestCode: **N_TKN_W** | Units: **mg/L**
Client ID: **PBW** | Batch ID: **19079** | TestNo: **E351.2**
Prep Date: **8/10/2023** | RunNo: **17578** | SeqNo: **509209**
Analysis Date: **8/11/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	ND	1									

Sample ID: **LCS-19079** | SampType: **LCS** | TestCode: **N_TKN_W** | Units: **mg/L**
Client ID: **LCSW** | Batch ID: **19079** | TestNo: **E351.2**
Prep Date: **8/10/2023** | RunNo: **17578** | SeqNo: **509210**
Analysis Date: **8/11/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	5.06	1	5	0	101	89.5	110.4				

Sample ID: **2308053-01AMS** | SampType: **MS** | TestCode: **N_TKN_W** | Units: **mg/L**
Client ID: **BatchQC** | Batch ID: **19079** | TestNo: **E351.2**
Prep Date: **8/10/2023** | RunNo: **17578** | SeqNo: **509213**
Analysis Date: **8/11/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	5.83	1	5	1.06	95.4	89.5	110.4				

Sample ID: **2308053-01AMSD** | SampType: **MSD** | TestCode: **N_TKN_W** | Units: **mg/L**
Client ID: **BatchQC** | Batch ID: **19079** | TestNo: **E351.2**
Prep Date: **8/10/2023** | RunNo: **17578** | SeqNo: **509214**
Analysis Date: **8/11/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nitrogen, Kjeldahl, Total	5.86	1	5	1.06	96.0	89.5	110.4	5.83	0.51	32.8	

Qualifiers:
B Analyte detected in the associated Method Blank
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S Spike Recovery outside accepted recovery limits

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QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY **TestCode:** **PH_W**

Sample ID: LCS-19093			SampType: LCS			TestCode: PH_W			Units: pH Units		
Client ID: LCSW			Batch ID: 19093			TestNo: SM 4500-H+					
Prep Date: 8/14/2023			RunNo: 17582			SeqNo: 509246					
Analysis Date: 8/14/2023											
Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
pH	5.01	1.68	5	0	100	89.51	110.49				

Qualifiers:
- B Analyte detected in the associated Method Blank
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- R RPD outside accepted recovery limits
- S Spike Recovery outside accepted recovery limits

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255 Glendale Ave, #21
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TEL: (775) 355-1044 FAX: (775) 355-0406
Website: www.alpha-analytical.com

QC SUMMARY REPORT

WO#: **2308061**

23-Aug-23

Client: Confluence Water Resources

Project: ACME/CLAYTON VALLEY **TestCode:** **TDS_W**

Sample ID: **MBLK-19083** SampType: **MBLK** TestCode: **TDS_W** Units: **mg/L**

Client ID: **PBW** Batch ID: **19083** TestNo: **Solids**

Prep Date: **8/10/2023** RunNo: **17580** SeqNo: **509219**

Analysis Date: **8/10/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Dissolved (TDS)	ND	10									

Sample ID: **LCS-19083** SampType: **LCS** TestCode: **TDS_W** Units: **mg/L**

Client ID: **LCSW** Batch ID: **19083** TestNo: **Solids**

Prep Date: **8/10/2023** RunNo: **17580** SeqNo: **509220**

Analysis Date: **8/10/2023**

Analyte	Result	PQL	SPK Value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Solids, Total Dissolved (TDS)	107	10	100	0	107	77	120				

Qualifiers:

B Analyte detected in the associated Method Blank

ND Not Detected at the Reporting Limit

R RPD outside accepted recovery limits

S Spike Recovery outside accepted recovery limits

Definitions:

ND = Not Detected

C = Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.

D = Reporting Limits were increased due to high concentrations of non-target analytes.

H = Reporting Limits were increased due to the hydrocarbons present in the sample.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

K = DRO concentration may include contributions from lighter-end hydrocarbons (e.g. gasoline) that elute in the DRO range.

L = DRO concentration may include contributions from heavier-end hydrocarbons (e.g. motor oil) that elute in the DRO range.

O = Reporting Limits were increased due to sample foaming.

V = Reporting Limits were increased due to high concentrations of target analytes.

X = Reporting Limits were increased due to sample matrix interferences.

Z = DRO concentration may include contributions from lighter-end (e.g. gasoline) and heavier-end (e.g. motor oil) hydrocarbons that elute in the DRO range.

S50 = The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria. The laboratory control sample was acceptable.

S51 = Surrogate recovery could not be determined due to the presence of co-eluting hydrocarbons.

S52 = Surrogate recovery was above laboratory acceptance limits. Probable matrix effect.

S53 = Surrogate recovery was below laboratory acceptance limits. Probable matrix effect.

S54 = Surrogate recovery was below laboratory acceptance limits.

S55 = Surrogate recovery was above laboratory acceptance limits.

Report CC's Matt Banta

WORKORDER SUMMARY

NV

WorkOrder: CWR2308061
Report Due By: 23-Aug-23
EDD Required: NO

Alpha Analytical, Inc.

255 Glendale Ave, #21 Sparks, Nevada 89431

TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention: Matt Banta

Client:

Confluence Water Resources
14175 Saddlebow Drive
Reno, NV 89511

TEL: (775) 843-1908
FAX:
ProjectNo: ACME/CLAYTON VALLEY

Date Received: 09-Aug-23

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 245_1DISS	300_0_W	ALKALINITY_W	CYANIDE_WAD_W	METALS_D_200_8	METALS_T_200_8	N_TKN_W	Sample Remarks
CWR2308061-01	TW-1-2	AQ	7/30/2023 12:00:00 PM	1	0	10						A - Li		
CWR2308061-02	TW-1-3	AQ	7/31/2023 12:00:00 PM	1	0	10						A - Li		
CWR2308061-03	TW-1-4	AQ	8/1/2023 12:00:00 PM	1	0	10						A - Li		
CWR2308061-04	TW-1-5	AQ	8/2/2023 12:00:00 PM	2	0	10					A - Li	A - Li		
CWR2308061-05	TW-1-6	AQ	8/3/2023 12:00:00 PM	2	0	10					A - Li	A - Li		
CWR2308061-06	TW-1-7	AQ	8/4/2023 12:00:00 PM	2	0	10					A - Li	A - Li		
CWR2308061-07	TW-1-8	AQ	8/5/2023 12:00:00 PM	1	0	10						A - Li		
CWR2308061-08	TW-1-9	AQ	8/6/2023 12:00:00 PM	1	0	10						A - Li		
CWR2308061-09	TW-1-10	AQ	8/7/2023 11:00:00 AM	7	0	10	A - Profile 1 + Li	A - Profile 1 + Li	A - Profile 1 + Li	A - Profile 1 + Li	A - Profile 1 + Li	A - Li	A - Profile 1 + Li	
CWR2308061-10	TW-1-10A	AQ	8/7/2023 11:00:00 AM	2	0	10					A - Li	A - Li		

Comments:

	Signature	Print Name	Company	Date/Time
Logged in by:	[signature]	Alicia Gilbert	**Alpha Analytical, Inc.**	8/9/23 1524

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 245_1DISS	300_0_W	ALKALINITY_W	CYANIDE_WAD_W	METALS_D_200_8	METALS_T_200_8	N_TKN_W	Sample Remarks
CWR2308061-11	TW-1-1	AQ	7/29/2023 12:00:00 PM	1	0	10					A - Li	A - Li		Sample split made by lab

Comments:

	Signature	Print Name	Company	Date/Time
Logged in by:	[signature]	Alicia Gilbert	Alpha Analytical, Inc.	8/9/23 1526

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Report CC's Matt Banta

WORKORDER SUMMARY

NV

WorkOrder: CWR2308061
Report Due By: 23-Aug-23
EDD Required: NO

Alpha Analytical, Inc.
255 Glendale Ave, #21 Sparks, Nevada 89431
TEL: (775) 355-1044 FAX: (775) 355-0406

Report Attention: Matt Banta

Client:
Confluence Water Resources
14175 Saddlebow Drive
Reno, NV 89511

TEL: (775) 843-1908
FAX:
ProjectNo: ACME/CLAYTON VALLEY

Date Received: 09-Aug-23

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests N_TOTAL_W	PH_W	TDS_W					Sample Remarks
CWR2308061-01	TW-1-2	AQ	7/30/2023 12:00:00 PM	1	0	10								
CWR2308061-02	TW-1-3	AQ	7/31/2023 12:00:00 PM	1	0	10								
CWR2308061-03	TW-1-4	AQ	8/1/2023 12:00:00 PM	1	0	10								
CWR2308061-04	TW-1-5	AQ	8/2/2023 12:00:00 PM	2	0	10								
CWR2308061-05	TW-1-6	AQ	8/3/2023 12:00:00 PM	2	0	10								
CWR2308061-06	TW-1-7	AQ	8/4/2023 12:00:00 PM	2	0	10								
CWR2308061-07	TW-1-8	AQ	8/5/2023 12:00:00 PM	1	0	10								
CWR2308061-08	TW-1-9	AQ	8/6/2023 12:00:00 PM	1	0	10								
CWR2308061-09	TW-1-10	AQ	8/7/2023 11:00:00 AM	7	0	10	A - Profile 1 + Li	A - Profile 1 + Li	A - Profile 1 + Li					
CWR2308061-10	TW-1-10A	AQ	8/7/2023 11:00:00 AM	2	0	10								

Comments:

	Signature	Print Name	Company	Date/Time
Logged in by:	[signature]	Alicia Gilbert	**Alpha Analytical, Inc.**	8/9/23 1524

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests N_TOTAL_W	PH_W	TDS_W					Sample Remarks
CWR2308061-11	TW-1-1	AQ	7/29/2023 12:00:00 PM	1	0	10								Sample split made by lab

Comments:

	Signature	Print Name	Company	Date/Time
Logged in by:	[signature]	Alicia Gilbert	Alpha Analytical, Inc.	8/9/23 1524

NOTE: Samples are discarded 60 days after sample receipt unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

ALPHA ANALYTICAL Sparks, NV

~~WESTBORO, MA TEL: 508-898-9220~~ FAX: 508-898-9193

~~MANSFIELD, MA TEL: 508-822-9300~~ FAX: 508-822-3288

CHAIN OF CUSTODY

PAGE ____ OF ____

Date Rec'd in Lab:

ALPHA Job #:

Client Information

Client: GeoXplor Corp

Address: 8-650 Clyde Ave. West Vancouver BC, Canada

Phone: 1-604-908-9201

Fax:

Email: ashex@telus.net

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: ACME

Project Location: Clayton Valley

Project #:

Project Manager: Matt Banta

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX ☒ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program: | Criteria: EPA 200.7 or 200.8

* PLEASE COPY: mbanta@confluencewaterresources.com 775-843-1908 → collector

Other Project Specific Requirements/Comments/Detection Limits:

*Please Filter For Dis. Lithium

TOTAL METALS contains PRES.

ANALYSIS: Total Lithium / Dissolved Lithium / NV Profile I

SAMPLE HANDLING: Filtration ✓ ☐ Done ☐ Not needed ☒ Lab to do; Preservation ☐ Lab to do (Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Total Lithium	Dissolved Lithium	NV Profile I	Sample Specific Comments
CWR2308061-01	TW-1-2	7/30/23	12:00	GW	MB	X	X		Please filter & PRES. for Dis. Metals
02	TW-1-3	7/31/23	12:00	GW	MB	X			
03	TW-1-4	8/1/23	12:00	GW	MB	X			
04	TW-1-5	8/2/23	12:00	GW	MB	X	X		
05	TW-1-6	8/3/23	12:00	GW	MB	X	X		
06	TW-1-7	8/4/23	12:00	GW	MB	X	X		* changes to COC made per Matt Banta
07	TW-1-8	8/5/23	12:00	GW	MB	X			
08	TW-1-9	8/6/23	12:00	GW	MB	X			
09	TW-1-10	8/7/23	11:00	GW	MB	X	X	X	
10	TW-1-10A	8/7/23	11:00	GW	MB	X	X	X	
11	TW-1-1	7/29/23	12:00			X	X		

Container Type

Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	8.4.23 @ 1300	[signature]	8/9/23 1300

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO. 01-01 (rev. 14-OCT-07)

5/26/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23030585*

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 3/24/2023. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh
Project Manager

MckennaO@wetlaboratory.com
(775) 200-9876

SPARKS
475 E. Greg Street, Suite 119
Sparks, Nevada 89431
tel (775) 355-0202
fax (775) 355-0817
EPA LAB ID: NV00925 - ELAP No: 2523

ELKO
1084 Lamoille Hwy
Elko, Nevada 89801
tel (775) 777-9933
fax (775) 777-9933
EPA LAB ID: NV00926

LAS VEGAS
3230 Polaris Ave. Suite 4
Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 23030585

Specific Report Comments

None

Subcontracting Comments

The analysis for Carbon, Deuterium, Oxygen Isotopes, Tritium was performed by Isotech Laboratories of Champaign, IL. Their report is attached.

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

SPARKS
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Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Per NDEP-BMRR requirements, the analyses conducted on an extract from a Humidity Cell Testing (HCT), or Meteoric Water Mobility Procedure (MWMP) are analyzed on a coarse filtered aliquot with the exception of Trace Metals, which are filtered through a 0.45 micron filte

SPARKS
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Sparks, Nevada 89431
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3230 Polaris Ave. Suite 4
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fax (702) 622-2868
EPA LAB ID: NV00932

Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME/ACME*

Date Printed: 5/26/2023
OrderID: *23030585*

Customer Sample ID: DH-1A 1880-1840
WETLAB Sample ID: 23030585-001

Collect Date/Time: 3/19/2023 18:00
Receive Date: 3/24/2023 14:06

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Subcontracted Analyses							
Tritium	N/A	See Attached		1			
Oxygen Isotopes	N/A	See Attached		1			
Deuterium	N/A	See Attached		1			
Carbon	N/A	See Attached		1			

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.

475 E. Greg Street #119 | Sparks, Nevada 89431 | www.WETLaboratory.com
tel (775) 355-0202 | fax (775) 355-0817
1084 Lamoille Highway | Elko, Nevada 89801
tel (775) 777-9933 | fax (775) 777-9933
3230 Polaris Ave., Suite 4 | Las Vegas, Nevada 89102
tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. 23030585
Sparks Control # ______
Elko Control # ______
LV Control # ______
Report Due Date
Page ______ of ______

Client: Confluence Water Resources, LLC
Address: 14175 Saddlebow Dr.
City, State & Zip: Reno, NV 89511
Contact: Matt Banta
Phone: 775-843-1908 | Collector's Name: Matt Banta
Fax: | PWS/Project Name: ACME
P.O. Number: | PWS/Project Number: ACME
Email: ashex@telus.net

Turnaround Time Requirements
Standard [✔]
5 Day* (25%) [ ] 72 Hour* (50%) [ ]
48 Hour* (100%) [ ] 24 Hour* (200%) [ ]
*Surcharges Will Apply

Samples Collected From Which State? NV [✔] CA [ ] Other [ ]
Compliance Monitoring? Yes [ ] No [✔]
Report to Regulatory Agency? Yes [ ] No [✔]
Report Results Via PDF [ ] EDD [ ] Other: email
Standard QC Required? Yes [✔] No [ ]

Billing Address (If different than Client Address)
Company: GeoXplor Corp
Address: 8-650 Clyde Ave
City, State & Zip: West Vancouver, BC. Canada
Contact: Clive Ashworth
Phone: 1-604-908-9201 Fax: ______
Email: ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE*	SAMPLE TYPE**	NO. OF CONTAINERS	C14	Oxygen 18	Deuterium	Tritium	Chlorine 36						Spl. No.
DH-1A 1880-1840	3//19/23	1800	1	GW	1	✔	✔	✔	✔	✔						

2303 1
0585 1

Instructions/Comments/Special Requirements: Need A Quote for Above!!

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER: ______

*SAMPLE PRESERVATIVES: 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
5.6°C	Y (N) None	1	3/19/23	2:06pm	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB ______ initial
To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB ______ initial
WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB ______ initial

301.2E

ISOTECH
a Stratum Reservoir brand
www.isotechlabs.com

Isotech Water Data

Job 54167
Project 23030585S
CoreTrac IS-106692

Company Lab No.	Isotech Lab No.	Sample Name	Sample Date	Sample Time	Analysis Date	δD H_2O ‰	$\delta^{18}O$ H_2O ‰	Tritium TU	^{14}C DIC pMC	Std. Dev.	Vacuum Distilled? *	Comments
23030585-001	866490	DH-1A 1880-1840	3/19/2023	18:00	5/20/2023	-108.8	-12.47	< 0.56	12.04	0.07	No	

Counting TU values are calculated for date of sample collection, as provided by the submitter. If no such date is provided, the sample arrival date at our laboratory is used.

* Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

Beta Analytic TESTING LABORATORY

Beta Analytic, Inc.
4985 SW 74th Court
Miami, FL 33155 USA
Tel: 305-667-5167
Fax: 305-663-0964
info@betalabservices.com

ISO/IEC 17025:2017-Accredited Testing Laboratory

May 03, 2023

Mr. Steve Pelphrey
Stratum Reservoir (ISOTECH), LLC
1308 Parkland Court
Champaign, IL 61821
United States

Job #54167

RE: Radiocarbon Dating Results

Mr. Steve Pelphrey

Enclosed is the radiocarbon dating result for one sample recently sent to us. The sample provided plenty of carbon for an accurate radiocarbon measurement. The results were obtained on the DIC and are reported both as percent modern carbon (pMC) and fraction of modern (F14C). The report sheet also includes the method used, material type, and applied pretreatments.

DIC extraction consisted of injecting sample water into an acid bath attached to an evacuated collection line. pH was reduced to < 1 and evolved CO2 was dried with methanol slush and collected in liquid nitrogen. CO2 was then graphitized over cobalt in a hydrogen atmosphere to produce the target for our AMS. Reported radiocarbon results are relative to NIST SRM-4990C.

Also mentioned on the report is an "Apparent Radiocarbon Age". This is for reference only. It would illustrate the residence time of the water in the absence of any hydro-geochemical effects. The best illustration of age would have to be derived by incorporating the radiocarbon pMC or fraction modern result into models which take the hydrologic conditions of the aquifer under study into account. The Apparent Radiocarbon Age is used as a relational tool, of understandable units to the layman, to interpret hydrologic differences between wells and to monitor temporal changes.

Given the complex nature of groundwater DIC14 chemistry, duplicate measurements within 1-2 pMC are reasonable for a single water sample. For very low DIC concentration waters (e.g. < 20 mg/L HCO3) DIC14 and waters with complex organic chemistry, results can vary significantly outside of this expectation. Please take this into consideration in your interpretation of results.

Reported carbon isotopes (d13C) are relative to VPDB and deuterium and oxygen isotopes (dD and d18O) are reported relative to VSMOW. Measurement was performed using gas-bench IRMS.

We analyzed the sample on a sole priority basis. No students or intern researchers who would necessarily be distracted with other obligations and priorities were used in the analysis. The analysis was a combined effort of our entire professional staff. The results are ISO/IEC 17025 accredited.

Our invoice has been sent separately. Thank you for your prior efforts in arranging payment. As always, if you have any questions or would like to discuss the results, don’t hesitate to contact us.

Sincerely,

Digital signature on file

Ronald E. Hatfield President

Beta Analytic, Inc.
4985 SW 74th Court
Miami, FL 33155 USA
Tel: 305-667-5167
Fax: 305-663-0964
info@betalabservices.com

ISO/IEC 17025:2017-Accredited Testing Laboratory

Mr. Steve Pelphrey — Report Date:5/3/2023

Stratum Reservoir (ISOTECH), LLC — Material Received:4/17/2023

Laboratory Number	pMC	$F^{14}C$	d13C o/oo
Beta - 661146	12.04 +/- 0.07 pMC	0.1204 +/- 0.0007	-2.70

I-866490
AMS-Standard delivery
MATERIAL/PRETREATMENT: (water DIC) acidify-gas strip
COMMENTS: The equivalent "Apparent" radiocarbon age to the reported pMC/F14C values is ~ 17010 BP (not adjusted for any hydro-geochemical effects on meteoric water 14CO2). Given the complex nature of groundwater DIC14 chemistry, duplicate measurements within 1-2 pMC are reasonable for a single water sample. For very low DIC concentration waters (< 20 mg/L HCO3) DIC14 and waters with complex organic chemistry, results can vary significantly outside of this expectation.

Dates are reported as RCYBP (radiocarbon years before present, "present" = AD 1950). By international convention, the modern reference standard was 95% the 14C activity of the National Insitute of Standards and Technology (NIST) Oxalic Acid (SRM 4990C) and calculated using the Libby 14C half-life (5568 years). Quoted errors represent 1 relative standard deviation statistics (68% probability) counting errors based on the combined measurements of the sample, background, and modern reference standards. Measured 13C/12 ratios (delta 13C) were calculated relative to the PDB-1 standard.

The Conventional Radiocarbon Age represents the Measured Radiocarbon Age corrected for isotopic fractionation, calculated using the delta 13C. On rare occasion where the Conventional Radiocarbon Age was calculated using an assumed delta 13C, the ratio and the Conventional Radiocarbon Age will be followed by "*". The Conventional Radiocarbon Age is not calendar calibrated. When available, the Calendar Calibrated result is calculated from the Conventional Radiocarbon Age and is listed as the "Two Sigma Calibrated Result" for each sample.

Beta Analytic, Inc.
4985 SW 74th Court
Miami, FL 33155 USA
Tel: 305-667-5167
Fax: 305-663-0964
info@betalabservices.com

ISO/IEC 17025:2017-Accredited Testing Laboratory

Quality Assurance Report

This report provides the results of reference materials used to validate radiocarbon analyses prior to reporting. Known-value reference materials were analyzed quasi-simultaneously with the unknowns. Results are reported as expected values vs measured values. Reported values are calculated relative to NIST SRM-4990C and corrected for isotopic fractionation. Results are reported using the direct analytical measure percent modern carbon (pMC) with one relative standard deviation. Agreement between expected and measured values is taken as being within 2 sigma agreement (error x 2) to account for total laboratory error.

Report Date: May 03, 2023
Submitter: Mr. Steve Pelphrey

QA MEASUREMENTS

Reference 1

Expected Value: 0.44 +/- 0.04 pMC
Measured Value: 0.44 +/- 0.04 pMC
Agreement: Accepted

Reference 2

Expected Value: 129.41 +/- 0.06 pMC
Measured Value: 129.40 +/- 0.34 pMC
Agreement: Accepted

Reference 3

Expected Value: 96.69 +/- 0.50 pMC
Measured Value: 96.95 +/- 0.27 pMC
Agreement: Accepted

COMMENT: All measurements passed acceptance tests.

Validation: Digital signature on file

Date: May 03, 2023

10/10/2023

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: *23080276*

Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 8/9/2023. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,

Cory Baker
QA Manager

Mckenna Oh
Project Manager

MckennaO@wetlaboratory.com
(775) 200-9876

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Sparks, Nevada 89431
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LAS VEGAS
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Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

Western Environmental Testing Laboratory
Report Comments

Confluence Water Resources, LLC - 23080276

Specific Report Comments

None

Subcontracting Comments

The analysis for Carbon, Deuterium, Oxygen Isotopes, Tritium was performed by Isotech Laboratories of Champaign, IL. Their report is attached.

Report Legend

B	--	The analysis of the method blank revealed concentrations of the target analyte above the reporting limit. The client results were greater than ten times the blank amount or non-detect; therefore, the data was not impacted.
D	--	Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	--	Sample analyzed beyond the accepted holding time
J	--	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit. The reported result should be considered an estimate.
K	--	The TPH Diesel Concentration reported here likely includes some heavier TPH Oil hydrocarbons reported in the TPH Diesel range as per EPA 8015.
L	--	The TPH Oil Concentration reported here likely includes some lighter TPH Diesel hydrocarbons reported in the TPH Oil range as per EPA 8015.
M	--	The matrix spike (MS) value for the analysis of this parameter was outside acceptance criteria due to sample concentration or possible matrix inference. The reported result should be considered an estimate.
N	--	There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	--	Not calculated in the QC Report due to sample concentration and/or possible matrix interference.
QD	--	The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	--	The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	--	Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
U	--	The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit. The reported result should be considered an estimate.
V	--	The sample(s) was received with headspace exceeding 6mm. Analysis was conducted, the sample data was flagged, and the client was notified.
V1	--	The associated Trip Blank (TB) was received with headspace exceeding 6mm. Analysis was conducted and the sample data was flagged.

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General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:
A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

Per NDEP-BMRR requirements, the analyses conducted on an extract from a Humidity Cell Testing (HCT), or Meteoric Water Mobility Procedure (MWMP) are analyzed on a coarse filtered aliquot with the exception of Trace Metals, which are filtered through a 0.45 micron filte

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Western Environmental Testing Laboratory
Analytical Report

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta
Phone: (775) 843-1908 **Fax:** NoFax
PO\Project: *ACME*

Date Printed: 10/10/2023
OrderID: *23080276*

Customer Sample ID: TW-1-10 **Collect Date/Time:** 8/7/2023 11:00
WETLAB Sample ID: 23080276-001 **Receive Date:** 8/9/2023 12:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Subcontracted Analyses							
Tritium	N/A	See Attached		1			
Oxygen Isotopes	N/A	See Attached		1			
Deuterium	N/A	See Attached		1			
Carbon	N/A	See Attached		1			

Customer Sample ID: DH-1A@1195 **Collect Date/Time:** 3/23/2023 16:00
WETLAB Sample ID: 23080276-002 **Receive Date:** 8/9/2023 12:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Subcontracted Analyses							
Tritium	N/A	See Attached		1			
Oxygen Isotopes	N/A	See Attached		1			
Deuterium	N/A	See Attached		1			
Carbon	N/A	See Attached		1			

DF=Dilution Factor, RL = Reporting Limit (minimum 3X the MDL), ND = Not Detected <RL or <MDL (if listed)

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WETLAB
WESTERN ENVIRONMENTAL TESTING LABORATORY
Specializing in Soil, Hazardous Waste and Water Analysis.

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3230 Polaris Ave., Suite 4 | Las Vegas, Nevada 89102
tel (702) 475-8899 | fax (702) 776-6152

WETLAB Order ID. 23080276
Sparks Control #
Elko Control #
LV Control #
Report Due Date
Page ___ of ___

Client Confluence Water Resources, LLC
Address 14175 Saddlebow Dr.
City, State & Zip Reno, NV 89511
Contact Matt Banta
Phone 775-843-1908 | Collector's Name Matt Banta
Fax | PWS/Project Name ACME
P.O. Number | PWS/Project Number ACME
Email ashex@telus.net

Turnaround Time Requirements
Standard ✔
5 Day* (25%) ☐ 72 Hour* (50%) ☐
48 Hour* (100%) ☐ 24 Hour* (200%) ☐
*Surcharges Will Apply

Samples Collected From Which State? NV ✔ CA ☐ Other ☐
Compliance Monitoring? Yes ☐ No ✔
Report to Regulatory Agency? Yes ☐ No ✔
Report Results Via PDF ☐ EDD ☐ Other email
Standard QC Required? Yes ✔ No ☐

Billing Address (if different than Client Address)
Company GeoXplor Corp
Address 8-650 Clyde Ave
City, State & Zip West Vancouver, BC, Canada
Contact Clive Ashworth
Phone 1-604-908-9201 Fax
Email ashex@telus.net

Analyses Requested

SAMPLE ID/LOCATION	DATE	TIME	PRES TYPE *	SAMPLE TYPE **	NO. OF CONTAINERS	C14	Oxygen 18	Deuterium	Tritium	Chlorine 36						Spl. No.
TW-1-10	8/7/23	1200	1	GW	1	✔	✔	✔	✔	✔						
DH-1A @ 1195	3/23/23	1600	1	GW	1	✔	✔	✔	✔	✔						

2308 0276 1 2

Instructions/Comments/Special Requirements:
no cooler

Sample Matrix Key** DW = Drinking Water WW = Wastewater SW = Surface Water MW = Monitoring Well SD = Solid/Sludge SO = Soil HW = Hazardous Waste OTHER:

*SAMPLE PRESERVATIVES: 1=Unpreserved 2=H2SO4 3=NaOH 4=HCl 5=HNO3 6=Na2S2O3 7=ZnOAc+NaOH 8=HCl/VOA Vial

Temp	Custody Seal	# of Containers	DATE	TIME	Samples Relinquished By	Samples Received By
28.8 °C	Y N None	2	8/9/23	12:37	[signature]	[signature]
°C	Y N None					
°C	Y N None					
°C	Y N None					

WETLAB'S Standard Terms and Conditions apply unless written agreements specify otherwise. Payment terms are Net 30.

Client/Collector attests to the validity and authenticity of this (these) sample(s) and, is (are) aware that tampering with or intentionally mislabeling the sample(s) location, date or time of collection may be considered fraud and subject to legal action (NAC445.0636). MB initial

To the maximum extent permitted by law, the Client agrees to limit the liability of WETLAB for the Client's damages to the total compensation received, unless other agreements are made in writing. This limitation shall apply regardless of the cause of action or legal theory pled or asserted. MB initial

WETLAB will dispose of samples 90 days from sample receipt. Client may request a longer sample storage time for an additional fee. Please contact your Project Manager for details. MB initial

301.2E

ISOTECH
a Stratum Reservoir brand
www.isotechlabs.com

Lab #: 886067 **Job #:** 55717 IS-106692 **Co. Job#:** 23080276S

Sample Name: TW-1-10 **Co. Lab#:** 23080276-001

Company: WETLAB - Western Environmental Testing Laboratory

API/Well: **Stratum ID:**

Container: Plastic container

Field/Site Name: 23080276S

Location:

Formation:

Sampling Point: OT

Date Sampled: 08/07/2023 11:00 **Date Received:** 08/22/2023 **Date Reported:** 10/06/2023

δD of water	-115.7‰ relative to VSMOW
$\delta^{18}O$ of water	-13.32‰ relative to VSMOW
Tritium content of water	<0.80 TU
$\delta^{13}C$ of DIC	na
^{14}C content of DIC	0.9 ± 0.0 percent modern carbon
$\delta^{15}N$ of nitrate	na
$\delta^{18}O$ of nitrate	na
δ^{34} of sulfate	na
$\delta^{18}O$ of sulfate	na
Vacuum Distilled? *	No

Remarks:

nd = not detected. na = not analyzed.
*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water

ISOTECH
a Stratum Reservoir brand
www.isotechlabs.com

Lab #: 886068 **Job #:** 55717 IS-106692 **Co. Job#:** 23080276S

Sample Name: DH-1A@1195 **Co. Lab#:** 23080276-002

Company: WETLAB - Western Environmental Testing Laboratory

API/Well: **Stratum ID:**

Container: Plastic container

Field/Site Name: 23080276S

Location:

Formation:

Sampling Point: OT

Date Sampled: 03/23/2023 16:00 **Date Received:** 08/22/2023 **Date Reported:** 10/06/2023

δD of water	-114.2‰ relative to VSMOW
δ^{18}O of water	-13.02‰ relative to VSMOW
Tritium content of water	<0.56 TU
δ^{13}C of DIC	na
^{14}C content of DIC	4.1 ± 0.1 percent modern carbon
δ^{15}N of nitrate	na
δ^{18}O of nitrate	na
δ^{34} of sulfate	na
δ^{18}O of sulfate	na
Vacuum Distilled? *	No

Remarks:

nd = not detected. na = not analyzed.
*Indicates if vacuum distillation was utilized for hydrogen and oxygen isotopic analysis of water