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Drilling Report

Lei Lithium Deposit – Groundwater Bore Drilling

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Section 1 Overview

1.1 Introduction

Lithium Plus Pty Ltd (Lithium Plus) is currently in the early stages of planning an underground mining project at the Lei lithium deposit, which is located about 30 kilometres south of Darwin on mineral exploration lease EL31091. This deposit is located in the Bynoe Harbour catchment area, which is environmentally significant to the region as it is drained by the Charlotte River.

The project is currently in the developmental phase, and detailed plans are being made. The initial designs propose a surface box-cut connected to a portal that will allow access to a spiralling decline between two pegmatite bodies. However, the exact depth of the underground workings is yet to be determined at this stage.

In 2023, Lithium Plus hired Groundwater Enterprises to conduct a preliminary Groundwater Assessment of the deposit area. The goal of this assessment was to identify the groundwater environmental values in the area and evaluate potential risks and impacts that could arise due to the proposed mining activities. In addition, the review's findings recommended the implementation of a groundwater drilling and testing program, which identified eight bore locations across six drilling sites.

The field program suggested comprised several key actions:

- Drilling and installing monitoring bores into the Burrell Creek Formation and the alluvial aquifer.
- Conducting hydraulic testing, including slug tests at a minimum, and preferably pumping tests, on the completed groundwater bores.
- Sampling groundwater for chemistry and monitoring of groundwater levels.
- Surveying the completed bores to the Australian Height Datum (AHD) so that potentiometric surfaces can be generated.
- Carrying out additional surface water sampling along the Charlotte River and at a waterhole, involving water quality sampling, level monitoring, and surveying.

Lithium Plus subsequently engaged CDM Smith Australia Pty Ltd. (CDM Smith) to provide hydrogeological support services for this next phase of that project and undertake the field program as specified by Groundwater Enterprises.

The report presented here gives a summary of the completed drilling program, a factual summary of results including bore logs and select hydraulic testing, and a preliminary update to the existing hydrogeological conceptualisation originally provided by Groundwater Enterprises. The report also includes recommendations based on outcomes to date and in alignment with the scope of the work.

1.2 Scope of Work

The following scope of work was originally assigned to CDM Smith:

- Supervising and providing advice to the drilling and installation of 8 groundwater monitoring bores at 6 locations (including geological logging).
- Aquifer slug testing for hydraulic parameters.
- Hydrochemical sampling and installation of water-level pressure transducer data loggers.
- Preparation of a drilling completion report summarising the drilling, construction, water quality, and testing results completed, as well as the presentation of a revised preliminary hydrogeological conceptualisation based on the new field data (this report).
- Project management activities to enable the delivery of the scope proposed and support project objectives.

Additional groundwater and surface water quality sampling was undertaken by EcOz on behalf of Lithium Plus between November 2023 and June 2024. The new bore locations and elevations were also surveyed by Lithium Plus in July 2024 (refer Appendix D.3.

1.2.1 Drilling Program

The table below (Table 1-1) presents the drilling locations as recommended by Groundwater Enterprises, including the design rationale.

At the time of preparation of this report, and due to access issues with the site, the LG6 monitoring site has not been constructed.

Table 1-1 Drilling locations (source: Groundwater Enterprises, 2023)

Site	East GDA94 Z52	North GDA94 Z52	Site Type	No. Bores	Nominal depth (m)	Rationale
LG1	693615	8590960	Nested bore	2	70 10	▪ Assess groundwater conditions down a gradient southwest of the mine. ▪ Down strike observation bore for pumping tests (conditions permitting) to determine fracture connectivity. ▪ Establish an on-lease nested monitoring site to assess potential impacts between mine workings and the Charlotte River.
LG2	693745	8591190	Single bore	1	100	▪ Investigate groundwater conditions at the site of the decline. ▪ Potential production bore for pumping test (conditions permitting) to assess hydraulic parameters and fracture connectivity
LG3	693980	8591290	Single bore	1	70	▪ Assess groundwater conditions up the gradient to the east of the mine
LG4	693760	8591530	Single bore	1	70	▪ Assess groundwater conditions to the north of the mine and potentially down gradient from the box-cut
LG5	693650	8591240	Single bore	1	70	▪ Investigate groundwater conditions within the pegmatite. ▪ Across the strike, observation bore for pumping tests (conditions permitting) to assess fracture connectivity.
LG6 Off lease	693415	8590930	Nested	2	70 10	▪ Investigate groundwater conditions adjacent to the Charlotte River down gradient of mine workings, including establishing the presence of an alluvial aquifer and groundwater quality in close proximity to the water course.

Notes: * As surveyed by Land Surveys, 2024, on behalf of Lithium Plus.

1.2.2 Groundwater and Surface Water Sampling

Groundwater chemistry was recorded during well development. Subsequently, surface water and groundwater quality samples were collected by EcOz between November 2023 and June 2024 and provided to CDM Smith. Sampling frequency was quarterly for the newly installed groundwater bores, and monthly sampling for the surface water monitoring sites. The location of these sites is included in Figure 2-1 below.

Groundwater wells were also monitored for depth to water during the water quality sampling activities.

Section 2 Monitoring Bore Drilling and Construction

In late November - early December 2023, six monitoring bores were drilled and constructed at five sites, including LG1 (Shallow and Deep monitoring bores), LG2, LG3, LG4, and LG5. The drilling and construction works were carried out by Bores NT Pty Ltd, contracted by Lithium Plus. The activities were supervised by a licensed water well driller and adhered to the Minimum Construction Requirements for Water Bores in Australia (Edition 4) outlined by NUDLC (2020) and based on the specifications provided by Groundwater Enterprises. The rotary air drilling method was employed for all boreholes. CDM Smith's field hydrogeologists completed successful slug testing and transducer installation in late December 2023.

CDM Smith was responsible for supervising the drilling and bore construction process, as well as conducting hydraulic conductivity testing. This involved overseeing the drilling works, conducting geological logging of the bores, supporting and documenting the construction of standpipe monitoring bores, and collecting data on bore development and groundwater levels.

2.1 Drilling and Construction

As previously mentioned, all bore drilling and construction works have been completed as per the scope, with the exception of LG6. At the time of writing this report, access to this bore has not yet been provided, and this portion of the project remains incomplete.

Below is an overview of the construction process for all drilled and completed bores to date:

- Rotary drilling of an 11.8" diameter collar hole and installation of either 158mm temporary surface casing or DN205 uPVC permanent casing where necessary.
- Rotary drilling at 6" diameter to the target depth.
- Installation of DN50 PN18 casing within each drilling hole, with 0.5 mm factory slotted screens installed within nominated target formations and gravel packed using 3 mm gravel to at least 1m above the top of the screen.
- Installation of 1 to 2 meters of bentonite seal above the gravel pack.
- Grouting the hole annulus with 5% cement/bentonite mix to surface.
- Installation of protective stainless-steel collar at surface to approximately 1m above ground level.
- Installation of a marker post adjacent to the bore.
- Airlift development of the cased well until the discharge water flowed clear and free of sediment, with measurement of yield and physio-chemical water quality parameters collected through development.
- Slug testing of the bores using a 35mm diameter, 197cm long solid slug.
- Installing logging transducers for long-term monitoring of groundwater variations.

Geologic chip samples from drilling were collected and laid out in three-meter intervals for geological logging during drilling. A CDM Smith Hydrogeologist then logged the samples and recorded hydrogeological information such as water strikes, airlift yields, and water quality.

A summary of the monitoring and bore drilling construction as completed is presented in the following table (Table 2-1) with well locations shown spatially on Figure 2-1).

Table 2-1 Lei Lithium Monitoring Bore Construction Details

Bore ID	Easting GDA94 Z52 *	Northing GDA94 Z52 *	Ground surface (m AHD)	Top of casing (m AHD)	Drilled depth (m AHD)	Screened interval (m bgl)	Gravel pack (m bgl)	Bentonite seal (m bgl)	Casing stick up (m)
LG1-S [1] (shallow)	693616.3	8590978.4	7.38	8.23	12.0	8.0 -12.0	7.0 – 12.0	5.0 - 7.0	0.85
LG1-D [2] (deep)	693616.9	8590981.6	7.42	8.25	79.0	73.5 - 76.6	71.0 - 78.5	67.0 - 71.0	0.83
LG2	693746.9	8591199.6	15.397	16.43	73.0	71.5 - 72.5	67.0 - 72.5	63.0 - 67.0	1.03
LG3	693979.3	8591289.8	23.108	24.20	60.6	52.1 - 55.1	50.4 - 60.1	48.3 - 50.4	1.09
LG4	693743.0	8591399.5	17.793	18.83	73.0	68.5 – 71.0	65.8 - 72.5	61.8 - 65.8	1.04
LG5	693650.1	8591238.3	16.094	17.03	59.5	65.0 - 68.0	61.5 - 69.0	59.0 - 61.5	0.93
LG6 -S (shallow)	Not drilled								
LG6-D (deep)	Not drilled								

Notes: * As surveyed (Land Surveys, 2024)
m bgl – metres below ground level
m AHD – metres above Australian Height Datum (elevation)
[1] This site is known as 'LG-1' in the original location survey data.
[2] This site is known as 'LG-A1' in the original location survey data.

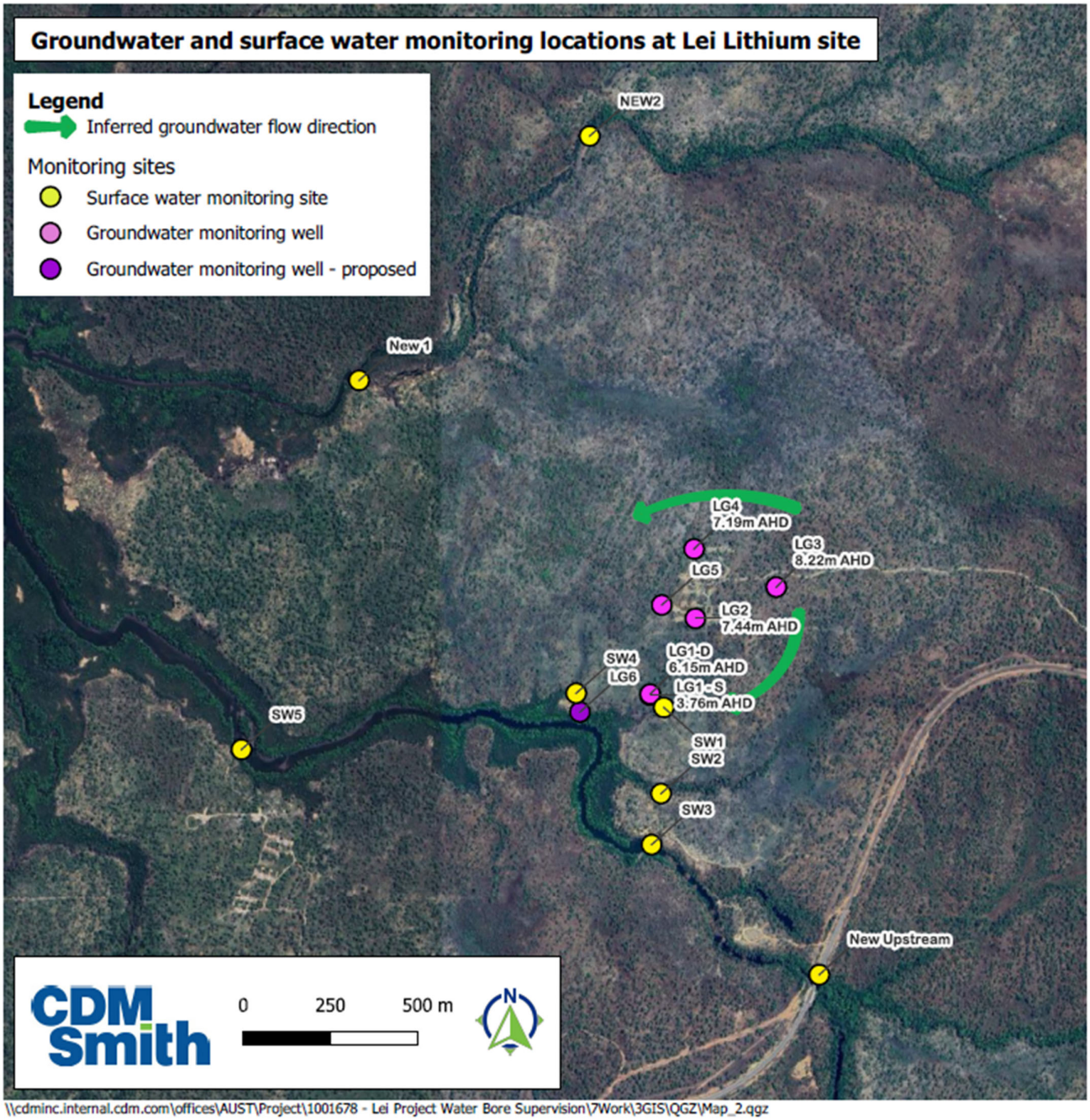

Figure 2-1 Groundwater wells and surface monitoring sites at the Lei Lithium site, with recent groundwater elevations (m AHD) and inferred groundwater flow.

2.2 Monitoring Bore Development

After drilling was completed, the wells were developed by using air via a polyline downhole to lift water out and to remove drill cuttings. Bore development is a standard procedure that is recommended after drilling and construction are completed. The purpose of this procedure is to remove any drilling materials left in the well and to enhance the permeability of the well by inducing groundwater flow into the well to replace the water that is being airlifted to surface. This is to ensure that the aquifer testing and groundwater sampling are completed within a clean well that best represents the aquifer.

Monitoring bores were developed by moving the polyline up and down within the screened interval, and a combination of sustained and surging flow was used. The development process continued until the discharged water was observed to have low turbidity, with the development recorded to ensure the well had been developed correctly.

Groundwater samples were collected during development and tested for field physicochemical parameters, such as electrical conductivity (EC) and temperature, using a calibrated Aquaread water quality meter. Yield measurements were determined by conducting bucket tests, where the time taken to fill a bucket of a known volume was measured, and v-notch weir tests, where the height of water flowing over the v-notch was measured to calculate the flow rate. Table 2-2 below presents the field water quality measurements obtained from each monitoring bore.

Table 2-2 Lei Lithium monitoring well development field parameters

Well ID	Approximate airlift yield (L/s) ^	Electrical conductivity (µS/cm)	pH	Temperature (°C)
LG1 – S	<0.5	148	7.99	30.3
LG1 – D	1	208	7.45	29.8
LG2	1	180	7.82	29.9
LG3	1	89	-	33.6
LG4	3	180	-	31.1
LG5	<0.5	157	7.8	30.6

Notes: '-' shows this parameter has not been measured for that bore on site.

^ Yield data for airlifts were measured during bore development, or drilling if not development estimate recorded.

M bgl – metres below ground level

2.3 Hydraulic Testing

Upon completing the routine monitoring bore development, a series of slug tests were conducted to determine the hydraulic properties of the aquifer. These tests provided a quick and efficient way to estimate the hydraulic conductivity of the surrounding environment, allowing for a more comprehensive understanding of the aquifer's overall behaviour and water flow dynamics.

Essentially, slug tests create a temporary disruption in the water level by either:

- Introduction of a "Slug" to the well, monitoring the water table's rise and subsequent recovery (Falling Head)
- Removing the slug from the well and measuring the rate at which the water table falls and then rises back (Rising Head)

Both rising and falling head tests were completed successfully on all bores drilled, with tests progressing as follows:

- Solid slugs with 35mm diameters and a length of 197cm were used for slug testing.

- The digital data loggers were deployed prior to the test at a depth lower than the intended depth for the slug test to prevent direct interference between the logger and the solid slug.
- After deploying data loggers, the depth to groundwater was measured using a manual depth meter to determine the water level recovery. This was then used to determine when the test was complete.
- During the test, "Level TROLL 100" digital data loggers and TROLL BaroLoggers were utilized to record groundwater level changes. Manual depth meters were also used to control the loggers' recorded data.
- The test was repeated once in LG1-S because, during the first attempt, the loggers were not deployed at depths deeper than the slug. In the second test, the loggers were set up at a depth of 9 m bgl, and the solid slug from 5 to 7 m bgl.
- Each test was completed within a maximum duration of 2 hours and 10 minutes and ended once the groundwater level returned to its original state prior to slug introduction.

An example of a finished monitoring well where slug testing is occurring is presented in Figure 2-2.

Figure 2-2 Lei Lithium – Final Well Construction during Slug Testing (LG5)

The analysis of the test results was conducted using AQTESOLV Pro 4.0, which is a widely recognised software in the industry. The software was used to carefully examine and interpret the Falling Head and Rising Head data collected to estimate the hydraulic conductivity. This involved visually comparing the data to the Bouwer and Rice (1976) analytical solution, which is a well-established method for both unconfined and confined aquifers. The ratio between vertical and horizontal conductivity used in the analysis was 1.

After removing test results that had significant issues, the remaining tests were analysed and fit to the Bouwer and Rice method curve. However, the hydraulic conductivity for LG3 and LG4 was different for rising and falling tests. Table 2-3 shows the average results for all tests, but the tests with better curve fit – which represent more reliable results – have also been highlighted in the table. This table provides a summary of the test results, while a more detailed analysis of the AQTESOLV solutions can be found in Appendix A.

Table 2-3 Lei Lithium Monitoring Bore Slug Test Analysis Results

Monitoring well	Hydraulic conductivity (m/day)		
	Rising head test	Falling head test	Average for the bore
LG1-S	0.05	0.05	0.05
LG1-D	6.8	6.8	6.8
LG2	1.9	1.9	1.9
LG3	0.9 *	1.2	1.1
LG4	3.8 *	2.1	3.0
LG5	0.13	0.12	0.1

Notes: * Indicates a better fit to data than the falling head test.

2.4 Datalogger Installation

To monitor short and long-term fluctuations in the constructed monitoring bores, digital data loggers have been installed. These loggers have been used for slug tests and will remain in the bores for long-term monitoring. All loggers have been calibrated and tested before deployment to the site, with calibration sheets attached as an appendix to this report. All loggers have been selected from Rugged TROLL 100 models, In-situ brand, designed for the depth of the bores. To perform barometric corrections in the wells, a barologger has also been installed in LG1-S Bore, which can be used to correct all measurements from all loggers. The following table shows the installed depth in each bore, with serial numbers of the loggers for future reference. Double braided marine ropes were used to hang loggers in monitoring bores.

Table 2-4 Lei Lithium Monitoring Bores – Installed Loggers in Monitoring Bores

Monitoring well	Logger Type	Installed depth (m bgl)	Logger serial number	Memory capacity (measurements)	Measurement frequency (every)
LG1-S	BaroTROLL	0.79	1043389	60,000	10 minutes
LG1-S	TROLL100	9.83	1063281	120,000	1 hour
LG1-D	TROLL100	20.42	1021694	120,000	1 hour
LG2	TROLL100	20.35	1031068	120,000	1 hour
LG3	TROLL 100	30.30	1025793	120,000	1 hour
LG4	TROLL 100	25.26	1035536	120,000	1 hour

Monitoring well	Logger Type	Installed depth (m bgl)	Logger serial number	Memory capacity (measurements)	Measurement frequency (every)
LG5	TROLL 100	20.39	1058439	120,000	1 hour

Notes: m bgl – metres below ground level

2.5 Water level monitoring

Depth to groundwater for the new monitoring bores was recorded during water quality sampling by EcOz between December 2023 and June 2024 (refer Section 1.2.2 above). The records of this monitoring, alongside data recorded during logger installation, are presented in Table 2-5 (as depth below ground level), Table 2-6 (as groundwater elevation) and displayed in Figure 2-3.

Table 2-5 Lei Lithium Monitoring Bores – Groundwater level records, as depth below ground level (EcOz, 2024)

Monitoring bore	Depth to groundwater (m bgl)						
	13 Dec 2023 *	16 Dec 2023 ^	17 Dec 2023 ^	18 Dec 2023 *	26 Mar 2024 *	13 Jun 2024 *	17 Jun 2024 *
LG1-S	4.53	3.74	-	-	-	-	2.56
LG1-D	2.16	1.32	-	-	-	-	#
LG2	6.13	8.01	-	-	0.47	3.72	-
LG3	-	-	14.92	13.57	5.38	10.50	-
LG4	-	-	10.56	11.42	3.72	-	6.40
LG5	9.90	-	8.89	-	3.21	5.03	-

Notes: m bgl – metres below ground level
Uncertain result recorded.
* Result recorded during monitoring.
^ Result recorded during slug testing.

Table 2-6 Lei Lithium Monitoring Bores – Groundwater level records, as groundwater elevation (EcOz, 2024)

Monitoring bore	Groundwater elevation (m AHD)						
	13 Dec 2023 *	16 Dec 2023 ^	17 Dec 2023 ^	18 Dec 2023 *	26 Mar 2024 *	13 Jun 2024 *	17 Jun 2024 *
LG1-S	2.86	4.65	-	-	-	-	4.83
LG1-D	5.26	6.10	-	-	-	-	#
LG2	9.27	8.39	-	-	14.93	11.68	-
LG3	-	-	9.19	9.54	17.73	12.61	-
LG4	-	-	8.23	6.37	14.07	-	11.39
LG5	6.19	-	8.20	-	12.88	11.06	-

Notes: m bgl – metres below ground level
Uncertain result recorded.
* Result recorded during monitoring.
^ Result recorded during slug testing.

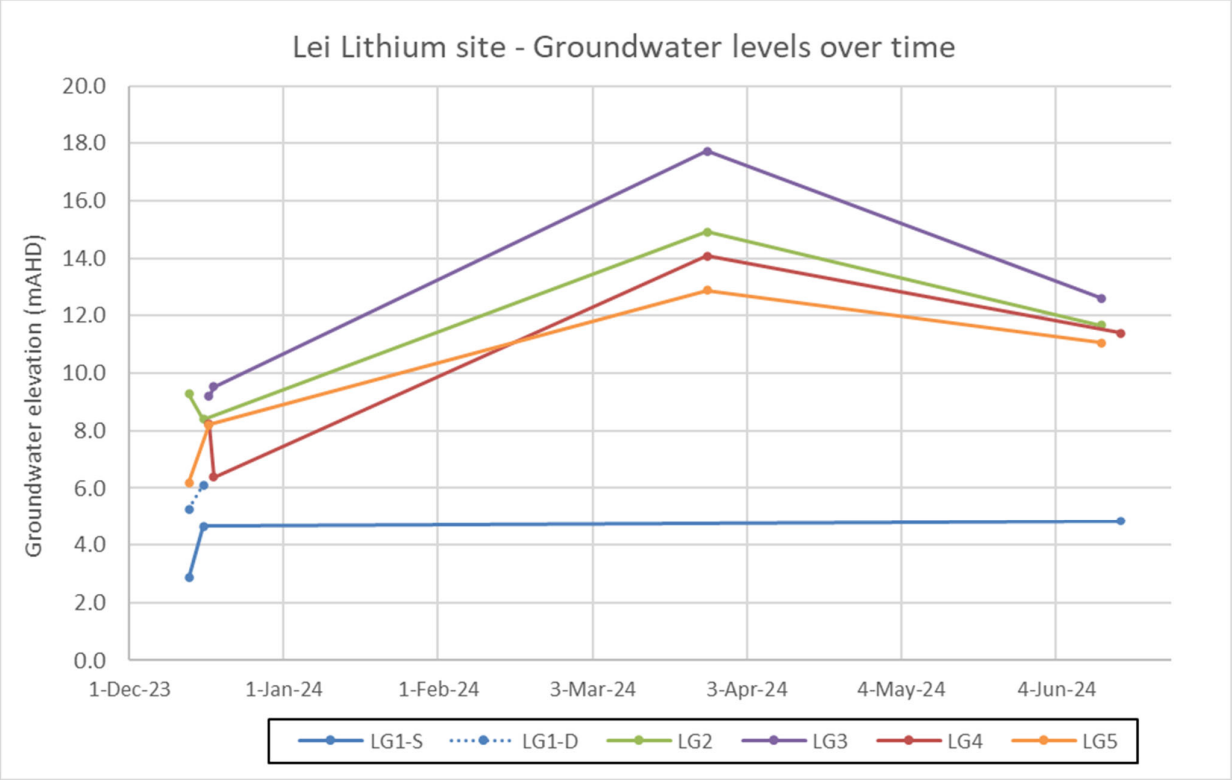

Figure 2-3 Change in groundwater elevation over time from available monitoring data (Dec 2023 – Jun 2024; EcOz, 2024))

2.6 Water chemistry testing

Samples taken by EcOz the new monitoring wells and surface water monitoring sites were analysed for a standard range of parameters, including:

- Alkalinity as CoCO3, Chloride, Sulfate;
- Calcium, Magnesium, Potassium, Sodium;
- Nitrogen (multiple forms);
- Phosphorus (multiple forms);
- Total dissolved solids;
- Metals – Aluminium, Arsenic, Barium, Beryllium, Boron, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Manganese, Mercury, Nickel, Selenium, Vanadium, Zinc; and
- Volatile Organic Compounds (VOCs).

In addition, electrical conductivity (EC), pH, temperature, turbidity, salinity, total dissolved solids (TDS), oxidation-reduction potential (ORP), and dissolved oxygen (DO) were recorded in the field during sampling. Change in EC over time for the sampled locations is presented in Figure 2-4. The tabulated results have been attached as Appendix D.

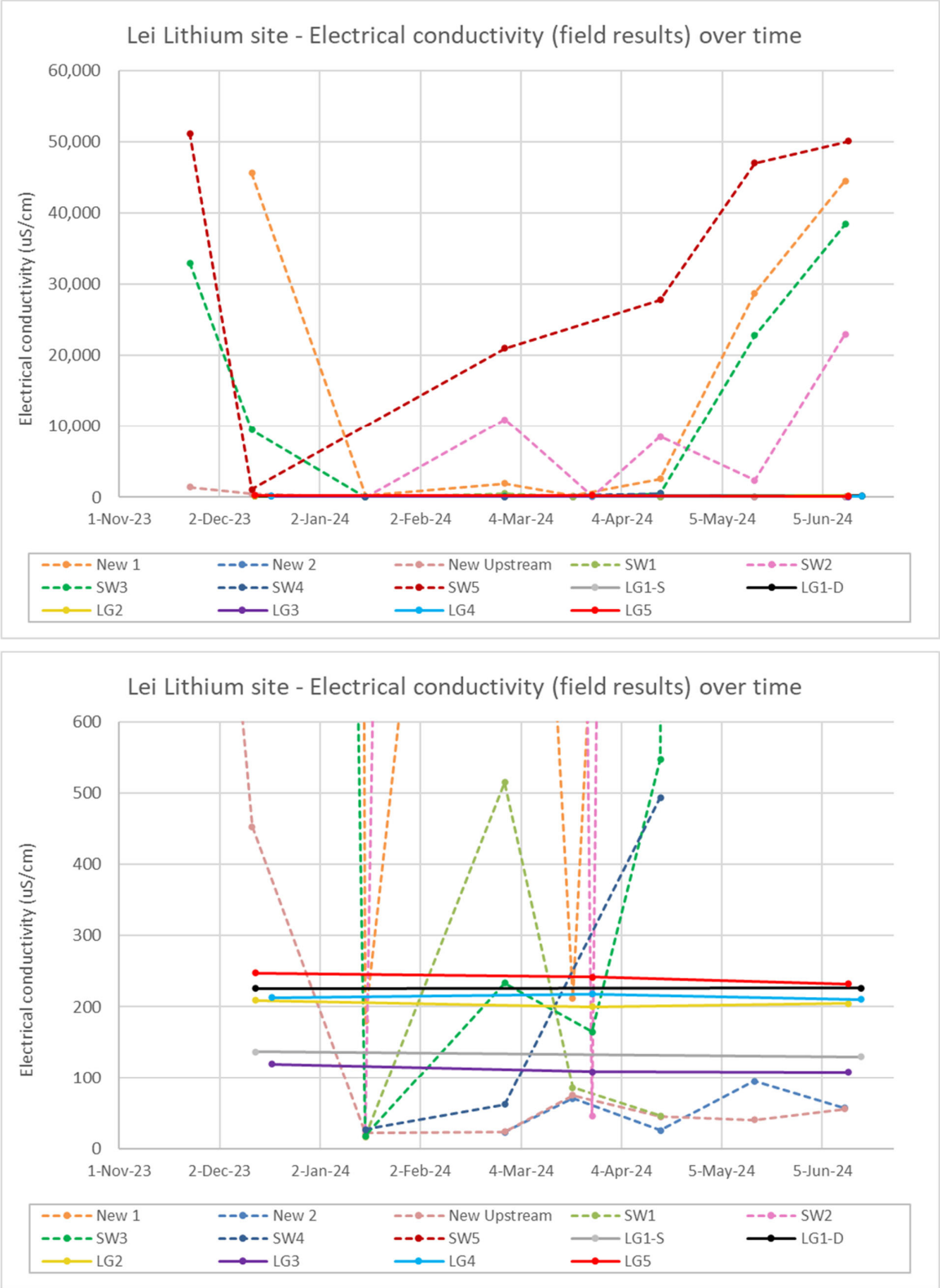

Figure 2-4 Changes in electrical conductivity (EC) over time from field testing, at surface (dashed lines) and groundwater monitoring locations (EcOz). TOP: X-axis (EC) scaled for all results; BOTTOM: EC axis scaled for <600 µS/cm results)

Section 3 Hydrogeological Conceptualisation

The available site data has been used to update the preliminary site hydrogeological conceptualisation initially developed by Groundwater Enterprises (2023). The update is presented below in Table 3-1. This conceptualisation is based on the information available to date, noting that outstanding and recommended works are required to fill remaining data gaps (refer Section 4).

Table 3-1 Updated groundwater conceptualisation

Initial Conceptualisation suggested by Groundwater Enterprise (2023)	Observations based on recent works (Nov-23 to Jun-24)
The groundwater around the Lei deposit is expected to mainly be in the Burrell Creek Formation, except for the shallow alluvial areas near the Charlotte River.	The geology encountered by the drilled bores is all composed of the Burrell Creek Formation, confirming that, where intersected, the watertable sits within this formation. No alluvial aquifers were encountered during the drilling program. Groundwater elevation results from the nested bore site (LG1-S, -D) suggests that there is an upward vertical groundwater gradient within the Burrell Creek Formation in some areas of the project site, driven by the shallow weathered portion of the unit acting to confine the deeper, fresher aquifer. Groundwater elevation in LG1-D (screen around 75 m bgl) is around 2.4 m higher in elevation than in LG1-S (screen around 10 m bgl). This is supported by aquifer testing and water yield results.
The Burrell Creek Formation is a fractured/weathered rock aquifer with bore yields typically less than 0.5 L/s. Its limited groundwater potential is due to a lack of primary openings and restricted fractures, except where drilling hits fracture zones or quartz veining bands.	The monitoring wells yielded an airlift flow rate of around 1 L/s or lower. However, in well LG4, a fracture zone was intersected, increasing the flow rate to 2-3 L/s. This indicates that groundwater flow is predominantly via fractures, likely in the unweathered zone where the fractures have not been filled with clay.
Regionally groundwater is usually found at the base of the weathering zone, transitioning into the fresh Burrell Creek Formation. At BP33, 2.5 km north of Lei, bore investigations found groundwater in the Burrell Creek Formation at 50 to 60 m depth below ground.	The aquifer in the local area exhibits a shallow watertable within the Burrell Creek Formation, with depths generally less than 15 meters below ground level. Depth to water decreases down-gradient toward the Charlotte River. Although the depth to groundwater is shallower than at the BP33 bore location, drill logs show the depth of weathering in the project area ranging from 35 to 55 meters below ground level, consistent with the regional weathering profile previously inferred.

Initial Conceptualisation suggested by Groundwater Enterprise (2023)	Observations based on recent works (Nov-23 to Jun-24)
The Burrell Creek Formation, mostly fine-grained, turns into clay when weathered. Highly weathered parts are less permeable than fresh rock due to fewer open fractures in the clayey, weathered phyllite. Hydraulic conductivities range from 0.27 – 2.6 m/day in fractured Burrell Creek Formation, while unweathered rock has lower permeability at 0.003 – 0.08 m/day.	The slug tests conducted in unweathered deeper bores show hydraulic conductivities generally consistent with previous estimates, although with a greater extremes, at 0.13 to 6.8 m/day. The single slug test undertaken in weathered zone of the Burrell Creek Formation (LG1-S), was also consistent with previous estimates, at 0.05 m/day. These results confirm the conceptualisation that weathering in the Burrell Creek Formation typically reduces hydraulic conductivity, by 1-2 orders of magnitude, and supports the interpretation from nested well water levels that the shallow weathered section is acting to confine the deeper sections of the Burrell Creek Formation aquifer.
There might be anisotropy in the secondary permeability of the Burrell Creek Formation, with higher permeability along the strike than across the strike, as observed in other locations.	Although it cannot be confirmed how hydraulic conductivity changes with different strikes, secondary permeability and anisotropy have been observed during drilling. Flow has been noted to increase in certain depths where fractures are present.
Groundwater levels at BP33 are shallow and fluctuate seasonally, rising up to 10 m during the wet season. Levels are shallower in lower areas and deeper in higher terrain. Groundwater in the Burrell Creek Formation at BP33 is mildly acidic with a pH range of 4.4 – 7.0 and typically fresh, with electrical conductivity ranging from 60 – 330 µS/cm. Lei deposit is expected to have similar water quality, but closer to the Charlotte River, groundwater may be saltier due to estuarine influences.	Groundwater quality on site is generally consistent with other local sampling of the Burrell Creek Formation, with EC ranging from around 100 to 250 µS/cm, and pH between 5.8 and 7.1. The EC results indicate very little to no mixing of the aquifer at the project site with relatively highly saline surface water of Charlotte River. The limited period of monitoring suggest groundwater quality is stable.
There was no info on local groundwater elevations and flow directions at Lei deposit. However, BP33 and Grants deposit data suggest groundwater flow likely aligns with the topography, heading southwest towards the Charlotte River.	The available data suggests groundwater flow follows ground surface topography, with flow from the project site likely to be toward the south-west toward Charlotte River, and toward local drainage lines.
There is a chance of groundwater in alluvial deposits along the Charlotte River, but they are likely thin and limited, saturating only in the wet and early dry seasons. If present near the Lei deposit, these alluvial aquifers may be locally significant, supporting nearby vegetation and ecosystems.	No alluvium was encountered during the drilling program, however no bores were drilled within areas with high potential to encounter alluvium associated with the Charlotte River.

Section 4 Outstanding scope and Recommendations

4.1 Remaining Scope of Work

The current report is based on the available data from work completed to date. The pending work, as outlined in the previously detailed scope of works (Groundwater Enterprise, 2023), includes:

- Installation of the monitoring well planned for the LG6 nested site (refer Figure 2-1 above) and associated aquifer and water chemistry testing undertaken; and
- Ongoing monitoring of groundwater level, and groundwater and surface water chemistry, and review of the data (including trends) to gain a better understanding of the relationship between surface water and groundwater at the site (initiated by EcOz).

4.2 Recommendations

The drilling work for the wells located within the tenement area has largely been completed, with access provided by Lithium Plus. The next priority is to complete the drilling, aquifer testing, and sampling of the remaining site (LG6), as advised by Groundwater Enterprise in 2023. While following the recommendations of the Groundwater Enterprise, it is also suggested to collect additional information to assess and inform possible impacts of mining activities on groundwater resources and environmental receptors:

- The monitoring well planned for the LG6 nested site (as recommended by Groundwater Enterprise (2023)) should be installed, and associated aquifer and water chemistry testing undertaken. This site is key to understanding the connectivity of the local groundwater and surface water systems;
- Additional shallow groundwater bores at groundwater monitoring wells LG2 to LG5 (in addition to the current, deeper wells) are needed in order to determine the hydrologic connection of shallow weathered and deep fresher sections of the Burrell Creek Formation;
- Continuation of quarterly hydrochemical sampling of groundwater and monthly sampling of surface water, and regular download (advised every 3-6 months) of the time-series data acquired from the monitoring well loggers (as recommended by Groundwater Enterprise (2023)), and review of this data, is recommended to assess the seasonal variability of groundwater;
- Environmental Values (EVs) / receptors relating to groundwater should be confirmed so that the groundwater risks associated with specific EVs can be further considered;
- A graphical conceptual hydrogeological model showing all groundwater sources, pathways and receptors would assist to present the current understanding of the groundwater system; and
- A data gap analysis should be conducted to determine the next steps towards more detailed studies, such as environmental impact assessments. These studies will help to assess the potential impacts of mining on the groundwater systems in the study area.

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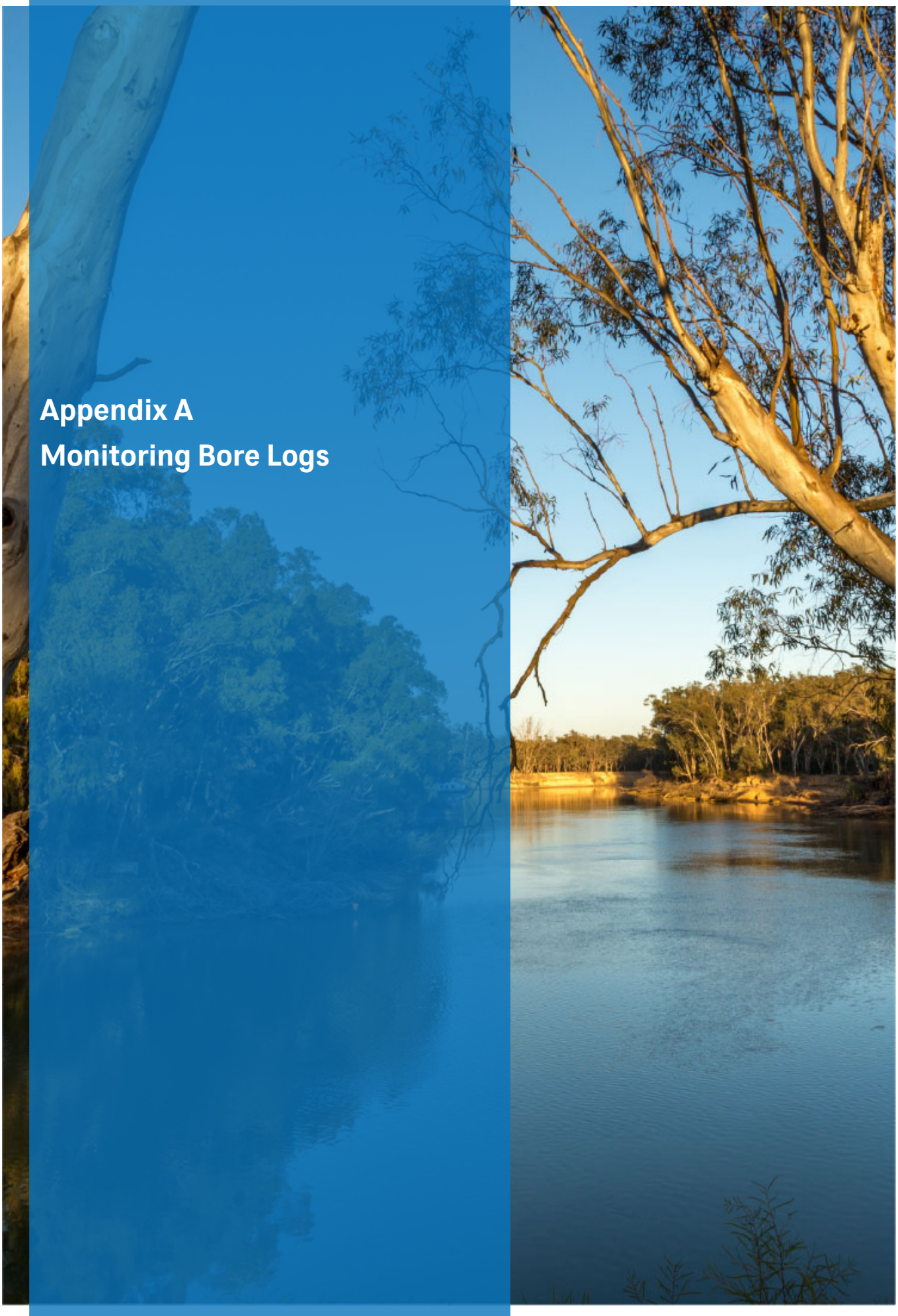


Appendix A
Monitoring Bore Logs

CDM Smith Australia Pty Ltd
1/48-50 Smith St
Darwin City NT 0800

WELL COMPLETION LOG

BOREHOLE / WELL NUMBER: LG-1S

Project Number: 1001678
Project Name: Lei Lithium
Location: EL 31091, NT
Client: Lithium Plus
Date Started: 01/12/2023
Date Finished: 01/12/2023

Drilling Contractor: Bores NT
Driller: Bryce
Drilling Method: Rotary Air
Total Depth (m bgl): 12
Hole Diameter (inches): 11.8, 6

Easting: 693615 **Northing:** 8590960
Surface Elevation (m AHD): TBD
Static Water Level
Depth (m btoc): 4.48m
Date: 16/12/2023

DRILLING INFO.			GEOLOGICAL DESCRIPTION		FIELD RECORDS / CONSTRUCTION INFO.							
Drilling Method	Bit Log (Inches)	Depth (m)	Lithology	Description	Water Cut (m bgl)	Airlift Yield (L/s)	EC (mS/cm)	pH (pH units)	Temperatue (°C)	Field Comments	Well Construction	Well Description
Rotary Air	11.8	0	Qa	Unconsolidated alluvium								Stick up: 0.74m
		1	Pfb (Weathered)	Brown/brownish red phyllite, heavily weathered								0-5m 5% Bentonite/cement grout
		2										
		3										0-8m DN50mm PN18 uPVC casing
		4										
		5										
	6	6										5-7m Bentonite Seal
		7										
		8										7-12m 3mm Gravel Pack
		9										8-11m DN50mm PN18 uPVC 0.5mm slotted screen
		10										
		11										11-12m Sump
		12										

Notes:

Logged By: GS
Checked By: MJ

CDM Smith

CDM Smith Australia Pty Ltd
1/48-50 Smith St
Darwin City NT 0800

WELL COMPLETION LOG

BOREHOLE / WELL NUMBER: LG-1D

Project Number: 1001678
Project Name: Lei Lithium
Location: EL 31091, NT
Client: Lithium Plus
Date Started: 01/12/2023
Date Finished: 01/12/2023

Drilling Contractor: Bores NT
Driller: Bryce
Drilling Method: Rotary Air
Total Depth (m bgl): 79
Hole Diameter (inches): 11.8, 6

Easting: 693615 **Northing:** 8590960
Surface Elevation (m AHD): TBD
Static Water Level
Depth (m btoc): 2.1
Date: 16/12/2023

DRILLING INFO.			GEOLOGICAL DESCRIPTION		FIELD RECORDS / CONSTRUCTION INFO.							
Drilling Method	Bit Log (Inches)	Depth (m)	Lithology	Description	Water Cut (m bgl)	Airlift Yield (L/s)	EC (mS/cm)	pH (pH units)	Temperatue (°C)	Field Comments	Well Construction	Well Description
Rotary Air	11.8	0	Qa	Unconsolidated alluvium	Seepage						Stick up: 0.74m	
			Pfb (Weathered)	Brown/red/yellow schist, highly weathered							0-67m 5% Bentonite/cement grout	
		36	Pfb	Grey phyllite, some quartz							0-73.5m DN50mm PN18 uPVC casing	
	6									71-73m Small fractures	67-71m Bentonite Seal 71-78.5m 3mm Gravel Pack 73.5-76.5m DN50mm PN18 uPVC 0.5mm slotted screen 76.5-78.5m Sump 78.5-79m Bentonite Plug	
		80										

Notes:

Logged By: GS
Checked By: MJ

CDM Smith

CDM Smith Australia Pty Ltd
1/48-50 Smith St
Darwin City NT 0800

WELL COMPLETION LOG

BOREHOLE / WELL NUMBER: LG-2

Project Number: 1001678
Project Name: Lei Lithium
Location: EL 31091, NT
Client: Lithium Plus
Date Started: 01/12/2023
Date Finished: 01/12/2023

Drilling Contractor: Bores NT
Driller: Bryce
Drilling Method: Rotary Air
Total Depth (m bgl): 73
Hole Diameter (inches): 11.8, 6

Easting: 693745 **Northing:** 8591190
Surface Elevation (m AHD): TBD
Static Water Level
Depth (m btoc): 8.99m
Date: 16/12/2023

DRILLING INFO.			GEOLOGICAL DESCRIPTION		FIELD RECORDS / CONSTRUCTION INFO.							
Drilling Method	Bit Log (Inches)	Depth (m)	Lithology	Description	Water Cut (m bgl)	Airlift Yield (L/s)	EC (mS/cm)	pH (pH units)	Temperatue (°C)	Field Comments	Well Construction	Well Description
Rotary Air	11.8	0	Pfb (Weathered)	Brown/red phyllite, heavily weathered, schist interbeddings	See page							Stick up: 0.98m
		8	Pfb	Quartz pegmatite vein								0-63m 5% Bentonite/cement grout
		12	Pfb (Weathered)	Brownish grey schist, weathered, quartz veins								0-68.5m DN50mm PN18 uPVC casing
		20		Grey/brown schist, quartz veins, slightly micaceous								
		28	Pfb	Quartz pegmatite vein								
		32	Pfb (Weathered)	Grey schist, weathered								
		44	Pfb	Grey/dark grey schist, slightly weathered, micaceous								
	6	56		Grey/dark grey phyllite/schist, some quartz veins		0.5						63-67m Bentonite Seal 68.5-71.5m DN50mm PN18 uPVC 0.5mm slotted screen 67-72.5m 3mm Gravel Pack 71.5-72.5m Sump
		72				1						72.5-73m Bentonite Plug
		76										

Notes:

Logged By: GS
Checked By: MJ

CDM Smith

CDM Smith Australia Pty Ltd
1/48-50 Smith St
Darwin City NT 0800

WELL COMPLETION LOG

BOREHOLE / WELL NUMBER: LG-3

Project Number: 1001678
Project Name: Lei Lithium
Location: EL 31091, NT
Client: Lithium Plus
Date Started: 16/11/2023
Date Finished: 16/11/2023

Drilling Contractor: Bores NT
Driller: Bryce
Drilling Method: Rotary Air
Total Depth (m bgl): 60.6
Hole Diameter (inches): 11.8, 6

Easting: 693980 **Northing:** 8591290
Surface Elevation (m AHD): TBD
Static Water Level
Depth (m btoc): 15.98m
Date: 17/12/2023

DRILLING INFO.			GEOLOGICAL DESCRIPTION		FIELD RECORDS / CONSTRUCTION INFO.							
Drilling Method	Bit Log (Inches)	Depth (m)	Lithology	Description	Water Cut (m bgl)	Airlift Yield (L/s)	EC (mS/cm)	pH (pH units)	Temperatue (°C)	Field Comments	Well Construction	Well Description
Rotary Air	11.8	0	Qa	Unconsolidated stream alluvium	Seepage	0.25 L/s						Stick up: 1.06m
		4	Pfb (Weathered)	Brown/red schist, weathered, small quartz lenses	46-49m							0-6m DN205mm uPVC Surface Casing
		8										0-48.3m 5% Bentonite/cement grout
		12										
		16										
		20										0-52.1m DN50mm PN18 uPVC casing
		24										
		28										
		32		Grey/brown schist								
		36										
		40										
		44										48.3-50.4m Bentonite Seal
	6	48				1 L/s						52.1-55.1m DN50mm PN18 uPVC 0.5mm slotted screen
		52		Grey/brown schist, some quartz								
		56	Pfb	Grey schist								50.4-60.1m 3mm Gravel Pack
		60				1 L/s						55.1-60.1m Sump
		64										60.1-60.6m Bentonite Plug

Notes:

Logged By: GS
Checked By: MJ

CDM Smith

CDM Smith Australia Pty Ltd
1/48-50 Smith St
Darwin City NT 0800

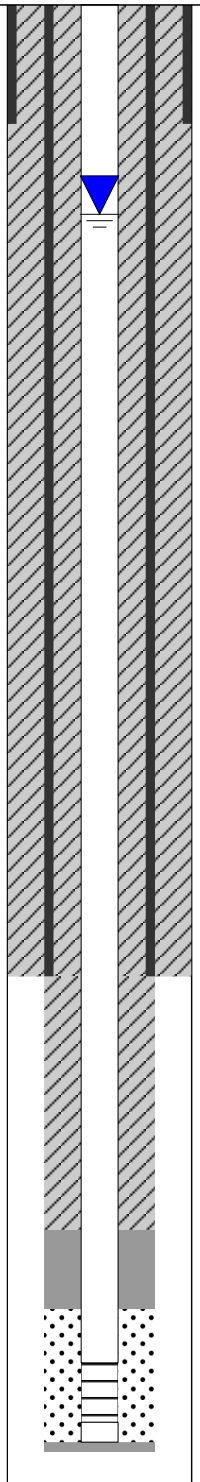
WELL COMPLETION LOG

BOREHOLE / WELL NUMBER: LG-4

Project Number: 1001678
Project Name: Lei Lithium
Location: EL 31091, NT
Client: Lithium Plus
Date Started: 18/11/2023
Date Finished: 18/11/2023

Drilling Contractor: Bores NT
Driller: Bryce
Drilling Method: Rotary Air
Total Depth (m bgl): 73
Hole Diameter (inches): 11.8, 6

Easting: 693760 **Northing:** 8591530
Surface Elevation (m AHD): TBD
Static Water Level
Depth (m btoc): 11.64
Date: 17/12/2023

DRILLING INFO.			GEOLOGICAL DESCRIPTION		FIELD RECORDS / CONSTRUCTION INFO.							
Drilling Method	Bit Log (Inches)	Depth (m)	Lithology	Description	Water Cut (m bgl)	Airlift Yield (L/s)	EC (mS/cm)	pH (pH units)	Temperatue (°C)	Field Comments	Well Construction	Well Description
Rotary Air	11.8	0	*Pfb (Weathered)*	Brown/red phyllite, weathered, micaceous, some minor grey phyllite								Stick up: 1.08m 0-6m DN205mm uPVC Surface Casing 0-68.5m DN50mm PN18 uPVC casing 0-61.8m 5% Bentonite/cement grout 61.8-65.8m Bentonite Seal 65.8-72.5m 3mm Gravel Pack 68.5-71.5m DN50mm PN18 uPVC 0.5mm slotted screen 71.5-72.5m Sump 72.5-73m Bentonite Plug
		4										
		8		Brown-red/brown-grey phyllite grading to schist, weathered								
		12										
		16										
		20		Brown/red schist, micaceous								
		24										
		28										
		32		Red, brown and dark brown schist, micaceous, firm								
		36										
		40										
		44										
		48										
	6	52	*Pfb*	Light to dark grey, grey/greenish schist, siltstone	53-55m							
		56										
		60										
		64										
		68		Grey to dark grey schist, some large quartz grains	66-73m	0.6 2-3						
		72										
		76										

Notes:

Logged By: GS
Checked By: MJ

CDM Smith

CDM Smith Australia Pty Ltd
1/48-50 Smith St
Darwin City NT 0800

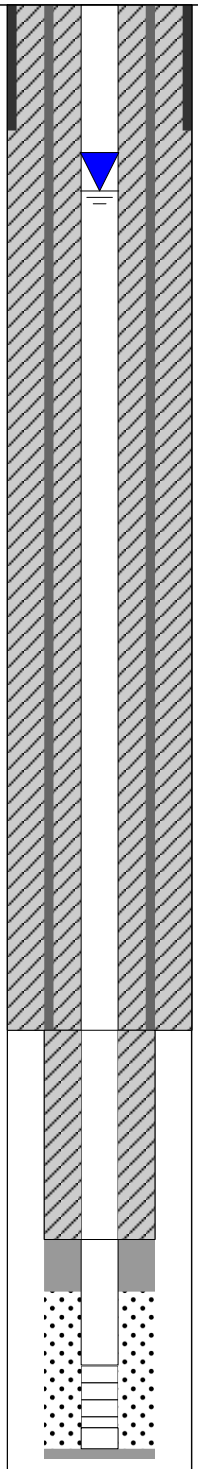
WELL COMPLETION LOG

BOREHOLE / WELL NUMBER: LG-5

Project Number: 1001678
Project Name: Lei Lithium
Location: EL 31091, NT
Client: Lithium Plus
Date Started: 23/11/2023
Date Finished: 23/11/2023

Drilling Contractor: Bores NT
Driller: Bryce
Drilling Method: Rotary Air
Total Depth (m bgl): 69.5
Hole Diameter (inches): 11.8, 6

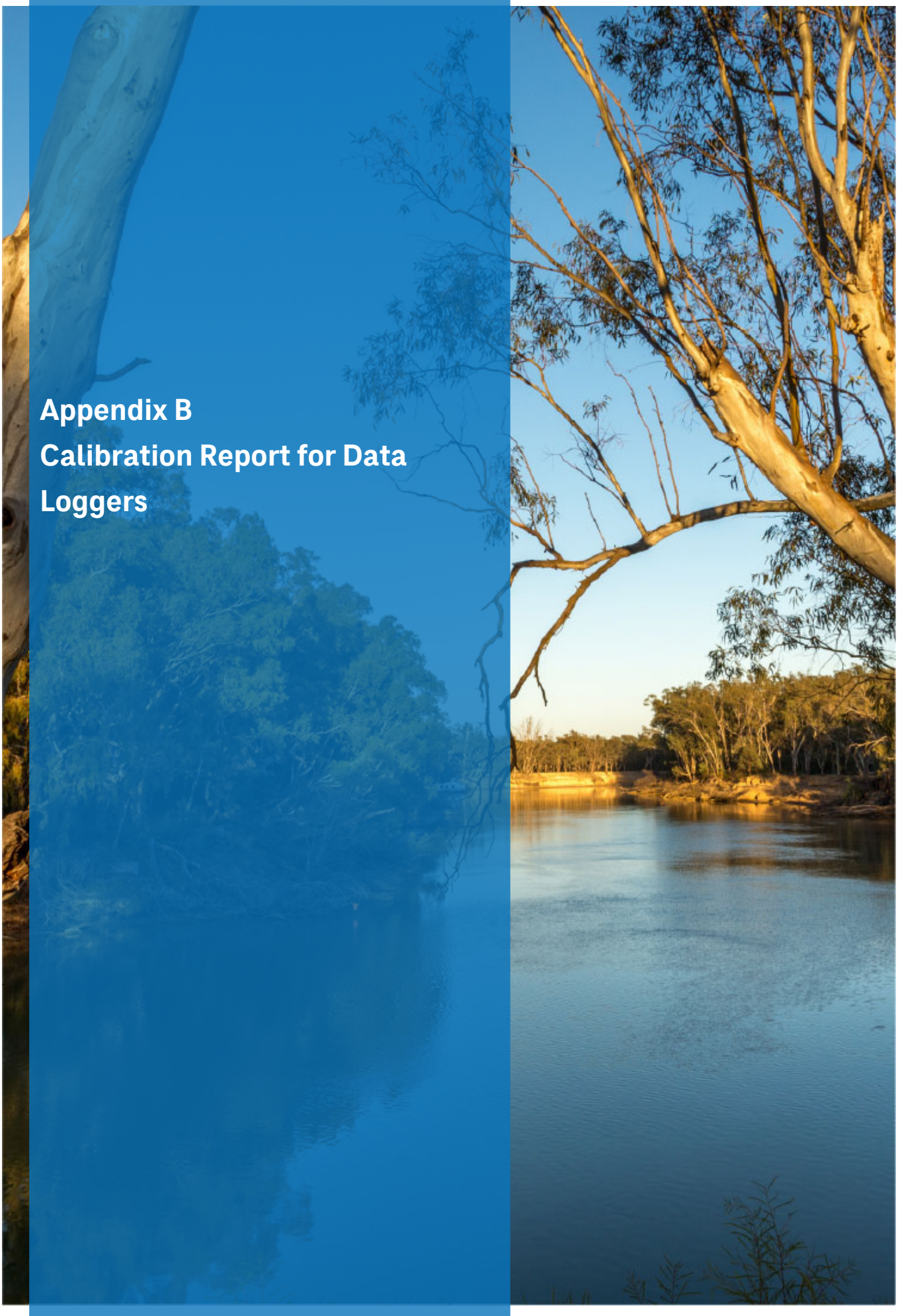
Easting: 693650 **Northing:** 8591240
Surface Elevation (m AHD): TBD
Static Water Level
Depth (m btoc): 9.87m
Date: 17/12/2023

DRILLING INFO.			GEOLOGICAL DESCRIPTION		FIELD RECORDS / CONSTRUCTION INFO.							
Drilling Method	Bit Log (Inches)	Depth (m)	Lithology	Description	Water Cut (m bgl)	Airlift Yield (L/s)	EC (mS/cm)	pH (pH units)	Temperatue (°C)	Field Comments	Well Construction	Well Description
Rotary Air	11.8	0	Pfb (Weathered)	Brown to dark brown phyllite, micaceous, highly weathered	58	0.35						Stick up: 0.98m 0-6m DN205mm PN18 uPVC surface casing 0-59m 5% Bentonite/cement grout 0-65m DN50mm PN18 uPVC casing 59-61.5m Bentonite Seal 61.5-69m 3mm Gravel Pack 65-68m DN50mm PN18 uPVC 0.5mm slotted screen 68-69m Sump 69-69.5m Bentonite Plug
		12		Brown phyllite grading to schist, micaceous, highly weathered, poor returns								
		16		Brownish grey schist, micaceous, highly weathered								
		32		Brownish grey phyllite, micaceous, highly weathered								
		40		Greyish brown phyllite, micaceous, highly weathered, poor returns								
	6	52	Pfb	Grey/blue/olive grey phyllite, slightly weathered								
		60		Light grey pegmatite, quartz, with some muscovite								
		72										

Notes:

Logged By: GS
Checked By:

Appendix B
Calibration Report for Data Loggers



Calibration Report

Report Number: 20230523224228-1035536

221 East Lincoln Avenue, Fort Collins, CO 80524 USA
1-970-498-1500, 1-800-446-7488, FAX: 1-970-498-1598
Visit us at www.in-situ.com

Instrument Details:

Instrument Model:	**Rugged TROLL 100**
Full Scale Depth Range:	**0 to 250 Ft (0 to 76 m)**
Serial Number:	**1035536**
Hardware Version:	0
Firmware Version:	1.06

Calibration Details:

Calibration Result:	**PASS**
Calibration Date:	2023-05-23 22:42:28 (UTC)
Nominal Range of Applied Temperature:	0 C to +50 C
Temperature Accuracy Specification:	+/- 0.3 C From 0 C to +50 C
Nominal Range of Applied Pressure:	7 PSI to 123 PSI Absolute
Pressure Accuracy Specification:	+/- 0.05% FS From -5 C to +50 C

Post-Calibration Check:

Parameter	Applied	Reported	Deviation	Unit
Depth	250.2639	250.2753	0.0114	FT
Depth	161.0686	161.0987	0.0301	FT
Depth	71.8795	71.9213	0.0418	FT
Temperature	20.0221	20.0583	0.0362	C

Calibration Procedures and Equipment Used:

Manu Agilent Model 53131A-010 SerialNo MY47001136
Manu Instrulab Model 406X-031-01 SerialNo 19528-1
Manu Fluke Model 1504 SerialNo C11443
Manu Mensor Model CPC6000 SerialNo 611120

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. Pressure calibration is conducted in units of PSI Absolute.
4. The total range of applied pressure includes pressure due to both the water column and 1 bar of atmosphere.
5. The pressure accuracy specification is in terms of the full-scale capability of the pressure sensor (i.e. maximum water depth + 1 bar atmosphere).
6. The Post-Calibration data is expressed, for convenience, in terms of water depth. An ambient barometric pressure of 1 bar is assumed.
7. Conversion factors: 2.30666 FT/PSI, 14.50377 PSI/bar.

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Jen B

Performed By: DESW

Report generated: 2023-10-11 14:47:45 UTC

Calibration Report

Report Number: 20230817205510-1058439

221 East Lincoln Avenue, Fort Collins, CO 80524 USA
1-970-498-1500, 1-800-446-7488, FAX: 1-970-498-1598
Visit us at www.in-situ.com

Instrument Details:

Instrument Model:	**Rugged TROLL 100**
Full Scale Depth Range:	**0 to 250 Ft (0 to 76 m)**
Serial Number:	**1058439**
Hardware Version:	0
Firmware Version:	1.06

Calibration Details:

Calibration Result:	**PASS**
Calibration Date:	2023-08-17 20:55:10 (UTC)
Nominal Range of Applied Temperature:	0 C to +50 C
Temperature Accuracy Specification:	+/- 0.3 C From 0 C to +50 C
Nominal Range of Applied Pressure:	7 PSI to 123 PSI Absolute
Pressure Accuracy Specification:	+/- 0.05% FS From -5 C to +50 C

Post-Calibration Check:

Parameter	Applied	Reported	Deviation	Unit
Depth	250.2685	250.2352	-0.0334	FT
Depth	161.0691	161.1052	0.0361	FT
Depth	71.8807	71.9044	0.0237	FT
Temperature	20.1082	20.0954	-0.0128	C

Calibration Procedures and Equipment Used:

Manu Agilent Model 53131A-010 SerialNo MY47001136
Manu Instrulab Model 406X-0031-01 SerialNo 2-31139
Manu Fluke Model 1504 SerialNo B91241
Manu Mensor Model CPC6000 SerialNo 410004H2

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. Pressure calibration is conducted in units of PSI Absolute.
4. The total range of applied pressure includes pressure due to both the water column and 1 bar of atmosphere.
5. The pressure accuracy specification is in terms of the full-scale capability of the pressure sensor (i.e. maximum water depth + 1 bar atmosphere).
6. The Post-Calibration data is expressed, for convenience, in terms of water depth. An ambient barometric pressure of 1 bar is assumed.
7. Conversion factors: 2.30666 FT/PSI, 14.50377 PSI/bar.

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Jen B

Performed By: KB

Report generated: 2023-10-11 18:58:03 UTC

Calibration Report

Report Number: 2023090612370-1025793

221 East Lincoln Avenue, Fort Collins, CO 80524 USA
1-970-498-1500, 1-800-446-7488, FAX: 1-970-498-1598
Visit us at www.in-situ.com

Instrument Details:

Instrument Model:	**Rugged TROLL 100**
Full Scale Depth Range:	**0 to 250 Ft (0 to 76 m)**
Serial Number:	**1025793**
Hardware Version:	0
Firmware Version:	1.06

Calibration Details:

Calibration Result:	**PASS**
Calibration Date:	2023-09-06 12:37:00 (UTC)
Nominal Range of Applied Temperature:	0 C to +50 C
Temperature Accuracy Specification:	+/- 0.3 C From 0 C to +50 C
Nominal Range of Applied Pressure:	7 PSI to 123 PSI Absolute
Pressure Accuracy Specification:	+/- 0.05% FS From -5 C to +50 C

Post-Calibration Check:

Parameter	Applied	Reported	Deviation	Unit
Depth	250.2685	250.2691	0.0005	FT
Depth	161.0681	161.1231	0.0549	FT
Depth	71.8800	71.8957	0.0157	FT
Temperature	20.1003	20.0842	-0.0161	C

Calibration Procedures and Equipment Used:

Manu Agilent Model 53131A-010 SerialNo MY47001136
Manu Instrulab Model 406X-0031-01 SerialNo 2-31139
Manu Fluke Model 1504 SerialNo B91241
Manu Mensor Model CPC6000 SerialNo 410004H2

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. Pressure calibration is conducted in units of PSI Absolute.
4. The total range of applied pressure includes pressure due to both the water column and 1 bar of atmosphere.
5. The pressure accuracy specification is in terms of the full-scale capability of the pressure sensor (i.e. maximum water depth + 1 bar atmosphere).
6. The Post-Calibration data is expressed, for convenience, in terms of water depth. An ambient barometric pressure of 1 bar is assumed.
7. Conversion factors: 2.30666 FT/PSI, 14.50377 PSI/bar.

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Jen B

Performed By: CR

Report generated: 2023-10-04 16:53:50 UTC

Calibration Report

Report Number: 20230830113935-1063281
221 East Lincoln Avenue, Fort Collins, CO 80524 USA
1-970-498-1500, 1-800-446-7488, FAX: 1-970-498-1598
Visit us at www.in-situ.com

Instrument Details:

Instrument Model:	**Rugged TROLL 100**
Full Scale Depth Range:	**0 to 30 Ft (0 to 9 m)**
Serial Number:	**1063281**
Hardware Version:	0
Firmware Version:	1.06

Calibration Details:

Calibration Result:	**PASS**
Calibration Date:	2023-08-30 11:39:35 (UTC)
Nominal Range of Applied Temperature:	0 C to +50 C
Temperature Accuracy Specification:	+/- 0.3 C From 0 C to +50 C
Nominal Range of Applied Pressure:	7 PSI to 30 PSI Absolute
Pressure Accuracy Specification:	+/- 0.05% FS From -5 C to +50 C

Post-Calibration Check:

Parameter	Applied	Reported	Deviation	Unit
Depth	35.7450	35.7374	-0.0076	FT
Depth	18.0589	18.0580	-0.0009	FT
Depth	0.3763	0.3776	0.0013	FT
Temperature	19.8481	19.8316	-0.0165	C

Calibration Procedures and Equipment Used:

Manu Agilent Model 53131A-010 SerialNo MY47000169
Manu Instrulab Model 406X-031-05 SerialNo 1-31125
Manu Fluke Model 1504 SerialNo B91242
Manu Mensor Model CPC6000 SerialNo 610145

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. Pressure calibration is conducted in units of PSI Absolute.
4. The total range of applied pressure includes pressure due to both the water column and 1 bar of atmosphere.
5. The pressure accuracy specification is in terms of the full-scale capability of the pressure sensor (i.e. maximum water depth + 1 bar atmosphere).
6. The Post-Calibration data is expressed, for convenience, in terms of water depth. An ambient barometric pressure of 1 bar is assumed.
7. Conversion factors: 2.30666 FT/PSI, 14.50377 PSI/bar.

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Jen B

Performed By: CR

Calibration Report

Report Number: 20230623144136-1043389

221 East Lincoln Avenue, Fort Collins, CO 80524 USA
1-970-498-1500, 1-800-446-7488, FAX: 1-970-498-1598
Visit us at www.in-situ.com

Instrument Details:

Instrument Model:	**Rugged BaroTROLL**
Full Scale Depth Range:	**0 to 15 Ft (0 to 1 m)**
Serial Number:	**1043389**
Hardware Version:	0
Firmware Version:	1.05

Calibration Details:

Calibration Result:	**PASS**
Calibration Date:	2023-06-23 14:41:36 (UTC)
Nominal Range of Applied Temperature:	0 C to +50 C
Temperature Accuracy Specification:	+/- 0.3 C From 0 C to +50 C
Nominal Range of Applied Pressure:	7 PSI to 30 PSI Absolute
Pressure Accuracy Specification:	+/- 0.05% FS From -5 C to +50 C

Post-Calibration Check:

Parameter	Applied	Reported	Deviation	Unit
Depth	35.7445	35.7441	-0.0004	FT
Depth	9.2172	9.2154	-0.0019	FT
Depth	-17.3093	-17.3052	0.0041	FT
Temperature	20.0218	20.0810	0.0592	C

Calibration Procedures and Equipment Used:

Manu Agilent Model 53131A-010 SerialNo MY47001136
Manu Instrulab Model 406X-031-01 SerialNo 19528-1
Manu Fluke Model 1504 SerialNo C11443
Manu Mensor Model CPC6000 SerialNo 611120

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. Pressure calibration is conducted in units of PSI Absolute.
4. The total range of applied pressure includes pressure due to both the water column and 1 bar of atmosphere.
5. The pressure accuracy specification is in terms of the full-scale capability of the pressure sensor (i.e. maximum water depth + 1 bar atmosphere).
6. The Post-Calibration data is expressed, for convenience, in terms of water depth. An ambient barometric pressure of 1 bar is assumed.
7. Conversion factors: 2.30666 FT/PSI, 14.50377 PSI/bar.

In-Situ YOUR EYES IN THE FIELD®
Jen B

Performed By: CR

Report generated: 2023-07-21 19:04:24 UTC

Calibration Report

Report Number: 20230517165355-1031068

221 East Lincoln Avenue, Fort Collins, CO 80524 USA
1-970-498-1500, 1-800-446-7488, FAX: 1-970-498-1598
Visit us at www.in-situ.com

Instrument Details:

Instrument Model:	**Rugged TROLL 100**
Full Scale Depth Range:	**0 to 250 Ft (0 to 76 m)**
Serial Number:	**1031068**
Hardware Version:	0
Firmware Version:	1.06

Calibration Details:

Calibration Result:	**PASS**
Calibration Date:	2023-05-17 16:53:55 (UTC)
Nominal Range of Applied Temperature:	0 C to +50 C
Temperature Accuracy Specification:	+/- 0.3 C From 0 C to +50 C
Nominal Range of Applied Pressure:	7 PSI to 123 PSI Absolute
Pressure Accuracy Specification:	+/- 0.05% FS From -5 C to +50 C

Post-Calibration Check:

Parameter	Applied	Reported	Deviation	Unit
Depth	250.2639	250.2487	-0.0152	FT
Depth	161.0714	161.0769	0.0055	FT
Depth	71.8823	71.8997	0.0174	FT
Temperature	19.7682	19.7654	-0.0028	C

Calibration Procedures and Equipment Used:

Manu Agilent Model 53131A-010 SerialNo MY47001136
Manu Instrulab Model 406X-0031-01 SerialNo 2-31139
Manu Fluke Model 1504 SerialNo B91241
Manu Mensor Model CPC6000 SerialNo 610450

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. Pressure calibration is conducted in units of PSI Absolute.
4. The total range of applied pressure includes pressure due to both the water column and 1 bar of atmosphere.
5. The pressure accuracy specification is in terms of the full-scale capability of the pressure sensor (i.e. maximum water depth + 1 bar atmosphere).
6. The Post-Calibration data is expressed, for convenience, in terms of water depth. An ambient barometric pressure of 1 bar is assumed.
7. Conversion factors: 2.30666 FT/PSI, 14.50377 PSI/bar.

In-Situ
YOUR EYES IN THE FIELD®
Jen B

Performed By: CR

Report generated: 2023-10-11 14:04:21 UTC

Calibration Report

Report Number: 20230906122058-1021694

221 East Lincoln Avenue, Fort Collins, CO 80524 USA
1-970-498-1500, 1-800-446-7488, FAX: 1-970-498-1598
Visit us at www.in-situ.com

Instrument Details:

Instrument Model:	**Rugged TROLL 100**
Full Scale Depth Range:	**0 to 250 Ft (0 to 76 m)**
Serial Number:	**1021694**
Hardware Version:	0
Firmware Version:	1.06

Calibration Details:

Calibration Result:	**PASS**
Calibration Date:	2023-09-06 12:20:58 (UTC)
Nominal Range of Applied Temperature:	0 C to +50 C
Temperature Accuracy Specification:	+/- 0.3 C From 0 C to +50 C
Nominal Range of Applied Pressure:	7 PSI to 123 PSI Absolute
Pressure Accuracy Specification:	+/- 0.05% FS From -5 C to +50 C

Post-Calibration Check:

Parameter	Applied	Reported	Deviation	Unit
Depth	250.2731	250.2624	-0.0108	FT
Depth	161.0675	161.1138	0.0463	FT
Depth	71.8795	71.9216	0.0421	FT
Temperature	19.8893	19.8917	0.0024	C

Calibration Procedures and Equipment Used:

Manu Agilent Model 53131A-010 SerialNo MY47002282
Manu Instrulab Model 406X-031-01 SerialNo 3-31139
Manu Fluke Model 1504 SerialNo C14477
Manu Mensor Model CPC6000 SerialNo 610206

Notes:

1. Standards used in this calibration are traceable to the National Institute of Standards and Technology.
2. This calibration report shall not be reproduced, except in full, without the written approval of In-Situ, Inc.
3. Pressure calibration is conducted in units of PSI Absolute.
4. The total range of applied pressure includes pressure due to both the water column and 1 bar of atmosphere.
5. The pressure accuracy specification is in terms of the full-scale capability of the pressure sensor (i.e. maximum water depth + 1 bar atmosphere).
6. The Post-Calibration data is expressed, for convenience, in terms of water depth. An ambient barometric pressure of 1 bar is assumed.
7. Conversion factors: 2.30666 FT/PSI, 14.50377 PSI/bar.

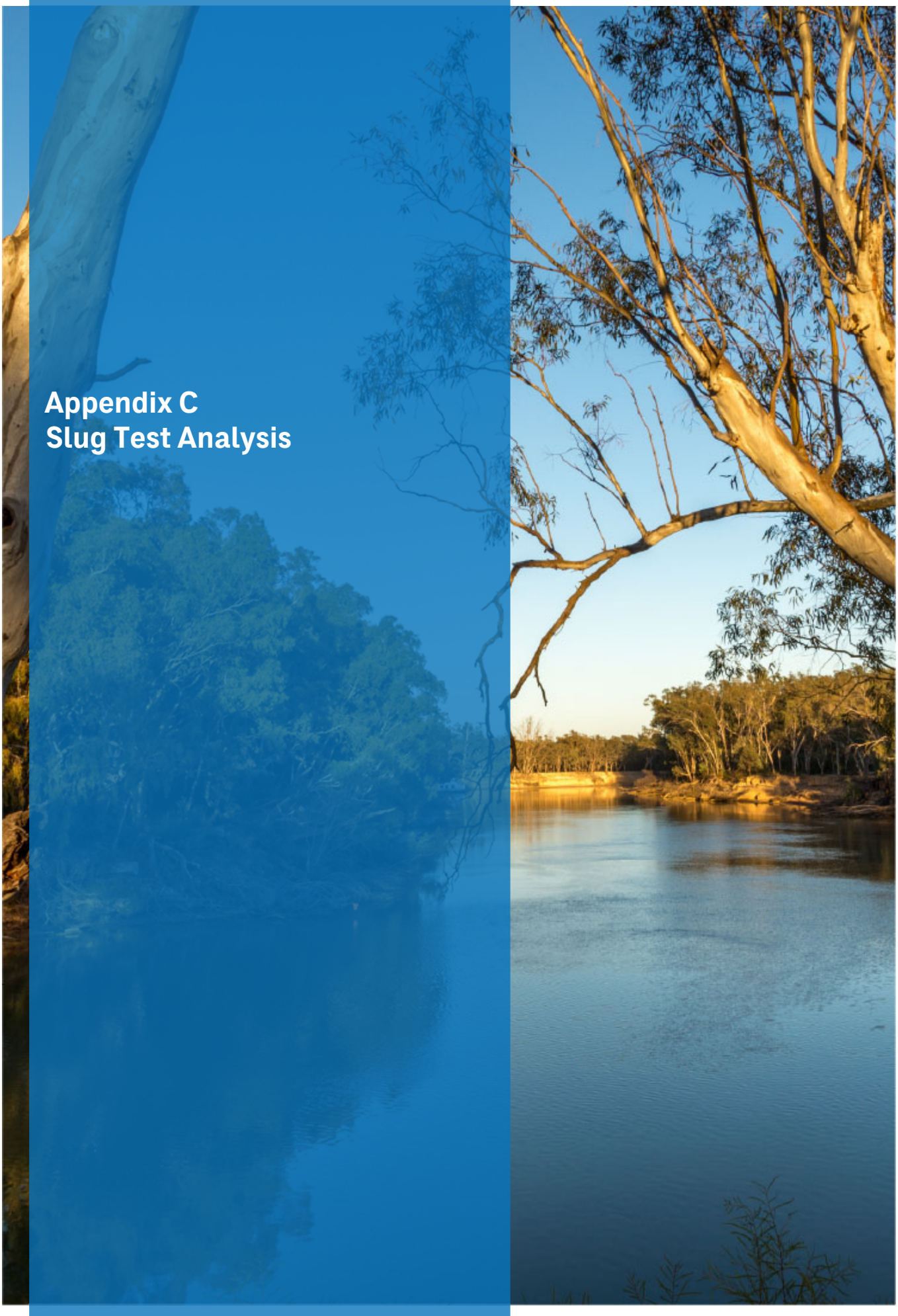
In-Situ
YOUR EYES IN THE FIELD®

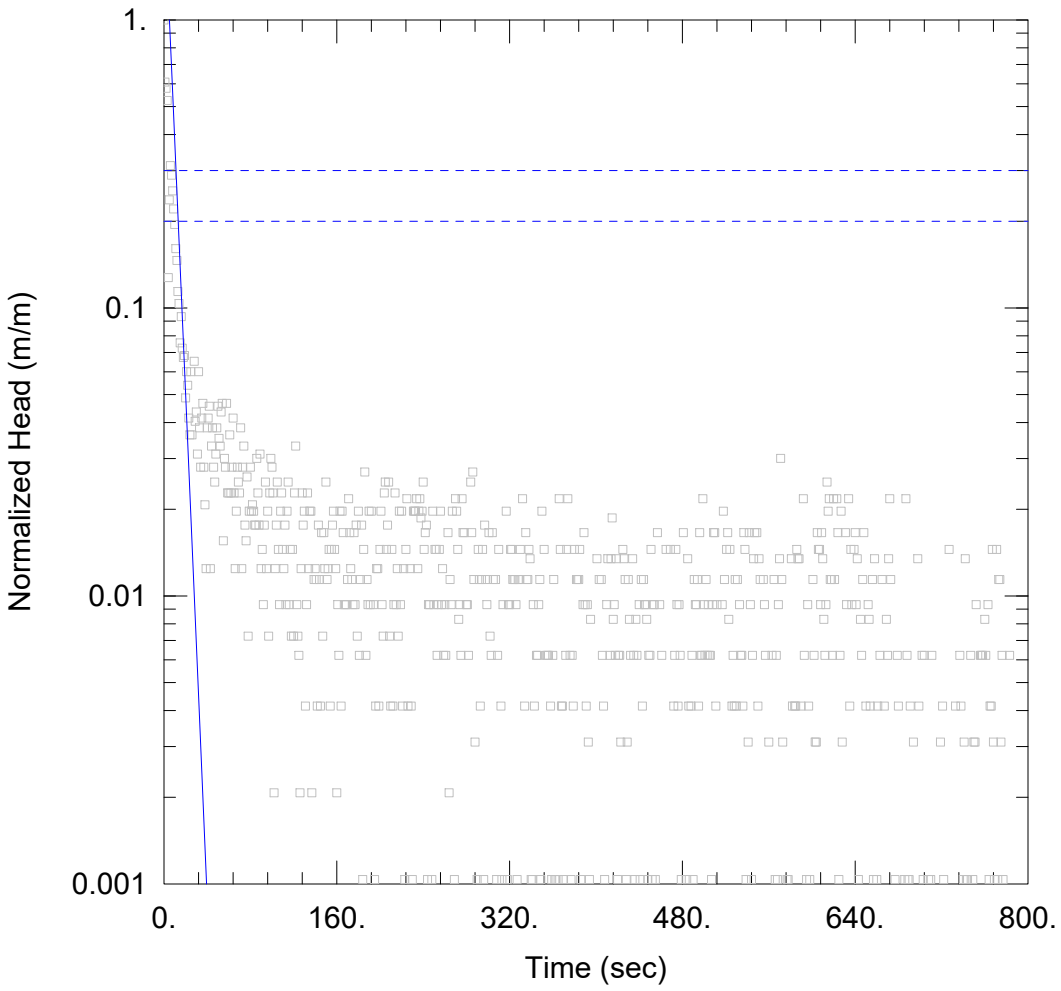
Jen B

Performed By: CR

Report generated: 2023-10-04 17:18:41 UTC

Appendix C
Slug Test Analysis





WELL TEST ANALYSIS

Data Set: \...\LG-1D FHT.aqt
Date: 01/16/24 Time: 13:51:54

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

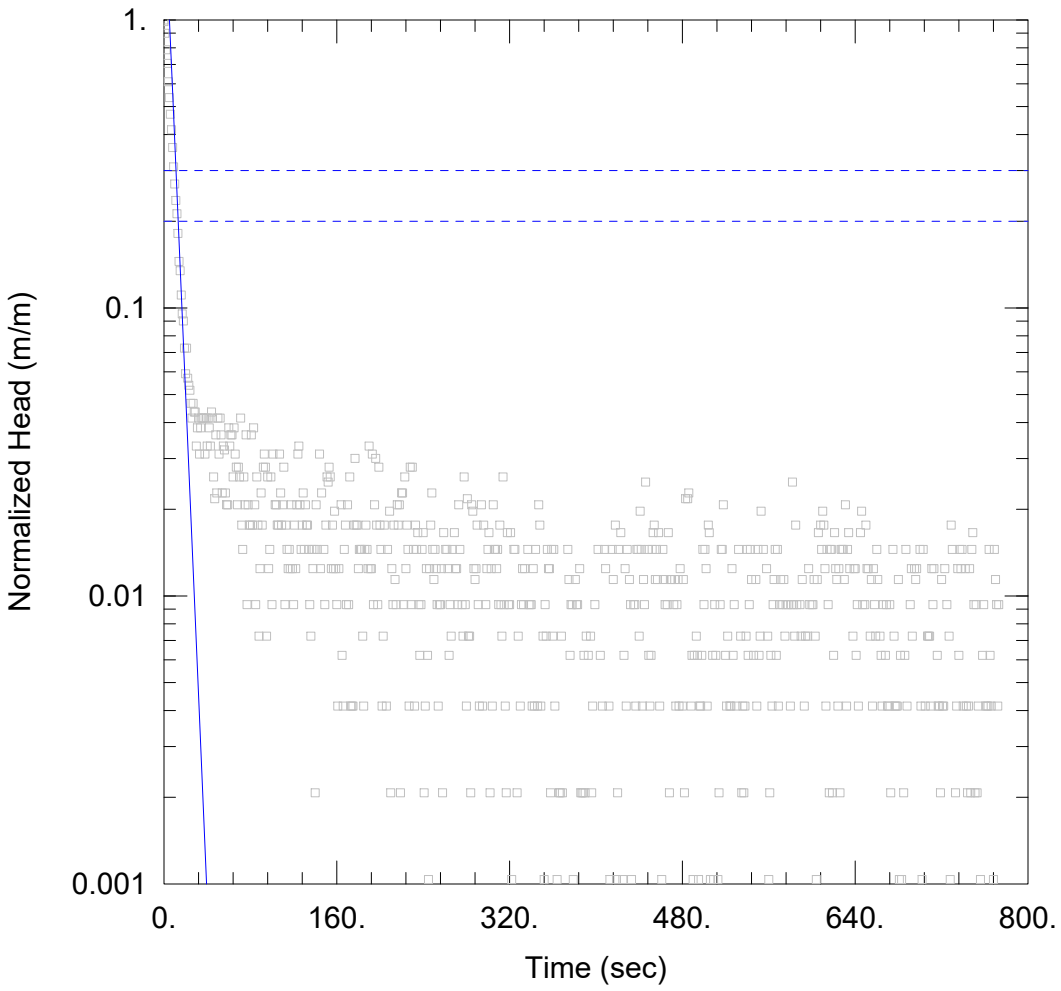
Saturated Thickness: 77.68 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-1D)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 75.18 m
Casing Radius: 0.025 m
Static Water Column Height: 77.68 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 6.762 m/day
y0 = 2.711 m



WELL TEST ANALYSIS

Data Set: \...\LG-1D RHT.aqt
Date: 01/16/24 Time: 13:52:21

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

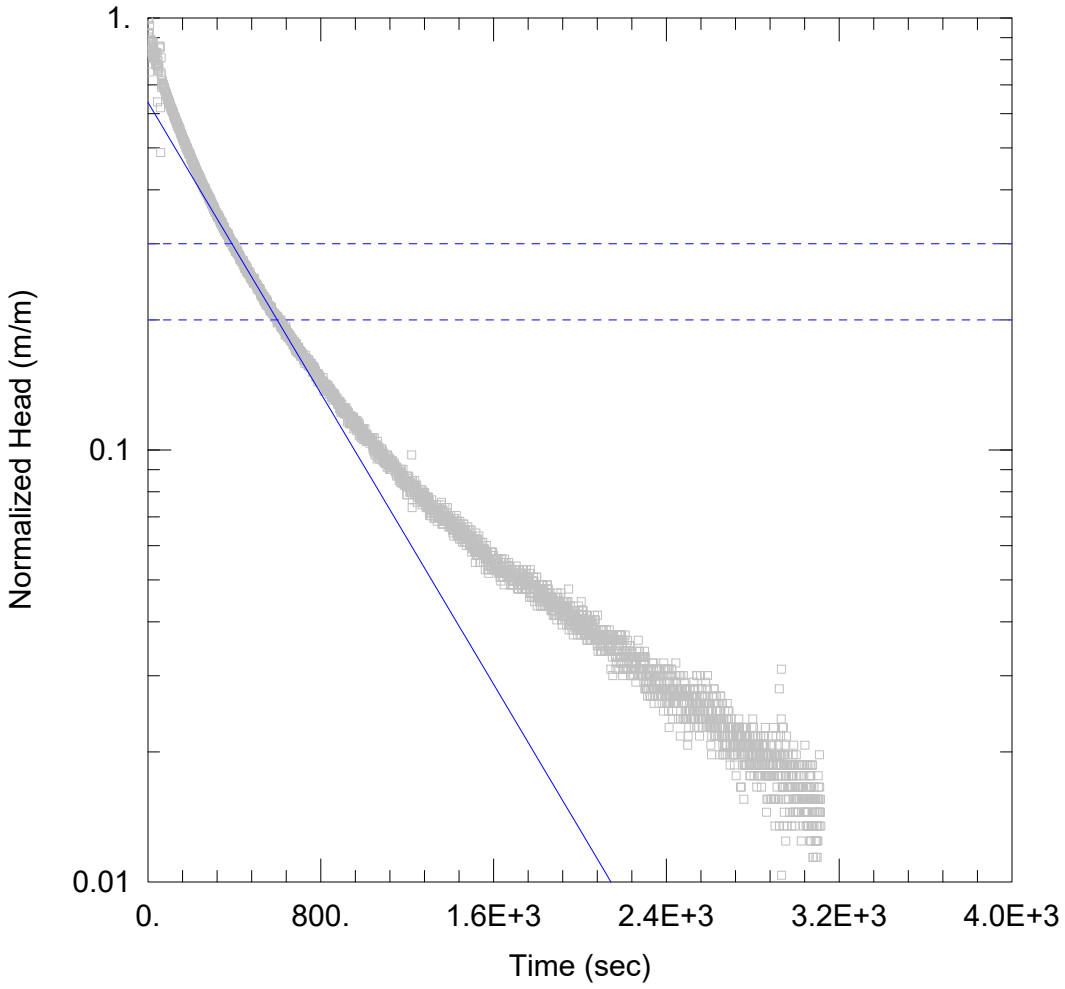
Saturated Thickness: 77.68 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-1D)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 75.18 m
Casing Radius: 0.025 m
Static Water Column Height: 77.68 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 6.762 m/day
y0 = 2.711 m



WELL TEST ANALYSIS

Data Set: \...\LG-1S FHT.aqt
Date: 01/16/24 Time: 13:52:41

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

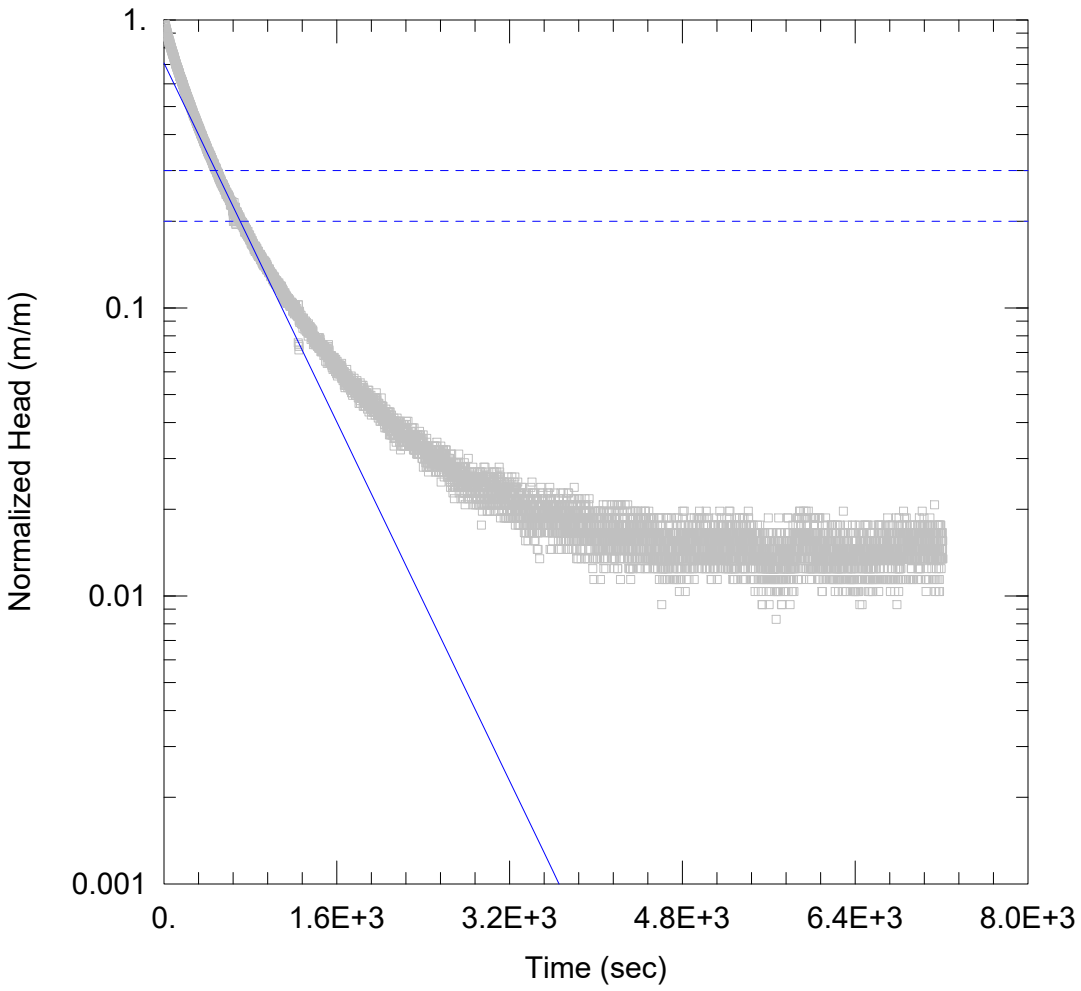
Saturated Thickness: 8.26 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-1S)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 7.26 m
Casing Radius: 0.025 m
Static Water Column Height: 8.26 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.05153 m/day
y0 = 0.6153 m



WELL TEST ANALYSIS

Data Set: \...\LG-1S RHT.aqt
Date: 01/16/24 Time: 13:52:55

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

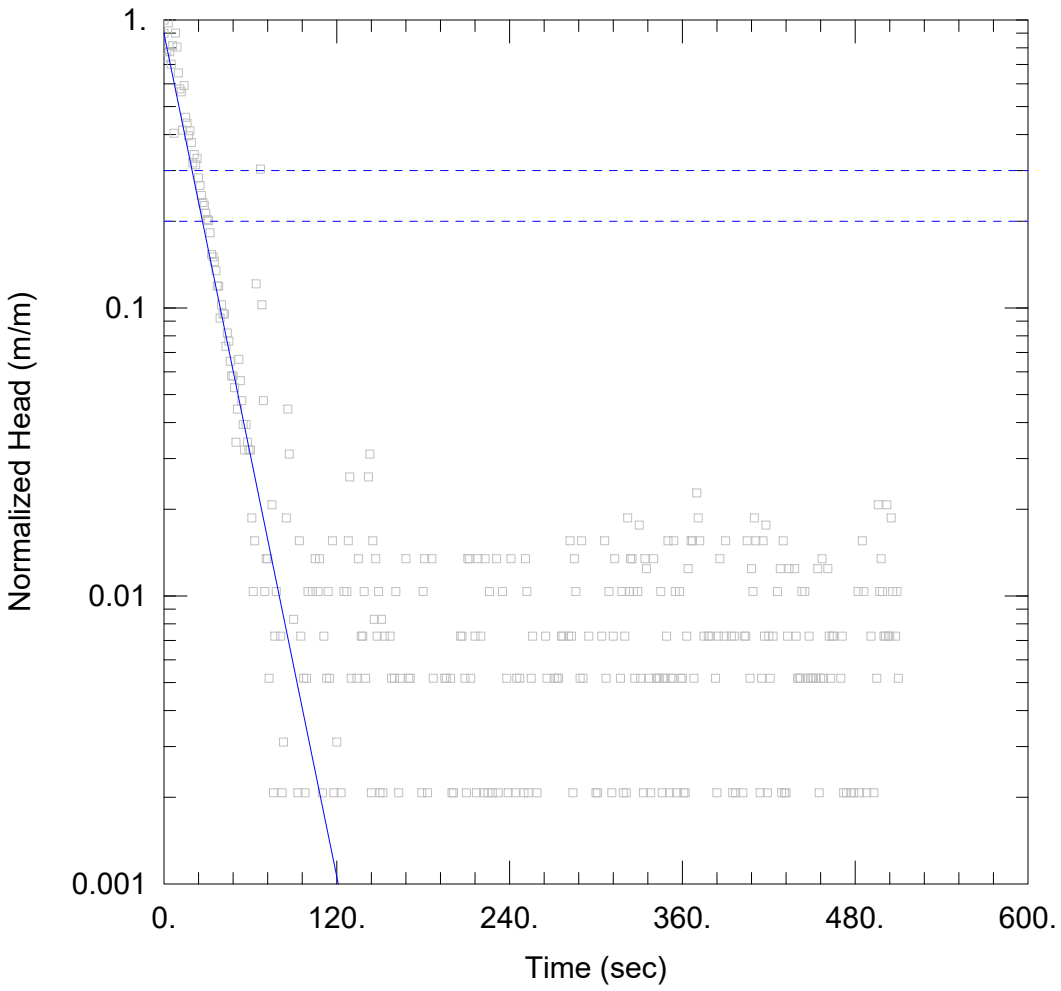
Saturated Thickness: 8.26 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-1S)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 7.26 m
Casing Radius: 0.025 m
Static Water Column Height: 8.26 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.04768 m/day
y0 = 0.6841 m



WELL TEST ANALYSIS

Data Set: \...\LG-2 FHT.aqt
Date: 01/16/24 Time: 13:53:14

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

Saturated Thickness: 64.99 m Anisotropy Ratio (Kz/Kr): 1.

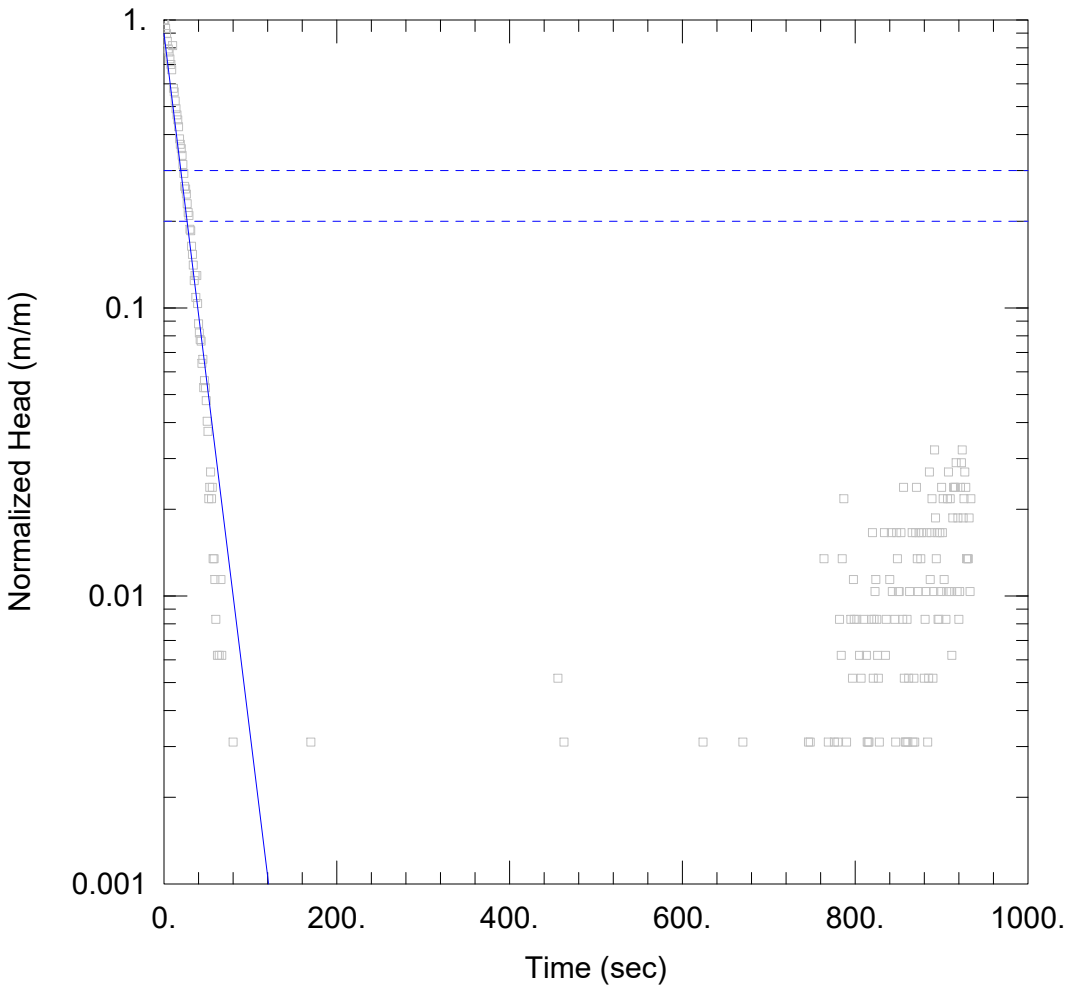
WELL DATA (LG-2)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 63.49 m
Casing Radius: 0.025 m
Static Water Column Height: 64.99 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 1.903 m/day y0 = 0.8654 m



WELL TEST ANALYSIS

Data Set: \...\LG-2 RHT.aqt
Date: 01/16/24 Time: 13:53:26

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

Saturated Thickness: 64.99 m Anisotropy Ratio (Kz/Kr): 1.

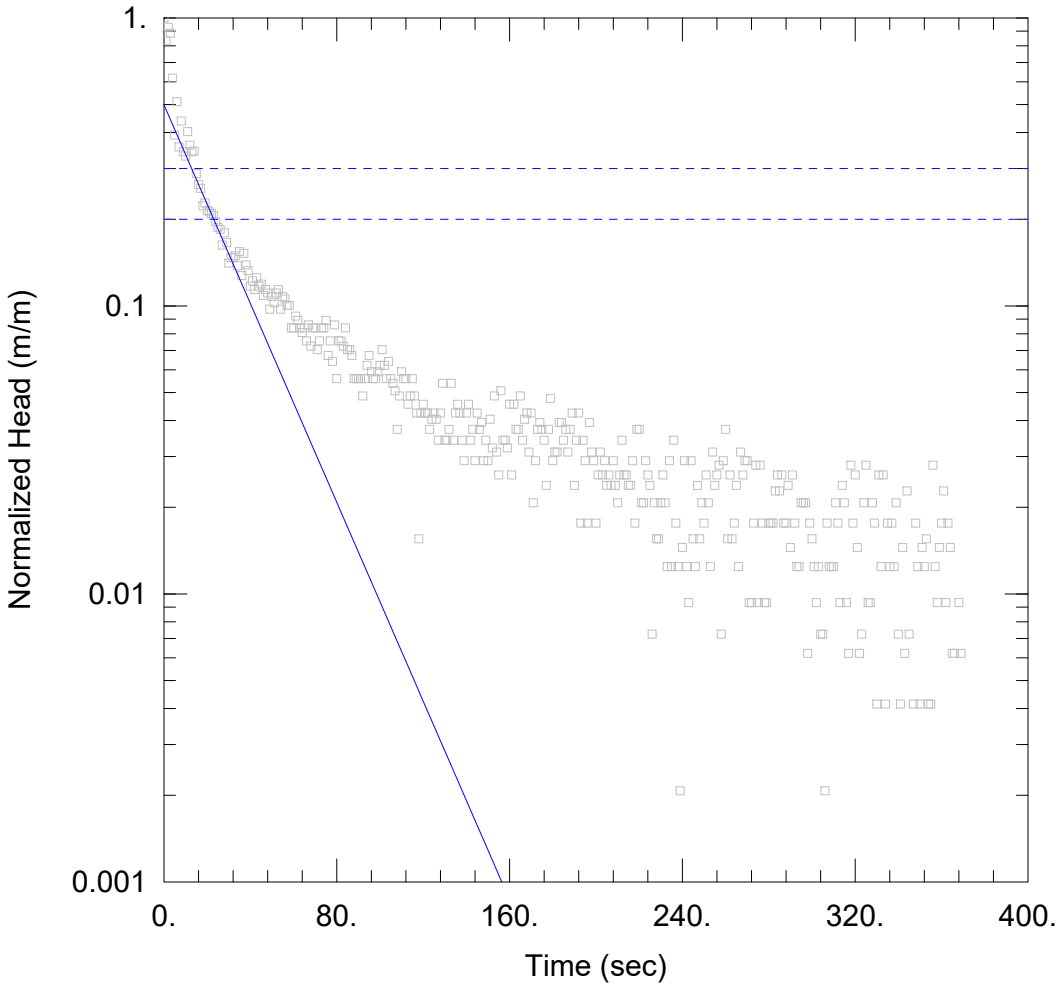
WELL DATA (LG-2)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 63.49 m
Casing Radius: 0.025 m
Static Water Column Height: 64.99 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 1.903 m/day y0 = 0.8654 m



WELL TEST ANALYSIS

Data Set: \...\LG-3 FHT.aqt
Date: 01/16/24 Time: 13:53:37

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

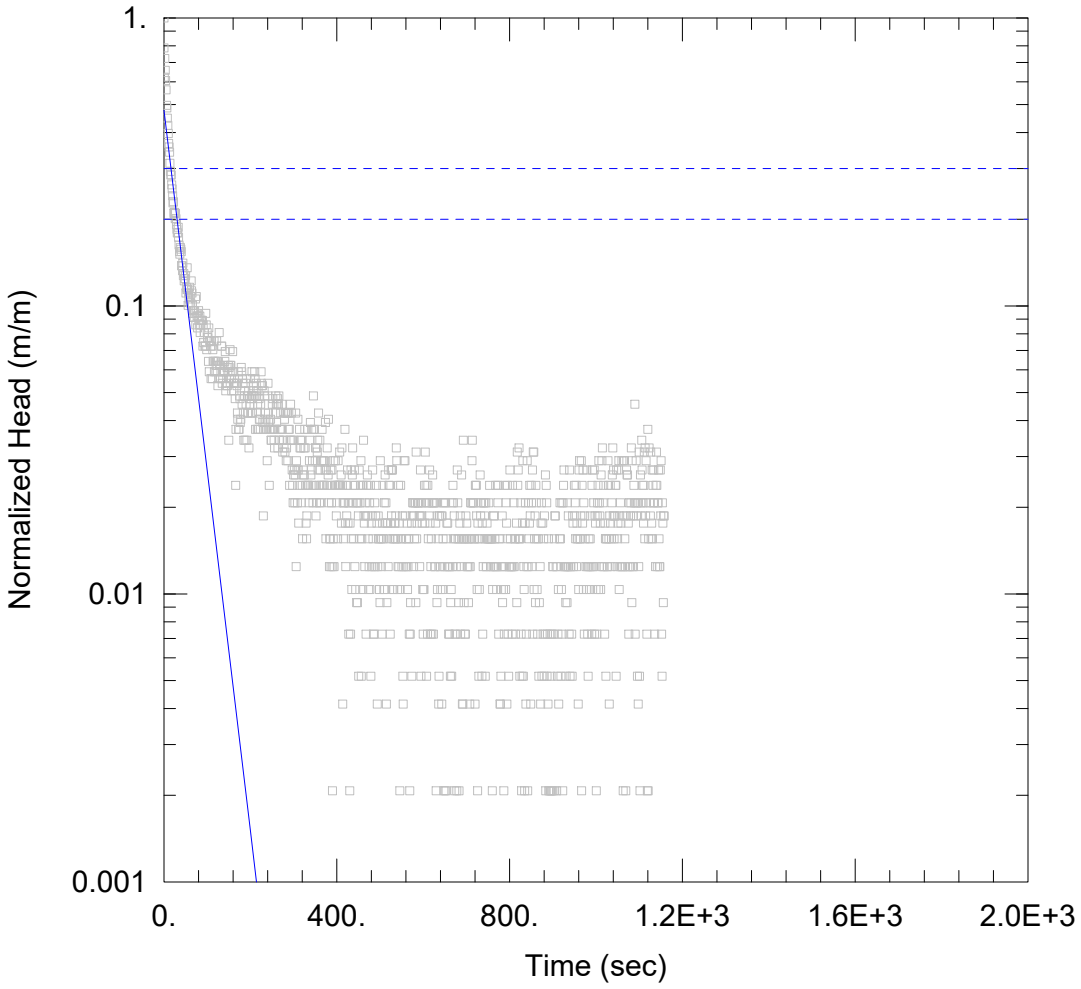
Saturated Thickness: 45.68 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-2)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 40.18 m
Casing Radius: 0.025 m
Static Water Column Height: 45.68 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 1.224 m/day
y0 = 0.4817 m



WELL TEST ANALYSIS

Data Set: \...\LG-3 RHT.aqt
Date: 01/16/24 Time: 13:53:49

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

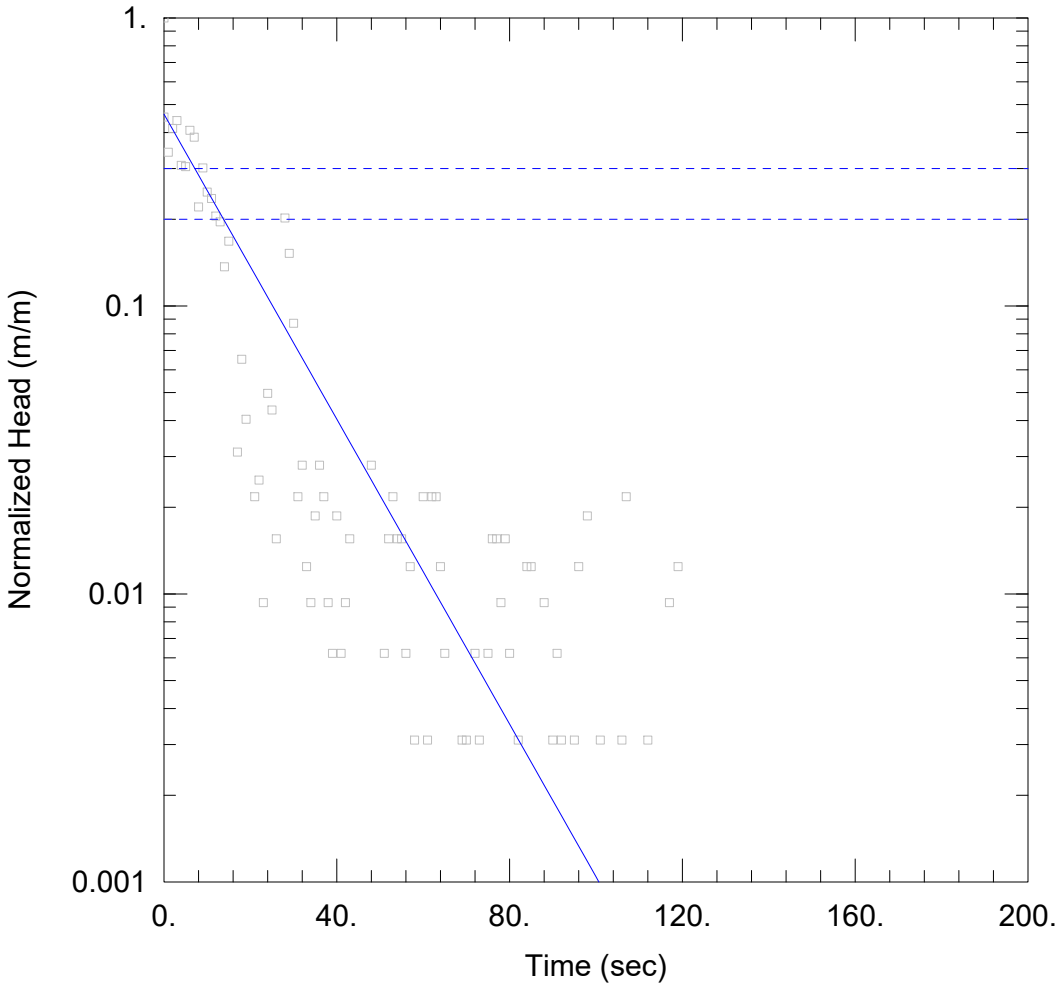
Saturated Thickness: 45.68 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-2)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 40.18 m
Casing Radius: 0.025 m
Static Water Column Height: 45.68 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.8869 m/day
y0 = 0.461 m



WELL TEST ANALYSIS

Data Set: \...\LG-4 FHT.aqt
Date: 01/16/24 Time: 13:54:01

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

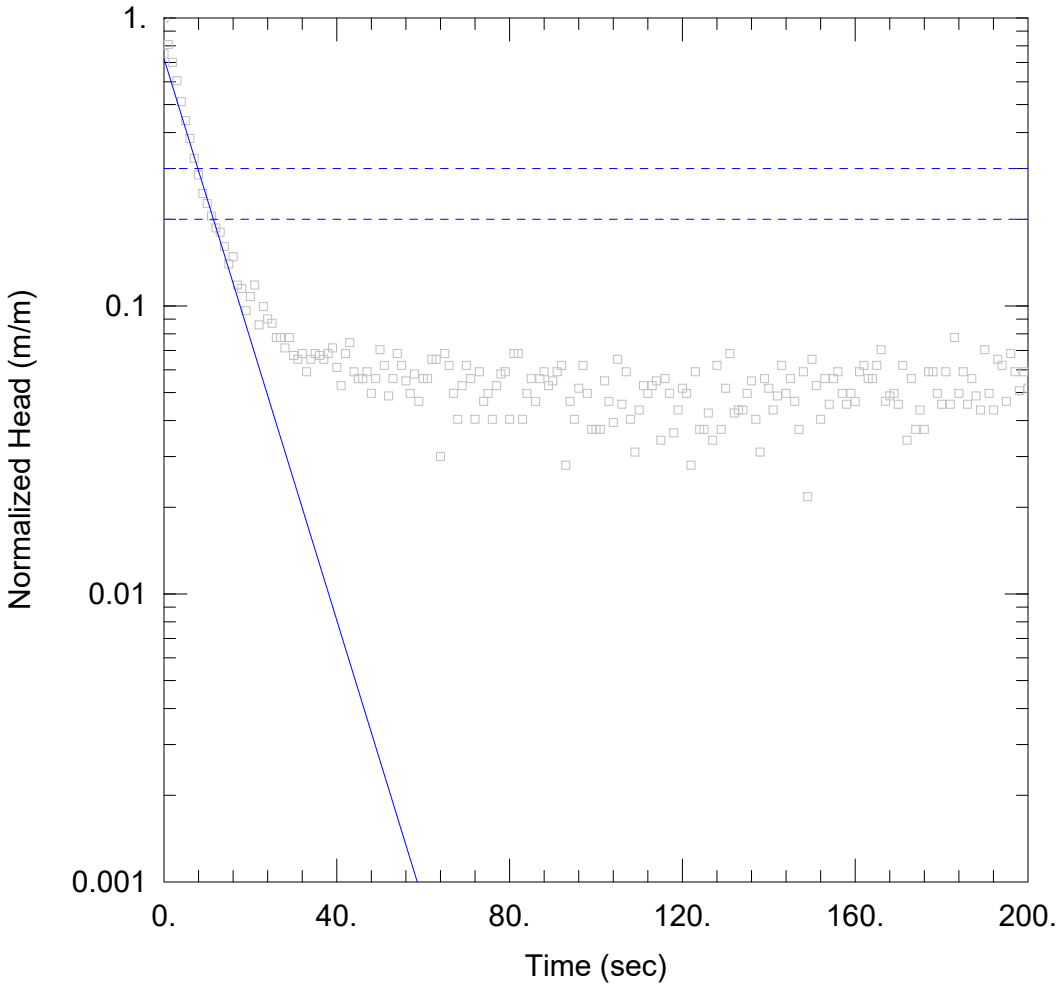
Saturated Thickness: 62.44 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-4)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 60.94 m
Casing Radius: 0.025 m
Static Water Column Height: 62.44 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 2.057 m/day
y0 = 0.4472 m



WELL TEST ANALYSIS

Data Set: \...\LG-4 RHT.aqt
Date: 01/16/24 Time: 13:54:30

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

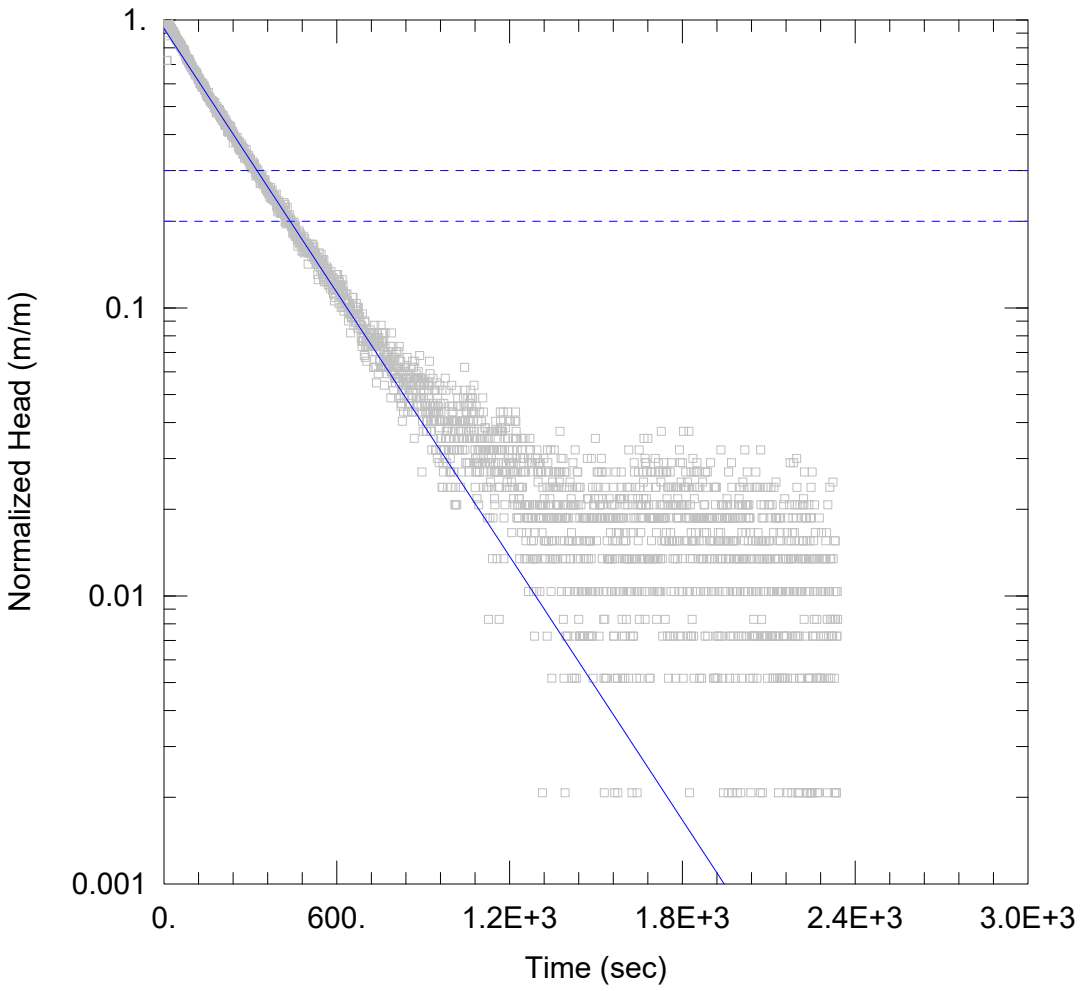
Saturated Thickness: 62.44 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-4)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 60.94 m
Casing Radius: 0.025 m
Static Water Column Height: 62.44 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 3.789 m/day
y0 = 0.6974 m



WELL TEST ANALYSIS

Data Set: \...\LG-5 FHT.aqt
Date: 01/16/24 Time: 13:54:43

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

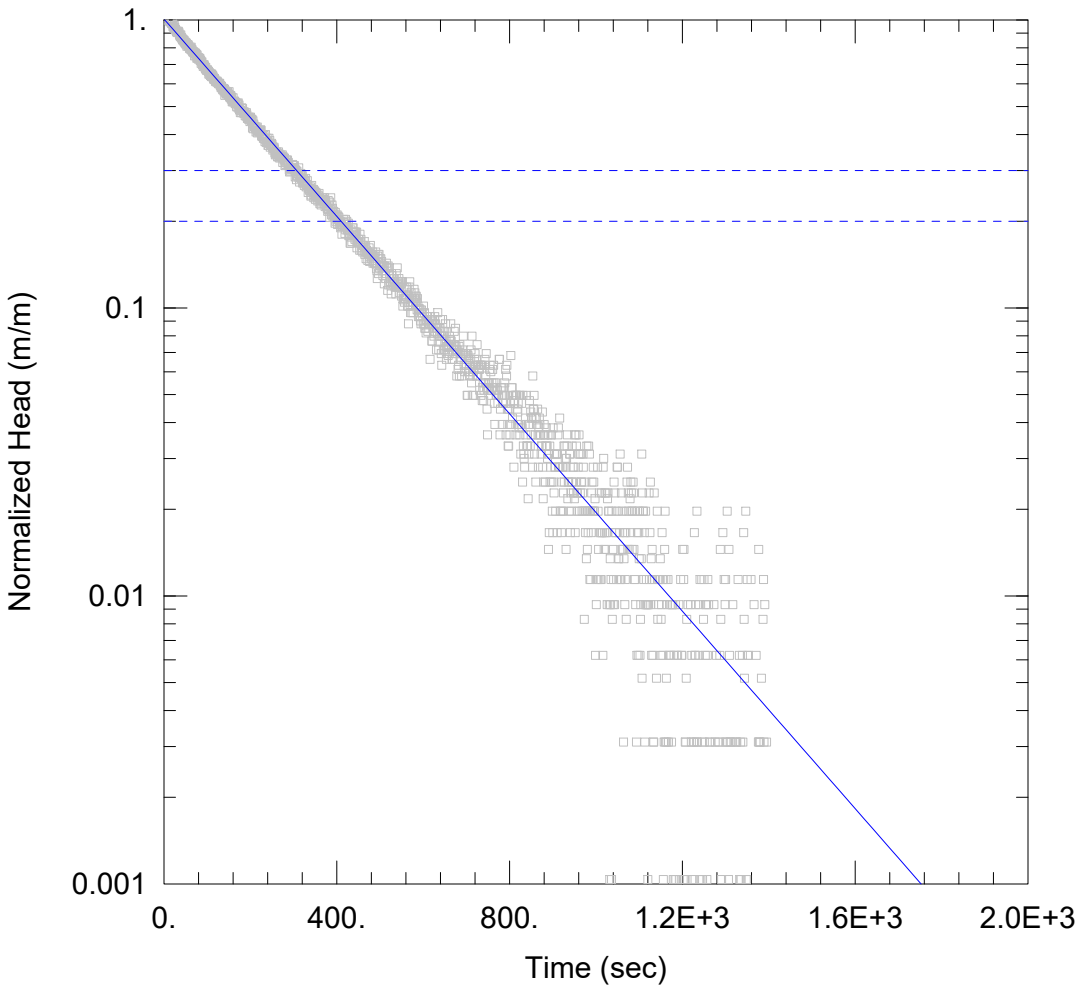
Saturated Thickness: 60.61 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-5)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 59.11 m
Casing Radius: 0.025 m
Static Water Column Height: 60.61 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.1183 m/day
y0 = 0.9009 m



WELL TEST ANALYSIS

Data Set: \...\LG-5 RHT.aqt
Date: 01/16/24 Time: 13:55:04

PROJECT INFORMATION

Company: CDM Smith
Client: Lithium Plus
Project: 1001678
Location: EL 31091, NT
Test Date: 16/12/2023

AQUIFER DATA

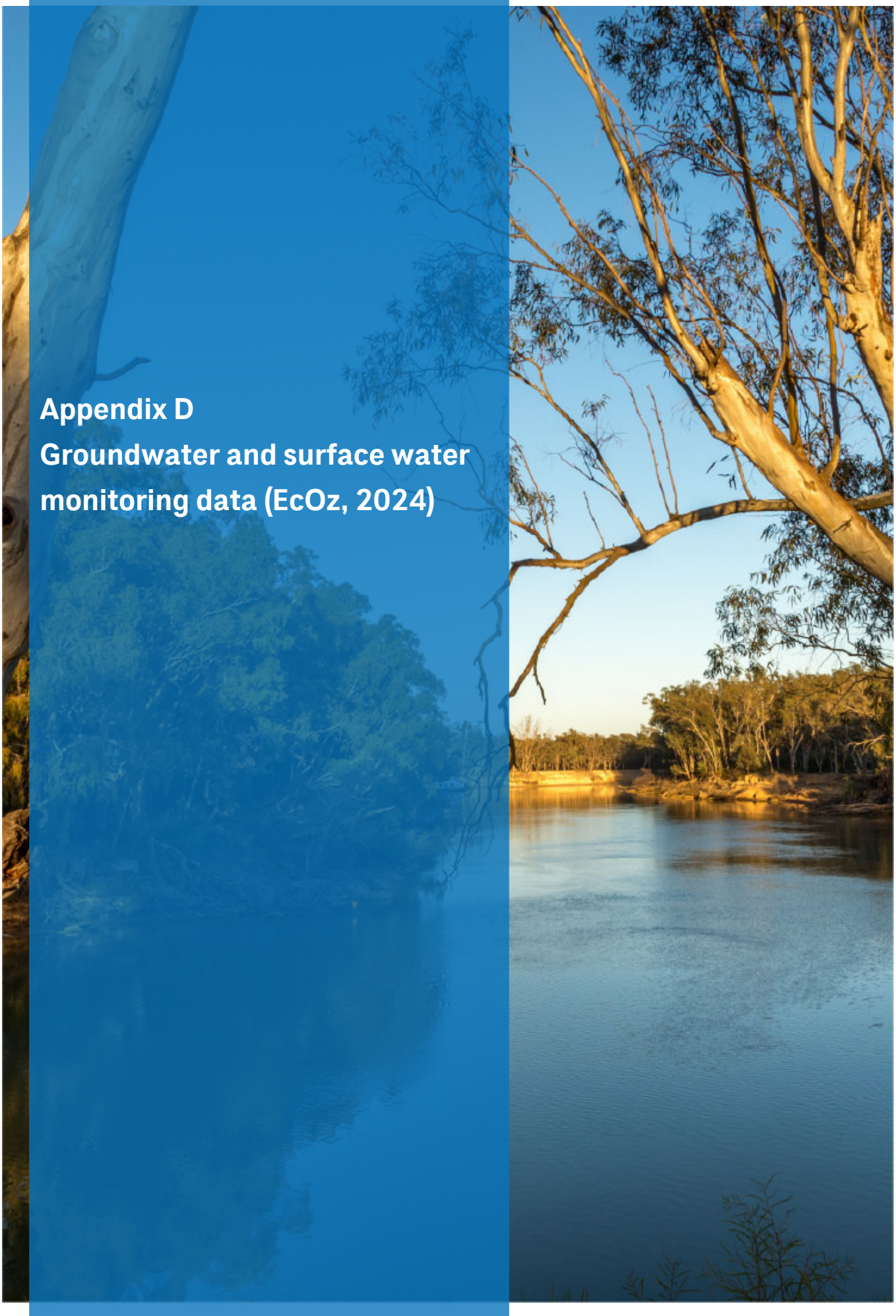
Saturated Thickness: 60.61 m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (LG-5)

Initial Displacement: 0.9653 m
Total Well Penetration Depth: 59.11 m
Casing Radius: 0.025 m
Static Water Column Height: 60.61 m
Screen Length: 3. m
Well Radius: 0.075 m

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.1328 m/day
y0 = 0.9726 m



Appendix D
Groundwater and surface water monitoring data (EcOz, 2024)

D.1 Laboratory results for testing of groundwater samples (as provided by EcOz, 2024).

D.1.1 Field test results

		EC	pH	Temp	Turbidity	Salinity	TDS	ORP	DO	SWL (m bgl)
		uS/cm	pH	°C	NTU	ppt	mg/L	mV	%	
Location Code	**Date**									
LG1s	**13 Dec 2023**	137.20	6.48	29.80	>	0.06	89.70	223.50	44.20	4.53
LG1s	**17 Jun 2024**	130.00	5.87	29.30	1239	0.06	85.00	98.00	15.50	2.56
LG1d	**13 Dec 2023**	226.30	7.04	30.40	3.40	0.11	146.00	168.30	27.40	2.16
LG1d	**17 Jun 2024**	226.60	6.42	28.80	53.12	0.11	147.00	-1.60	5.30	OVR
LG2	**13 Dec 2023**	209.00	6.85	30.50	3.63	0.10	135.20	-146.00	0.60	6.13
LG2	**26 Mar 2024**	200.10	6.73	30.40	5.00	0.09	130.60	-63.80	0.60	0.47
LG2	**13 Jun 2024**	204.50	6.74	29.90	4.60	0.09	132.00	44.00	23.00	3.72
LG3	**18 Dec 2023**	119.60	5.99	31.50	7.46	0.05	77.35	136.20	26.90	13.57
LG3	**26 Mar 2024**	109.00	5.99	32.80	5.00	0.05	70.90	67.00	5.20	5.38
LG3	**13 Jun 2024**	108.00	5.95	31.40	5.30	0.05	70.00	107.00	6.30	10.50
LG4	**18 Dec 2023**	213.00	7.01	31.10	1.33	0.10	138.40	-86.90	1.10	11.42
LG4	**26 Mar 2024**	218.00	7.06	31.10	5.00	0.10	141.70	-82.00	1.30	3.72
LG4	**17 Jun 2024**	210.20	6.59	30.90	1.41	0.10	136.00	-56.10	1.90	6.40
LG5	**13 Dec 2023**	247.50	6.46	31.10	>	0.12	161.20	-85.60	1.00	9.90
LG5	**26 Mar 2024**	242.10	6.72	31.10	300	0.11	156.30	-96.80	0.70	3.21
LG5	**13 Jun 2024**	232.00	6.48	30.70	78.20	0.11	150.00	55.00	0.30	5.03

D.1.2 Laboratory results

		Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Hydroxide) as CaCO3	Alkalinity (total) as CaCO3	Sulfate as SO4 - Turbidimetric (filtered)	Chloride	Anions Total	Cations Total	Calcium (filtered)	Magnesium (filtered)	Potassium (filtered)	Sodium (filtered)	Nitrogen (Total)	Nitrite + Nitrate as N	Kjeldahl Nitrogen Total	Total Phosphorus as P (Organic Phosphate as P)	Reactive Phosphorus as P (Orthophosphate as P)	Total Dissolved Solids (Lab)	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Barium	Barium (filtered)	Beryllium	Beryllium (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Chromium (III+VI)
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		1	1	1	1	1	1	0.01	0.01	1	1	1	1	0.1	0.01	0.1	0.01	0.01	10	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.001	0.05	0.05	0.0001	0.0001	0.001
Location Code	**Date**																															
LG1s	**13 Dec 2023**	59	<1	<1	59	3	4	1.35	1.49	7	6	5	12	0.6	0.03	0.6	0.3	0.11	799	12.6	<0.01	0.031	0.006	0.263	0.141	0.004	<0.001	<0.05	<0.05	<0.0001	<0.0001	0.03
LG1s	**17 Jun 2024**	60	<1	<1	60	<1	4	1.31	1.46	8	6	5	10	1.2	0.03	1.2	0.56	0.18	146	0.53	0.64	0.012	0.011	0.069	0.067	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG1d	**13 Dec 2023**	106	<1	<1	106	2	4	2.27	2.36	24	6	4	13	<0.1	<0.01	<0.1	0.1	0.07	212	0.06	<0.01	0.034	0.032	0.072	0.055	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG1d	**17 Jun 2024**	111	<1	<1	111	<1	4	2.33	2.42	21	6	9	15	0.3	<0.01	0.3	0.31	0.01	140	<0.01	<0.01	0.078	0.074	0.076	0.068	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG2	**13 Dec 2023**	92	<1	<1	92	<1	8	2.06	2.1	15	5	6	18	0.4	<0.01	0.4	0.34	0.24	190	0.07	<0.01	0.026	0.022	0.081	0.071	<0.001	<0.001	0.2	<0.05	<0.0001	<0.0001	0.001
LG2	**26 Mar 2024**	86	<1	<1	86	<1	7	1.92	1.73	12	4	6	15	0.4	<0.01	0.4	0.45	0.44	148	0.05	0.03	0.027	0.025	0.071	0.059	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG2	**13 Jun 2024**	90	<1	<1	90	<1	6	1.97	1.85	12	4	7	17	0.4	<0.01	0.4	0.38	0.24	178	0.06	0.01	0.022	0.019	0.062	0.052	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG3	**18 Dec 2023**	44	<1	<1	44	1	5	1.04	1.01	4	2	5	12	0.3	0.06	0.2	0.18	0.22	220	0.06	<0.01	0.006	0.006	0.051	0.047	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	0.001
LG3	**26 Mar 2024**	49	<1	<1	49	2	5	1.16	0.97	4	2	5	11	<0.1	0.04	<0.1	0.15	0.1	107	0.02	<0.01	0.013	0.012	0.07	0.062	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG3	**13 Jun 2024**	47	<1	<1	47	<1	5	1.08	1.01	4	2	5	12	0.2	0.03	0.2	0.16	0.14	112	0.06	<0.01	0.009	0.008	0.061	0.048	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	0.002
LG4	**18 Dec 2023**	97	<1	<1	97	<1	4	2.05	2	9	3	5	27	0.3	<0.01	0.3	0.46	0.41	148	0.01	<0.01	0.203	0.205	0.032	0.027	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG4	**26 Mar 2024**	110	<1	<1	110	<1	4	2.31	2.16	12	4	4	26	<0.1	<0.01	<0.1	0.23	0.15	115	<0.01	<0.01	0.16	0.154	0.036	0.034	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG4	**17 Jun 2024**	106	<1	<1	106	<1	4	2.23	2.18	13	4	3	26	0.2	<0.01	0.2	0.24	0.15	124	<0.01	<0.01	0.162	0.156	0.025	0.024	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001
LG5	**13 Dec 2023**	80	<1	<1	80	11	16	2.28	2.34	4	2	6	42	1	<0.01	1	1.65	1.3	353	6.68	<0.01	0.205	0.152	0.081	0.014	0.004	<0.001	<0.05	<0.05	<0.0001	<0.0001	0.005
LG5	**26 Mar 2024**	97	<1	<1	97	2	14	2.37	2.48	10	2	8	37	0.4	<0.01	0.4	1.9	1.64	245	0.99	0.27	0.141	0.131	0.066	0.048	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	0.002
LG5	**13 Jun 2024**	98	<1	<1	98	<1	15	2.38	2.16	5	2	7	36	0.3	<0.01	0.3	1.4	1.35	269	5.95	2.6	0.13	0.119	0.031	0.028	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<0.001

		Chromium (III+VI) (filtered)	Cobalt	Cobalt (filtered)	Copper	Copper (filtered)	Iron	Iron (filtered)	Lead	Lead (filtered)	Lithium	Lithium (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Selenium	Selenium (filtered)	Vanadium	Vanadium (filtered)	Zinc	Zinc (filtered)	Benzene	Ethylbenzene
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L
		0.001	0.001	0.001	0.001	0.001	0.05	0.05	0.001	0.001	0.001	0.001	0.001	0.001	0.0001	0.0001	0.001	0.001	0.01	0.01	0.01	0.01	0.005	0.005	1	2
Location Code	**Date**																									
LG1s	**13 Dec 2023**	<0.001	0.005	<0.001	0.004	<0.001	18.5	<0.05	0.008	<0.001	0.112	0.098	0.173	0.016	<0.0001	<0.0010	0.015	0.002	0.03	<0.01	<0.01	<0.01	0.079	0.009	<1	<2
LG1s	**17 Jun 2024**	<0.001	<0.001	<0.001	0.001	0.001	0.17	0.15	<0.001	<0.001			0.088	0.082	<0.0001	<0.0001	0.006	0.002	<0.01	<0.01	<0.01	<0.01	0.058	0.053	<1	<2
LG1d	**13 Dec 2023**	<0.001	<0.001	<0.001	<0.001	0.001	0.43	<0.05	0.003	<0.001	0.085	0.088	0.158	0.147	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.009	0.006	<1	<2
LG1d	**17 Jun 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	2.78	2.24	<0.001	<0.001			0.185	0.168	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.023	<0.005	<1	<2
LG2	**13 Dec 2023**	<0.001	<0.001	<0.001	<0.001	<0.001	3.76	2.63	<0.001	<0.001	0.096	0.101	0.286	0.261	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.01	0.006	<1	<2
LG2	**26 Mar 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	2.52	1.9	<0.001	<0.001	0.088	0.078	0.243	0.21	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<1	<2
LG2	**13 Jun 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	2.34	1.85	<0.001	<0.001	0.101	0.084	0.243	0.206	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.006	0.006	<1	<2
LG3	**18 Dec 2023**	<0.001	<0.001	<0.001	<0.001	<0.001	0.06	<0.05	<0.001	<0.001	0.044	0.045	0.003	0.003	<0.0001	<0.0001	0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.007	0.005	<1	<2
LG3	**26 Mar 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	0.26	0.2	<0.001	<0.001	0.043	0.039	0.111	0.103	<0.0001	<0.0001	0.002	0.001	<0.01	<0.01	<0.01	<0.01	0.044	0.042	<1	<2
LG3	**13 Jun 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	0.59	0.49	<0.001	<0.001	0.044	0.037	0.08	0.067	<0.0001	<0.0001	0.002	0.001	<0.01	<0.01	<0.01	<0.01	0.02	0.016	<1	<2
LG4	**18 Dec 2023**	<0.001	<0.001	<0.001	<0.001	<0.001	0.31	0.23	<0.001	<0.001	0.13	0.132	0.067	0.064	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<1	<2
LG4	**26 Mar 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	0.26	0.18	<0.001	<0.001	0.107	0.104	0.083	0.082	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<1	<2
LG4	**17 Jun 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	0.29	0.22	<0.001	<0.001			0.079	0.079	<0.0001	<0.0001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.012	0.005	<1	<2
LG5	**13 Dec 2023**	<0.001	0.004	<0.001	0.012	<0.001	5.1	<0.05	0.021	<0.001	0.245	0.277	0.06	0.01	<0.0001	<0.0001	0.006	0.004	0.02	<0.01	<0.01	<0.01	0.034	<0.005	<1	<2
LG5	**26 Mar 2024**	0.001	<0.001	<0.001	<0.001	<0.001	1.4	1.07	0.004	0.002	0.255	0.234	0.027	0.021	<0.0001	<0.0001	0.001	0.001	<0.01	<0.01	<0.01	<0.01	0.007	<0.005	<1	<2
LG5	**13 Jun 2024**	<0.001	<0.001	<0.001	<0.001	<0.001	3.16	2.04	0.001	0.002	0.282	0.262	0.025	0.023	<0.0001	<0.0001	0.001	<0.001	<0.01	<0.01	<0.01	<0.01	0.008	0.012	<1	<2

		Naphthalene (VOC)	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
		mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		0.005	2	2	2	2	1	20	20	100	100	100	100	100	20	50	100	50	50
Location Code	Date																		
LG1s	13 Dec 2023	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG1s	17 Jun 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG1d	13 Dec 2023	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG1d	17 Jun 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG2	13 Dec 2023	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG2	26 Mar 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG2	13 Jun 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG3	18 Dec 2023	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG3	26 Mar 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG3	13 Jun 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG4	18 Dec 2023	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG4	26 Mar 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG4	17 Jun 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG5	13 Dec 2023	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG5	26 Mar 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50
LG5	13 Jun 2024	<0.005	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<20	<50	<100	<50	<50

D.2 Laboratory results for testing of surface water samples (as provided by EcOz, 2024).

D.2.1 Field test results

		Temperature	D.O	E.C	TDS	Salinity	pH	ORP	Turbidity
		°C	%	uS/cm	mg/L	ppt	pH	mV	NTU
Location Code	**Date**								
New 1	**12 Dec 2023**	33.9	40	45558	29640	24.2	7.18	-27.3	7.42
New 1	**16 Jan 2024**	26.6	68.1	180.6	117.65	0.08	6.16	227.1	17.6
New 1	**28 Feb 2024**	29.6	88	1931	1255	0.97	6.33	167.6	3.4
New 1	**20 Mar 2024**	29.9	94.7	212.7	138	0.1	6.29	251.4	6.12
New 1	**16 Apr 2024**	28.2	72	2573	1670	1.32	6.17	302	<10
New 1	**15 May 2024**	27.5	53.1	28750	18700	17.89	6.9	240.6	1.89
New 1	**12 Jun 2024**	25.1	88.5	44506	28926	28.73	6.65	212.3	3.21
New 2	**28 Feb 2024**	29	78.6	22.9	15	0.01	6.48	143.7	3.44
New 2	**20 Mar 2024**	29.6	82.7	70.4	46	0.03	6.09	230.1	9.14
New 2	**16 Apr 2024**	27.4	73	25.4	16.9	0.01	5.7	282	<10
New 2	**15 May 2024**	26	53.6	94.9	62.4	0.04	7.05	278.2	2.05
New 2	**12 Jun 2024**	23	63.3	56.7	37	0.03	6.28	190	5.14
New Upstream	**23 Nov 2023**	29.1	58.7	1400	909	0.69	6.06	216.2	5.32
New Upstream	**12 Dec 2023**	28.6	56.2	453	300.5	0.22	7.2	137.4	9.72
New Upstream	**16 Jan 2024**	27.4	68.3	21.4	13.65	0.01	6.22	220.3	20.7
New Upstream	**28 Feb 2024**	28.9	70.3	23.6	15	0.1	7.46	186.8	4.42
New Upstream	**20 Mar 2024**	30.1	77.1	74.5	48	0.03	5.76	249.3	3.69
New Upstream	**16 Apr 2024**	30.4	65	44.5	28.6	0.02	5.94	225	<10
New Upstream	**15 May 2024**	25.6	38.3	40.5	26.65	0.02	5.99	389.1	2.19
New Upstream	**12 Jun 2024**	24	73.6	55.4	36	0.03	6.86	185.3	1.99
SW1	**16 Jan 2024**	27	59.2	16.6	11.7	0.01	5.67	220	17.2
SW1	**28 Feb 2024**	29.4	91.5	515	333	0.24	7.29	185.7	4.23
SW1	**20 Mar 2024**	29.7	97	86	56	0.64	6.37	267.9	6.64
SW1	**16 Apr 2024**	29.6	57	46	29.9	0.02	5.9	233.5	<10
SW2	**16 Jan 2024**	26.7	54.2	25.4	16.25	0.01	5.78	220.7	4.6
SW2	**28 Feb 2024**	30.2	45.9	10967	7129	6.17	6.59	126.4	0.39
SW2	**26 Mar 2024**	32.4	50.2	46.1	29.9	0.02	6.64	141.7	<10
SW2	**16 Apr 2024**	29.7	49	8533	5544	4.71	6.15	289	<10
SW2	**15 May 2024**	25.7	50.1	2411	1566.2	1.23	6.17	332.6	1.9
SW2	**12 Jun 2024**	23.4	55.1	22990	14948	13.9	6.73	185.9	1.05

		Temperature	D.O	E.C	TDS	Salinity	pH	ORP	Turbidity
		°C	%	uS/cm	mg/L	ppt	pH	mV	NTU
Location Code	**Date**								
SW3	**23 Nov 2023**	31.2	81.1	32945	21426	20.48	6.86	298.7	15.1
SW3	**12 Dec 2023**	30.5	57.3	9512	6181.5	5.29	6.5	221.5	13
SW3	**16 Jan 2024**	26.6	54.2	17.9	11.7	0.01	6.3	209.3	18.4
SW3	**28 Feb 2024**	29	86.9	233.8	152	0.11	7.64	180.6	5.16
SW3	**26 Mar 2024**	31.1	63.3	165	107	0.08	6.32	152.3	<10
SW3	**16 Apr 2024**	29.6	72	548	357	0.26	6.09	238	<10
SW3	**15 May 2024**	26.3	57.4	22799	14820	13.72	6.78	388.1	3.13
SW3	**12 Jun 2024**	27.1	93	38402	24965	24.36	7.07	213.9	2.79
SW4	**16 Jan 2024**	27.8	60.3	26.5	16.9	0.01	6.07	224.4	4.4
SW4	**28 Feb 2024**	29.3	65.7	62	40	0.03	6.07	157.1	5.74
SW4	**16 Apr 2024**	28.7	46	494	318.5	0.24	5.83	265	<10
SW5	**23 Nov 2023**	31.6	73.9	51129	33268	33.4	7.01	347.3	5.19
SW5	**12 Dec 2023**	32.3	93.6	1110	702.6	0.52	7.24	222.3	7.12
SW5	**28 Feb 2024**	29.8	83.8	21035	13673	12.52	7.01	225.6	1.48
SW5	**16 Apr 2024**	32.2	72	27816	18077	16.95	6.91	301.2	<10
SW5	**15 May 2024**	28.6	47.6	46964	30550	30.43	7.08	348.8	3.41
SW5	**13 Jun 2024**	26.2	84.1	50048	32532	32.74	7.04	66.6	1.61

D.2.2 Laboratory results

		Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	Chlorophyll a	Total Phosphorus as P (Organic Phosphate as P)	Sulfate as SO4 - Turbidimetric (filtered)	Nitrite + Nitrate as N	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Hydroxide) as CaCO3	Alkalinity (total) as CaCO3	Ammonia as N	Anions Total	Cations Total	Chloride	Ionic Balance	Kjeldahl Nitrogen Total	Nitrate (as N)	Nitrite (as N)
		mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	%	mg/L	mg/L	mg/L
		0.005	1	2	2	2	2	2	1	20	20	100	100	100	100	100	0.001	0.01	1	0.01	1	1	1	1	0.01	0.01	0.01	1	0.01	0.1	0.01	0.01
Location Code	**Date**																															
New 1	**12 Dec 2023**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.001	0.04	2,600	<0.01	118	<1	<1	118	0.1	519	512	16,400	0.66	0.4	<0.01	<0.01
New 1	**16 Jan 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	6	0.01	3	<1	<1	3	0.09	1.68	1.78	53		0.2	<0.01	0.01
New 1	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	64	<0.01	8	<1	<1	8	0.05	16.9	16.4	547	1.44	0.2	<0.01	<0.01
New 1	**20 Mar 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	4	<0.01	7	<1	<1	7	<0.01	1.38	1.32	41		0.2	<0.01	<0.01
New 1	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	85	<0.01	12	<1	<1	12	<0.01	22.2	20.7	714	3.43	0.2	<0.01	<0.01
New 1	**15 May 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.005	0.06	1,370	<0.01	61	<1	<1	61	<0.01	295	288	9,400	1.12	0.2	<0.01	<0.01
New 1	**12 Jun 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.12	2,330	<0.01	115	<1	<1	115	0.22	502	529	16,000	2.65	0.3	<0.01	<0.01
New 2	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.04	<1	<0.01	6	<1	<1	6	0.07	0.23	0.09	4		0.3	<0.01	<0.01
New 2	**20 Mar 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	<0.01	5	<1	<1	5	<0.01	0.18	0.13	3		0.2	<0.01	<0.01
New 2	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	<0.01	8	<1	<1	8	<0.01	0.3	0.22	5		0.2	<0.01	<0.01
New 2	**15 May 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	1	0.03	8	<1	<1	8	<0.01	0.52	0.69	12		0.2	0.03	<0.01
New 2	**12 Jun 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	<0.01	7	<1	<1	7	0.24	0.34	0.21	7		0.5	<0.01	<0.01
New Upstream	**23 Nov 2023**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	<1	<0.01	10	<1	<1	10	0.02	0.42	0.48	8		0.4	<0.01	<0.01
New Upstream	**12 Dec 2023**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.004	0.02	<1	<0.01	7	<1	<1	7	0.02	0.34	0.32	7		0.4	<0.01	<0.01
New Upstream	**16 Jan 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	<1	0.02	8	<1	<1	8	0.02	0.27	0.09	4		0.2	0.01	0.01
New Upstream	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	<1	<0.01	6	<1	<1	6	0.01	0.23	0.13	4		0.3	<0.01	<0.01
New Upstream	**20 Mar 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	<0.01	6	<1	<1	6	<0.01	0.23	0.13	4		0.2	<0.01	<0.01
New Upstream	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	<0.01	7	<1	<1	7	<0.01	0.25	0.39	4		0.2	<0.01	<0.01
New Upstream	**15 May 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.001	<0.01	<1	<0.01	9	<1	<1	9	0.01	0.32	0.47	5		0.2	<0.01	<0.01
New Upstream	**12 Jun 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	1	<0.01	7	<1	<1	7	0.23	0.27	0.17	4		0.4	<0.01	<0.01
SW1	**16 Jan 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	<1	<0.01	3	<1	<1	3	0.05	0.17	0.17	4		0.2	<0.01	0.01
SW1	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	0.01	6	<1	<1	6	<0.01	0.23	0.13	4		0.2	0.01	<0.01
SW1	**20 Mar 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	<0.01	10	<1	<1	10	<0.01	0.31	0.17	4		0.1	<0.01	<0.01
SW1	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	<1	<0.01	10	<1	<1	10	0.02	0.31	0.26	4		0.1	<0.01	<0.01
SW2	**16 Jan 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	<1	<0.01	2	<1	<1	2	0.03	0.21	0.17	6		0.2	<0.01	<0.01
SW2	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	2	<0.01	7	<1	<1	7	<0.01	0.74	0.64	20		0.3	<0.01	<0.01
SW2	**26 Mar 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	2	<0.01	6	<1	<1	6	<0.01	0.75	0.56	21		0.2	<0.01	<0.01
SW2	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.001	<0.01	400	<0.01	31	<1	<1	31	0.02	78.6	74.5	2,470	2.72	0.2	<0.01	<0.01
SW2	**15 May 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.002	<0.01	89	<0.01	14	<1	<1	14	0.01	21.2	19	676	5.54	0.2	<0.01	<0.01
SW2	**12 Jun 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.04	1,600	<0.01	70	<1	<1	70	0.1	342	302	10,900	6.22	0.4	<0.01	<0.01
SW3	**23 Nov 2023**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.001	0.05	366	<0.01	26	<1	<1	26	0.02	78.9	83.7	2,510	2.92	0.4	<0.01	<0.01
SW3	**12 Dec 2023**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.002	0.02	420	<0.01	28	<1	<1	28	0.04	87.4	79.4	2,770	4.82	0.4	<0.01	<0.01
SW3	**16 Jan 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.03	<1	<0.01	2	<1	<1	2	0.05	0.15	0.09	4		0.2	<0.01	0.02

		Naphthalene (VOC)	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)	Chlorophyll a	Total Phosphorus as P (Organic Phosphate as P)	Sulfate as SO4 - Turbidimetric (filtered)	Nitrite + Nitrate as N	Alkalinity (Bicarbonate as CaCO3)	Alkalinity (Carbonate as CaCO3)	Alkalinity (Hydroxide) as CaCO3	Alkalinity (total) as CaCO3	Ammonia as N	Anions Total	Cations Total	Chloride	Ionic Balance	Kjeldahl Nitrogen Total	Nitrate (as N)	Nitrite (as N)
		mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	meq/L	meq/L	mg/L	%	mg/L	mg/L	mg/L
		0.005	1	2	2	2	2	2	1	20	20	100	100	100	100	100	0.001	0.01	1	0.01	1	1	1	1	0.01	0.01	0.01	1	0.01	0.1	0.01	0.01
Location Code	**Date**																															
SW3	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	12	<0.01	9	<1	<1	9	<0.01	3.19	3.16	98	0.49	0.3	<0.01	<0.01
SW3	**26 Mar 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	5	<0.01	6	<1	<1	6	<0.01	1.44	1.27	43		0.2	<0.01	<0.01
SW3	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	14	<0.01	11	<1	<1	11	<0.01	3.9	3.88	120	0.19	0.2	<0.01	<0.01
SW3	**15 May 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.002	0.04	1,160	0.01	52	<1	<1	52	0.02	238	230	7,530	1.55	0.2	0.01	<0.01
SW3	**12 Jun 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.06	1,940	<0.01	99	<1	<1	99	0.23	418	451	13,300	3.82	0.4	<0.01	<0.01
SW4	**16 Jan 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.02	<1	<0.01	4	<1	<1	4	0.02	0.25	0.17	6		0.6	<0.01	0.01
SW4	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	2	<0.01	9	<1	<1	9	0.09	0.56	0.35	12		0.2	<0.01	<0.01
SW4	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	<0.01	12	<0.01	13	<1	<1	13	<0.01	3.42	3.32	103	1.36	0.1	<0.01	<0.01
SW5	**23 Nov 2023**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.006	0.04	2,440	<0.01	109	<1	<1	109	0.1	459	527	14,400	6.89	0.4	<0.01	<0.01
SW5	**12 Dec 2023**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.04	2,160	<0.01	107	<1	<1	107	0.07	436	448	13,800	1.26	0.6	<0.01	<0.01
SW5	**28 Feb 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.004	0.01	886	0.01	60	<1	<1	60	<0.01	209	211	6,720	0.54	0.3	0.01	<0.01
SW5	**16 Apr 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.002	<0.01	1,020	<0.01	71	<1	<1	71	<0.01	275	267	8,960	1.54	0.2	<0.01	<0.01
SW5	**15 May 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	0.001	0.07	2,460	<0.01	105	<1	<1	105	0.06	476	511	15,000	3.47	0.5	<0.01	<0.01
SW5	**13 Jun 2024**	<0.005	<1	<2	<2	<2	<2	<2	<1	<20	<20	<100	<100	<100	<100	<100	<0.001	0.05	2,630	<0.01	127	<1	<1	127	0.25	565	607	18,000	3.56	0.4	<0.01	<0.01

		Nitrogen (Total)	Reactive Phosphorus as P (Orthophosphate as P)	Sodium (filtered)	Hardness as CaCO3 (filtered)	Total Suspended Solids (Lab)	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Barium	Barium (filtered)	Beryllium	Beryllium (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Calcium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Cobalt	Cobalt (filtered)	Copper	Copper (filtered)	Iron	Iron (filtered)
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		0.1	0.01	1	1	5	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.001	0.05	0.05	0.0001	0.0001	1	0.001	0.001	0.001	0.001	0.001	0.001	0.05	0.05
Location Code	**Date**																										
New 1	**12 Dec 2023**	0.4	<0.01	9,010		11	<0.10	<0.10	<0.010	<0.010	0.019	0.018	<0.010	<0.010	4.21	3.91	<0.0010	<0.0010	398	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.1	<0.10
New 1	**16 Jan 2024**	0.2	<0.01	34		7	0.27	0.03	<0.001	<0.001	0.007	0.005	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.31	0.07
New 1	**28 Feb 2024**	0.2	<0.01	294	167	<5	0.15	0.01	<0.001	<0.001	0.011	0.011	<0.001	<0.001	0.13	0.14	<0.0001	<0.0001	11	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.61	<0.05
New 1	**20 Mar 2024**	0.2	<0.01	23	15	<5	0.05	<0.01	0.001	0.001	0.012	0.012		<0.001	<0.05	<0.05	<0.0001	<0.0001	1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.48	<0.05
New 1	**16 Apr 2024**	0.2	<0.01	363	227	<5	0.19	<0.01	0.002	0.001	0.02	0.018	<0.001	<0.001	0.16	0.18	<0.0001	<0.0001	15	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.18	<0.05
New 1	**15 May 2024**	0.2	<0.01	5,110		12	<0.01	0.02	<0.001	0.001	0.021	0.019	<0.001	<0.001	1.79	2.02	<0.0001	<0.0001	226	<0.001	<0.001	<0.001	<0.001	0.004	0.006	0.08	0.44
New 1	**12 Jun 2024**	0.3	<0.01	9,290	5,820	<5	<0.10	<0.10	<0.010	<0.010	0.015	0.018		<0.010	3.5	3.3	<0.0010	<0.0010	402	<0.010	<0.010	<0.010	<0.010	0.022	0.022	0.19	<0.10
New 2	**28 Feb 2024**	0.3	<0.01	2	<1	<5	0.1	0.03	<0.001	<0.001	0.011	0.011	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.52	0.13
New 2	**20 Mar 2024**	0.2	<0.01	3	<1	<5	0.06	<0.01	0.001	<0.001	0.012	0.009		<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.44	0.13
New 2	**16 Apr 2024**	0.2	<0.01	5	<1	<5	0.15	0.01	0.002	0.002	0.023	0.018	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.41	0.21
New 2	**15 May 2024**	0.2	<0.01	12		<5	0.04	0.01	0.004	0.003	0.028	0.026	<0.001	<0.001	<0.05	0.06	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	2.35	0.37
New 2	**12 Jun 2024**	0.5	<0.01	3	4	<5	0.01	<0.01	0.002	0.002	0.021	0.022		<0.001	<0.05	0.07	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	0.004	0.004	1.32	0.2
New Upstream	**23 Nov 2023**	0.4	<0.01	6		<5	0.23	0.05	0.003	0.002	0.039	0.027		<0.001	<0.05	0.2	<0.0001	<0.0001	<1	<0.001	<0.001	0.002	0.001	<0.001	<0.001	2.75	0.52
New Upstream	**12 Dec 2023**	0.4	<0.01	5		13	0.12	0.06	0.002	0.002	0.024	0.02	<0.001	<0.001	0.15	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	0.001	0.006	0.002	1.56	0.84
New Upstream	**16 Jan 2024**	0.2	<0.01	2		5	0.26	0.03	<0.001	<0.001	0.012	0.008	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.22	<0.05
New Upstream	**28 Feb 2024**	0.3	<0.01	3	<1	<5	0.06	0.02	<0.001	<0.001	0.012	0.012	<0.001	<0.001	<0.05	0.07	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.72	0.24
New Upstream	**20 Mar 2024**	0.2	<0.01	3	<1	<5	0.04	<0.01	<0.001	0.001	0.014	0.011		<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.8	0.14
New Upstream	**16 Apr 2024**	0.2	<0.01	7	4	<5	0.05	<0.01	<0.001	<0.001	0.018	0.016	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.37	0.21
New Upstream	**15 May 2024**	0.2	<0.01	7		<5	<0.01	<0.01	<0.001	<0.001	0.026	0.018	<0.001	<0.001	0.4	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.16	0.23
New Upstream	**12 Jun 2024**	0.4	<0.01	2	4	<5	<0.01	<0.01	<0.001	<0.001	0.022	0.024		<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.22	0.2
SW1	**16 Jan 2024**	0.2	<0.01	4		5	0.24	0.04	<0.001	<0.001	0.014	0.01	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.18	0.06
SW1	**28 Feb 2024**	0.2	<0.01	3	<1	<5	0.08	<0.01	0.001	0.001	0.018	0.017	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.67	0.16
SW1	**20 Mar 2024**	0.1	<0.01	4	<1	<5	0.03	<0.01	0.001	<0.001	0.015	0.015		<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.5	<0.05
SW1	**16 Apr 2024**	0.1	<0.01	4	4	<5	0.03	<0.01	0.002	0.001	0.034	0.024	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	2.07	0.12
SW2	**16 Jan 2024**	0.2	<0.01	4		<5	0.17	0.05	<0.001	<0.001	0.011	0.009	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	0.15	0.07
SW2	**28 Feb 2024**	0.3	<0.01	11	8	<5	0.09	<0.01	0.002	0.002	0.023	0.021	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.8	0.13
SW2	**26 Mar 2024**	0.2	<0.01	11	4	<5	0.05	<0.01	0.002	<0.001	0.016	0.012		<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.14	0.13
SW2	**16 Apr 2024**	0.2	<0.01	1,300	832	5	0.02	<0.01	0.001	<0.001	0.039	0.035	<0.001	<0.001	0.57	0.59	<0.0001	<0.0001	58	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	1.58	0.07
SW2	**15 May 2024**	0.2	<0.01	328		7	<0.01	<0.01	0.002	0.001	0.03	0.03	<0.001	<0.001	0.14	0.14	<0.0001	<0.0001	14	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	1.87	0.37
SW2	**12 Jun 2024**	0.4	<0.01	5,240	3,460	8	<0.10	<0.10	<0.010	<0.010	0.032	0.033		<0.010	2.08	1.86	<0.0010	<0.0010	238	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.34	<0.10
SW3	**23 Nov 2023**	0.4	<0.01	1,490		14	0.33	<0.01	0.002	0.001	0.024	0.022		<0.001	0.63	0.75	<0.0001	<0.0001	56	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.67	0.09

		Nitrogen (Total)	Reactive Phosphorus as P (Orthophosphate as P)	Sodium (filtered)	Hardness as CaCO3 (filtered)	Total Suspended Solids (Lab)	Aluminium	Aluminium (filtered)	Arsenic	Arsenic (filtered)	Barium	Barium (filtered)	Beryllium	Beryllium (filtered)	Boron	Boron (filtered)	Cadmium	Cadmium (filtered)	Calcium (filtered)	Chromium (III+VI)	Chromium (III+VI) (filtered)	Cobalt	Cobalt (filtered)	Copper	Copper (filtered)	Iron	Iron (filtered)
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		0.1	0.01	1	1	5	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.001	0.05	0.05	0.0001	0.0001	1	0.001	0.001	0.001	0.001	0.001	0.001	0.05	0.05
Location Code	**Date**																										
SW3	**12 Dec 2023**	0.4	<0.01	1,410		20	0.13	0.02	0.002	<0.001	0.022	0.02	<0.001	<0.001	0.73	0.63	<0.0001	<0.0001	57	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	0.98	0.29
SW3	**16 Jan 2024**	0.2	<0.01	2		8	0.28	0.04	<0.001	<0.001	0.013	0.006	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.29	0.08
SW3	**28 Feb 2024**	0.3	<0.01	56	34	<5	0.06	<0.01	<0.001	0.001	0.012	0.012	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.76	0.07
SW3	**26 Mar 2024**	0.2	<0.01	23	12	<5	0.04	<0.01	<0.001	<0.001	0.014	0.01		<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.61	0.07
SW3	**16 Apr 2024**	0.2	<0.01	67	44	<5	0.08	<0.01	<0.001	<0.001	0.016	0.014	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	3	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	1.12	<0.05
SW3	**15 May 2024**	0.2	<0.01	4,080		6	0.04	<0.01	<0.001	<0.001	0.028	0.027	<0.001	<0.001	1.62	1.62	<0.0001	<0.0001	178	0.001	<0.001	<0.001	<0.001	0.011	0.012	0.68	<0.05
SW3	**12 Jun 2024**	0.4	<0.01	7,910	4,960	<5	<0.10	<0.10	<0.010	<0.010	0.017	0.018		<0.010	2.82	2.76	<0.0010	<0.0010	346	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.15	<0.10
SW4	**16 Jan 2024**	0.6	<0.01	4		<5	0.12	0.03	<0.001	<0.001	0.009	0.008	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.08	<0.05
SW4	**28 Feb 2024**	0.2	<0.01	8	<1	<5	0.11	0.01	0.001	0.001	0.006	0.005	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	<1	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.22	0.05
SW4	**16 Apr 2024**	0.1	<0.01	61	30	<5	0.08	<0.01	0.004	0.002	0.004	0.004	<0.001	<0.001	<0.05	<0.05	<0.0001	<0.0001	2	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.96	0.06
SW5	**23 Nov 2023**	0.4	<0.01	9,370		8	0.34	<0.10	<0.010	<0.010	0.02	0.017		<0.010	3.65	4.63	<0.0010	<0.0010	393	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.58	0.2
SW5	**12 Dec 2023**	0.6	<0.01	7,890		10	<0.10	<0.10	<0.010	<0.010	0.016	0.016	<0.010	<0.010	3.59	3.58	<0.0010	<0.0010	344	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.10	<0.10
SW5	**28 Feb 2024**	0.3	<0.01	3,760	2,210	9	0.08	<0.01	<0.001	<0.001	0.013	0.012	<0.001	<0.001	1.73	1.54	<0.0001	<0.0001	147	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.12	<0.05
SW5	**16 Apr 2024**	0.2	<0.01	4,700	2,920	6	0.18	<0.01	<0.001	<0.001	0.016	0.016	<0.001	<0.001	1.97	2.14	<0.0001	<0.0001	202	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.33	<0.05
SW5	**15 May 2024**	0.5	<0.01	9,060		<5	<0.10	<0.10	<0.010	<0.010	0.016	0.016	<0.010	<0.010	3.51	3.58	<0.0010	<0.0010	368	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.14	<0.10
SW5	**13 Jun 2024**	0.4	<0.01	10,700	6,570	<5	<0.10	<0.10	<0.010	<0.010	0.015	0.012	<0.010	<0.010	3.96	3.97	<0.0010	<0.0010	438	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.12	<0.10

		Lead	Lead (filtered)	Lithium	Lithium (filtered)	Magnesium (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Potassium (filtered)	Selenium	Selenium (filtered)	Vanadium	Vanadium (filtered)	Zinc	Zinc (filtered)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		0.001	0.001	0.001	0.001	1	0.001	0.001	0.0001	0.0001	0.001	0.001	1	0.01	0.01	0.01	0.01	0.005	0.005	20	50	100	50	50
Location Code	**Date**																							
New 1	**12 Dec 2023**	<0.010	<0.010	0.152	0.153	1,120	0.075	0.074	<0.0001	<0.0001	<0.010	<0.010	328	<0.10	<0.10	<0.10	<0.10	<0.052	<0.050	<20	<50	<100	<50	<50
New 1	**16 Jan 2024**	<0.001	<0.001	0.001	<0.001	3	0.008	0.006	<0.0001	<0.0001	<0.001	<0.001	2	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 1	**28 Feb 2024**	<0.001	<0.001	0.005	0.006	34	0.009	0.008	<0.0001	<0.0001	<0.001	<0.001	12	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 1	**20 Mar 2024**	<0.001	<0.001	0.002	0.002	3	0.009	0.005	<0.0001	<0.0001	<0.001	<0.001	1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 1	**16 Apr 2024**	<0.001	<0.001	0.01	0.013	46	0.015	0.015	<0.0001	<0.0001	<0.001	<0.001	14	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 1	**15 May 2024**	<0.001	<0.001	0.072	0.073	612	0.038	0.038	<0.0001	<0.0001	<0.001	<0.001	174	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 1	**12 Jun 2024**	<0.010	<0.010	0.12	0.129	1,170	0.039	0.041	<0.0001	<0.0001	<0.010	<0.010	352	<0.10	<0.10	<0.10	<0.10	<0.052	<0.050	<20	<50	<100	<50	<50
New 2	**28 Feb 2024**	<0.001	<0.001	0.001	0.002	<1	0.006	0.006	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 2	**20 Mar 2024**	<0.001	<0.001	0.002	0.002	<1	0.009	<0.001	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 2	**16 Apr 2024**	<0.001	<0.001	0.004	0.007	<1	0.021	0.018	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 2	**15 May 2024**	<0.001	<0.001	0.004	0.003	2	0.056	0.051	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New 2	**12 Jun 2024**	<0.001	<0.001	0.004	0.003	1	0.034	0.036	<0.0001	<0.0001	0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	0.006	<0.005	<20	<50	<100	<50	<50
New Upstream	**23 Nov 2023**	<0.001	<0.001	0.009	0.007	2	0.154	0.11	<0.0001	<0.0001	0.002	0.002	2	<0.01	<0.01	<0.01	<0.01	0.006	<0.005	<20	<50	<100	<50	<50
New Upstream	**12 Dec 2023**	<0.001	<0.001	0.003	0.004	1	0.081	0.064	<0.0001	<0.0001	0.002	0.001	1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New Upstream	**16 Jan 2024**	<0.001	<0.001	<0.001	<0.001	<1	0.021	0.011	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	0.006	0.007	<20	<50	<100	<50	<50
New Upstream	**28 Feb 2024**	<0.001	<0.001	0.002	0.002	<1	0.006	0.007	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New Upstream	**20 Mar 2024**	<0.001	<0.001	0.002	0.002	<1	0.016	0.008	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New Upstream	**16 Apr 2024**	<0.001	<0.001	0.002	0.005	1	0.013	0.013	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New Upstream	**15 May 2024**	<0.001	<0.001	0.017	0.003	2	0.042	0.003	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
New Upstream	**12 Jun 2024**	<0.001	<0.001	0.006	0.005	1	0.03	0.032	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW1	**16 Jan 2024**	<0.001	<0.001	0.003	0.003	<1	0.006	0.005	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW1	**28 Feb 2024**	<0.001	<0.001	0.006	0.005	<1	0.027	0.026	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW1	**20 Mar 2024**	<0.001	<0.001	0.003	0.004	<1	0.039	0.028	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW1	**16 Apr 2024**	<0.001	<0.001	0.004	0.005	1	0.148	0.133	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW2	**16 Jan 2024**	<0.001	<0.001	<0.001	<0.001	<1	0.006	0.005	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW2	**28 Feb 2024**	<0.001	<0.001	0.002	0.004	2	0.017	0.018	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW2	**26 Mar 2024**	<0.001	<0.001	0.004	0.002	1	0.011	0.006	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW2	**16 Apr 2024**	<0.001	<0.001	0.026	0.026	167	0.064	0.062	<0.0001	<0.0001	<0.001	<0.001	50	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW2	**15 May 2024**	<0.001	<0.001	0.013	0.012	45	0.057	0.039	<0.0001	<0.0001	<0.001	<0.001	12	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW2	**12 Jun 2024**	<0.010	<0.010	0.071	0.081	697	0.038	0.044	<0.0001	<0.0001	<0.010	<0.010	193	<0.10	<0.10	<0.10	<0.10	0.063	<0.050	<20	<50	<100	<50	<50

		Lead	Lead (filtered)	Lithium	Lithium (filtered)	Magnesium (filtered)	Manganese	Manganese (filtered)	Mercury	Mercury (filtered)	Nickel	Nickel (filtered)	Potassium (filtered)	Selenium	Selenium (filtered)	Vanadium	Vanadium (filtered)	Zinc	Zinc (filtered)	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L
		0.001	0.001	0.001	0.001	1	0.001	0.001	0.0001	0.0001	0.001	0.001	1	0.01	0.01	0.01	0.01	0.005	0.005	20	50	100	50	50
Location Code	**Date**																							
SW3	**23 Nov 2023**	<0.001	<0.001	0.031	0.032	178	0.092	0.082	<0.0001	<0.0001	0.001	0.001	56	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW3	**12 Dec 2023**	<0.001	<0.001	0.032	0.03	170	0.064	0.06	<0.0001	<0.0001	<0.001	0.001	48	<0.01	<0.01	<0.01	<0.01	0.006	<0.005	<20	<50	<100	<50	<50
SW3	**16 Jan 2024**	<0.001	<0.001	<0.001	<0.001	<1	0.013	0.007	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW3	**28 Feb 2024**	<0.001	<0.001	0.003	0.004	7	0.006	0.005	<0.0001	<0.0001	<0.001	<0.001	2	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW3	**26 Mar 2024**	<0.001	<0.001	0.003	0.002	3	0.008	0.002	<0.0001	<0.0001	<0.001	<0.001	1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW3	**16 Apr 2024**	<0.001	<0.001	0.004	0.006	9	0.011	0.011	<0.0001	<0.0001	<0.001	<0.001	3	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW3	**15 May 2024**	<0.001	<0.001	0.063	0.061	491	0.049	0.044	<0.0001	<0.0001	<0.001	<0.001	140	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW3	**12 Jun 2024**	<0.010	<0.010	0.095	0.11	994	0.038	0.044	<0.0001	<0.0001	<0.010	<0.010	297	<0.10	<0.10	<0.10	<0.10	<0.052	<0.050	<20	<50	<100	<50	<50
SW4	**16 Jan 2024**	<0.001	<0.001	0.004	0.003	<1	0.004	0.002	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW4	**28 Feb 2024**	<0.001	<0.001	0.003	0.003	<1	0.005	0.005	<0.0001	<0.0001	<0.001	<0.001	<1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW4	**16 Apr 2024**	<0.001	<0.001	0.003	0.005	6	0.013	0.012	<0.0001	<0.0001	<0.001	<0.001	3	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW5	**23 Nov 2023**	<0.010	<0.010	0.155	0.161	1,110	0.094	0.078	<0.0001	<0.0001	<0.010	<0.010	337	<0.10	<0.10	<0.10	<0.10	<0.052	<0.050	<20	<50	<100	<50	<50
SW5	**12 Dec 2023**	<0.010	<0.010	0.134	0.139	970	0.057	0.056	<0.0001	<0.0001	<0.010	<0.010	286	<0.10	<0.10	<0.10	<0.10	<0.052	<0.050	<20	<50	<100	<50	<50
SW5	**28 Feb 2024**	<0.001	<0.001	0.061	0.057	448	0.025	0.023	<0.0001	<0.0001	<0.001	<0.001	146	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW5	**16 Apr 2024**	<0.001	<0.001	0.08	0.079	587	0.036	0.035	<0.0001	<0.0001	<0.001	<0.001	165	<0.01	<0.01	<0.01	<0.01	<0.005	<0.005	<20	<50	<100	<50	<50
SW5	**15 May 2024**	<0.010	<0.010	0.135	0.145	1,090	0.032	0.03	<0.0001	<0.0001	<0.010	<0.010	333	<0.10	<0.10	<0.10	<0.10	<0.052	<0.050	<20	<50	<100	<50	<50
SW5	**13 Jun 2024**	<0.010	<0.010	0.153	0.144	1,330	0.026	0.016	<0.0001	<0.0001	<0.010	<0.010	392	<0.10	<0.10	<0.10	<0.10	<0.052	<0.050	<20	<50	<100	<50	<50

D.3 Location survey data (as provided by EcOz, 2024, from Land Surveys)

Bore hole ID	Easting	Northing	Elevation (m AHD)
LG1-S – ground surface	693616.3	8590978.4	7.385
LG1-S – top of casing	693616.4	8590978.5	8.238
LG1-D – ground surface	693616.9	8590981.6	7.422
LG1-D – top of casing	693616.9	8590981.5	8.248
LG2 – ground surface	693746.9	8591199.6	15.397
LG2 – top of casing	693747.0	8591199.6	16.426
LG3 – ground surface	693979.3	8591289.8	23.108
LG3 – top of casing	693979.3	8591290.0	24.202
LG4 – ground surface	693743.0	8591399.5	17.793
LG4 – top of casing	693743.0	8591399.4	18.83
LG5 – ground surface	693650.1	8591238.3	16.094
LG5 – top of casing	693650.0	8591238.2	17.029